TOSHIBA

Better Air Solutions

Through our commitment to world-class **efficiency**, versatile **scalability** and leading **quality**, Toshiba Air Conditioning advances leading-edge technologies to find the most forward-thinking solutions possible for your world.

A Carrier Company

TOSHIBA AIR CONDITIONING **CATALOGUE 2024**

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EXPERIENCE THE FUTURE

TOSHIBA AIR CONDITIONING > **CATALOGUE 2024**

Better Air Solutions

EXPERIENCE THE FUTURE

"Toshiba Air Conditioning solutions"

In 1961, Toshiba Air Conditioning presented its split air conditioning unit to the world – a system where the indoor and outdoor units are only connected by copper piping. Today, more than 60 years later, Toshiba Air Conditioning still offers a wide range of high-quality products and services utilizing forward-thinking technologies.

RELIABILITY ENVIRONMENTAL SUSTAINABILITY SIMPLICITY QUALITY

TOSHIBA AIR CONDITIONING
COMMITMENT TO BETTER AIR SOLUTIONS

Toshiba Air Conditioning supports Carrier's 2030 Environmental, Social, and Governance (ESG) goals, including the goal to reduce its customers' carbon footprint by more than 1 gigaton. We help to address climate change by going further than just products and beyond their basic functions, to create reliable and safe solutions that can interact with each other and with users. With the forward-thinking solutions by Toshiba Air Conditioning, we help deliver healthy, safe and productive indoor environments.

CHOOSE THE EXPERT OF INSPIRED TECHNOLOGIES

Since Toshiba Air Conditioning developed and mass-produced the world's-first inverter split air conditioners for commercial and residential applications in 1980 and 1981, which is a historically significant milestone recognized by the Institute of Electrical and Electronics Engineers (IEEE), inverter technology has been widely used throughout the world to deliver comfort with high energy efficiency.

Inverter technology enables the unit to continuously regulate its cooling and heating capacity by altering the speed of the compressor using a variable-frequency drive to control the speed of the motor. This innovation helps generate outstanding comfort and efficiency levels.

1981 – Inverter Driven Compressor

1988 – Twin Rotary Residential Use

1993 – DC Twin Rotary

1998 – R410A Residential Use

2004 – Dual Stage Compressor

2020 – Triple Rotary Compressor

Through our commitment to world-class **efficiency**, versatile **scalability** and leading **quality**, Toshiba Air Conditioning advances leading-edge technologies to find the most forward-thinking solutions for your world.

Top-class energy efficiency

- High volume triple rotary compressor
- Twin rotary compressors
- All climates from -30°C (DAISEIKAI™ 10) to 52°C (SMMS-u).
- Top class A+++* air to water heating solutions with ESTIA™
- Refrigerants with lower environmental impact
- Optimal temperature control solutions with precision

(*) The energy efficiency class range of this product is D→A+++

Scalable solutions

Toshiba Air Conditioning develops cutting-edge technologies that benefit people by offering the ideal combination of comfort and products that help to protect the environment for residential, light commercial and large building applications.

Superior manufacturing quality

Toshiba Air Conditioning's innovations provide comprehensive building air conditioning solutions which have been subject to strict evaluation testing to offer world-class reliability.
Third party institute certifications for quality, safety and performance, guaranteed (TÜV, Eurovent, WEEE, RoHS, REACH, Intertek, Keymark).

bsi. ISO 9001 Quality Management | ISO 14001 Environmental Management | OHSAS 18001 Occupational Health & Safety Management

LEADING THE WAY TO EXCELLENCE

Toshiba Air Conditioning, with heat pump technology at its core, contributes to people's well-being while respecting the environment. For decades, Toshiba Air Conditioning has been receiving prestigious awards for its significant achievements in air conditioning. This demonstrates the innovative spirit of Toshiba Air Conditioning, a relentless drive to improve its products and systems.

Products designed and engineered to perform

Toshiba Air Conditioning strengths center on in-house research and development of advanced technologies and core components. Its global research activities are managed and integrated to ensure all research sites collaborate to provide innovative solutions to customers across the world.

Forward-thinking technologies to support building decarbonization

Toshiba Air Conditioning combines technological development with consideration for future generations, resulting in a range of extremely energy-efficient air conditioners, helping to reduce greenhouse gas emissions at their source. Its continuous research into the development of inverter technology has provided remarkable results, both with regards to meeting the required comfort levels and continually reducing the system's energy consumption.


Quality production


Outdoor units production


Indoor units production

Entire production process certified by international quality assurance institutes

All products provide high operating efficiency and cooling, as they participate in the European third-party certification programmes.
This acts as a guarantee for customers and users that the products will operate in accordance with the design specifications and that the data published is grounded by evidence.
Toshiba Air Conditioning participates in the Eurovent Certification Performance programme for AC1, AC2 & VRF.
Check ongoing validity of certificate: www.eurovent-certificate.com
For Estia certification, refer to Keymark heat pump certification program: www.heatpumpkeymark.com

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

In line with European standards

To improve its environmental responsibility, Toshiba Air Conditionning offers products that meet the following European standards:

EN 14511
Air conditioners, liquid chilling packages and heat pumps with electrically-driven compressors for space heating and cooling. Test methods.

EN 14825
Air conditioners, liquid chilling packages and heat pumps, with electrically-driven compressors, for space heating and cooling. Testing and rating with part loads and calculation of seasonal performance.

EN 16147
Heat pumps with electrically-driven compressors. Testing, performance rating and requirements for marking domestic hot water units.

EN 378
It relates to safety and environmental requirements in the design, manufacture, installation, operation, maintenance, and disposal of refrigerating systems.

EN 60335-2-40 rel.6
Safety requirements for electrical heat pumps, air-conditioners and dehumidifiers.

Japan - Fuji Operations R&D Center e-THIRD building

THE WORLD IS TARGETING ZERO EMISSIONS

Today the process of cooling and heating buildings is not the sole challenge. Global warming is an issue that affects all of us and Toshiba Air Conditioning is prioritizing the decarbonization of buildings as a top priority.

The R32 based solutions proposed by Toshiba Air Conditioning help achieve this goal, whilst also preserving comfort and cost-effectiveness.

A range in line with our goal to reduce our customers' carbon footprint

Toshiba Air Conditioning is offering a complete range of air-to-air products dedicated to cooling and heating in comfort applications. With system solutions from 2 to 67kW, we can address residential, light commercial and business markets requirements.

Residential

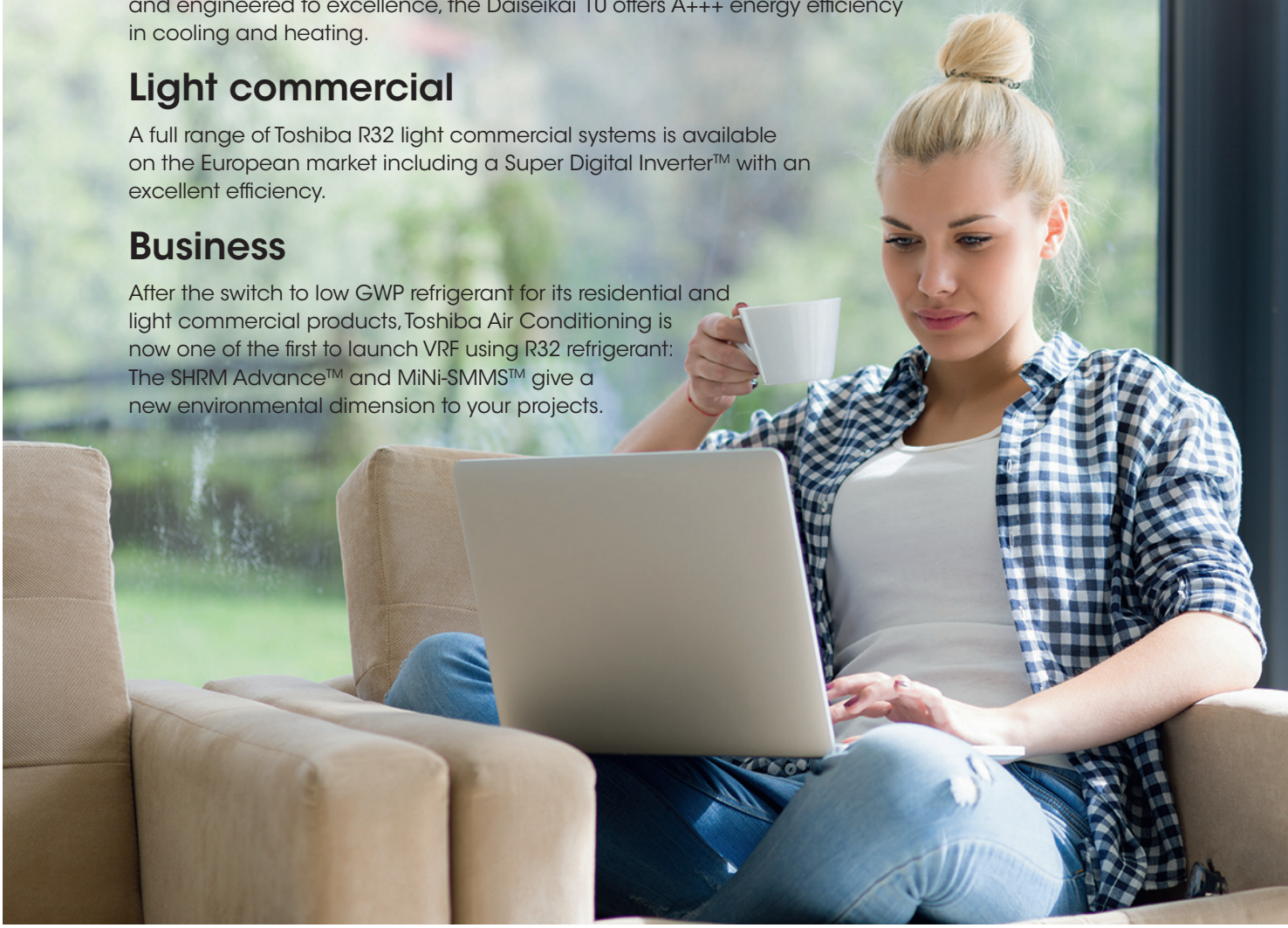
DAISEIKAI™ 10 features a stylish wooden grille sourced from PEFC-certified sustainable forests. The casing is using up to 43% recycled plastic, another sign of an innovative and environmental approach. Designed to perform and engineered to excellence, the Daiseikai 10 offers A+++ energy efficiency in cooling and heating.

Light commercial

A full range of Toshiba R32 light commercial systems is available on the European market including a Super Digital Inverter™ with an excellent efficiency.

Business

After the switch to low GWP refrigerant for its residential and light commercial products, Toshiba Air Conditioning is now one of the first to launch VRF using R32 refrigerant: The SHRM Advance™ and MiNi-SMMS™ give a new environmental dimension to your projects.



The right choice…

The fundamental design and control of Toshiba Air Conditioning systems remains unchanged with the R32 refrigerant.
Toshiba Air Conditioning unique combination of twin rotary compressors and all inverter driven control also contributes to guaranteed accuracy and expertise of flawless Japanese quality. All these result in the high level of performance and efficiency our customers are used to.

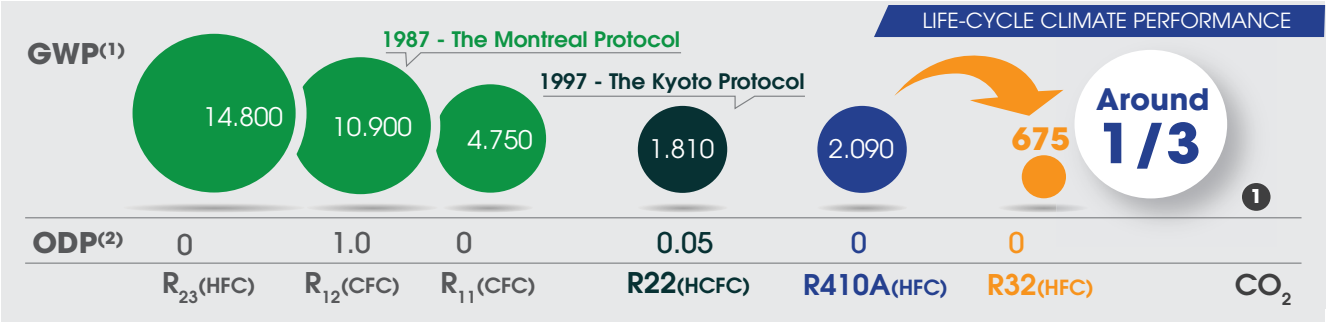
- Large capacity
- Low noise
- Wide operating range
- DLC treatment
- Less refrigerant needed
- Liquid injection technology

Toshiba Twin rotary compressor with new liquid injection technology, your best ally. Centre piece of the system, the Toshiba super-efficient twin rotary compressor has been engineered to match R32 refrigerant requirements.

…to the benefit of all

Design to help protect the environment

- The right balance between environment safety and your comfort
- Energy efficiency increased for greater savings

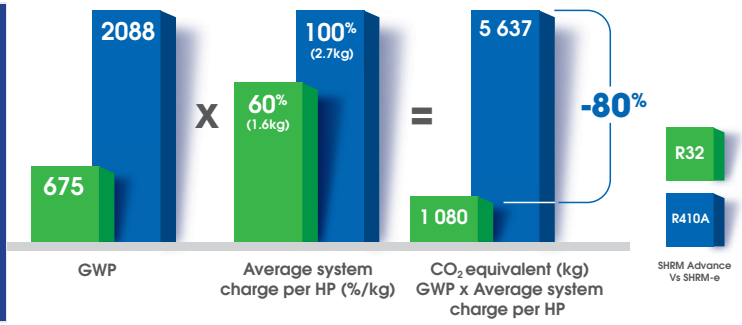


(1) Global Warming Potential
(2) Ozon Depletion Potential

Installer friendly

- Working pressures for R410A and R32 refrigerants are similar
- R32 refrigerant can be easily charged in both liquid or gas state
- Safety commissioning instructions are similar to those for R410A
- R32 and R410A equipments is the same except for the refrigerant recovery pump and the reclaim cylinder
- Toshiba flare joints certified ISO14903

Low GWP with R32 refrigerant and 40% less refrigerant charge in SHRM Advance have led to an 80% reduction in the total CO_2 equivalent of the system, in comparison with legacy model using R410A refrigerant.



F-GAS COMPLIANCE

TOSHIBA AIR CONDITIONING RESPONDS TO REGULATORY EVOLUTIONS

The European F-gas regulation (517/2014) has been in force since 1 January 2015. It aims to protect the environment by reducing greenhouse gas emissions and progressively deploying new rules related to the use of Hydrofluorocarbons refrigerants (HFCs) in heating and cooling systems. This regulation introduces an ambitious gradual reduction of HFC quantities that are put on the market in the EU by HFC producers and distributors (in equivalent tons of CO2), with an initial reduction of 37% from 2018 and a final objective of cutting quantities by 95% by 2030.

This regulation has driven manufacturers to turn to refrigerants with lower Global Warming Potential (GWP) and Toshiba air conditioning is no exception; efforts have been made to pursue lower GWP refrigerant while the reduction of refrigerant charge volume has been explored.

in 2018	in 2024	in 2030
-37%*	-69%*	-95%*

*HFC consumption compared to equivalent tons of CO_2

Your safety first and foremost

Based on the requirements of the F-gas regulation, only certified installers can carry on Dx system installations. The implementation of systems using HFC requires thus some specific precautions such as a strict control of the leakages and a periodic checking of the refrigerant charge.

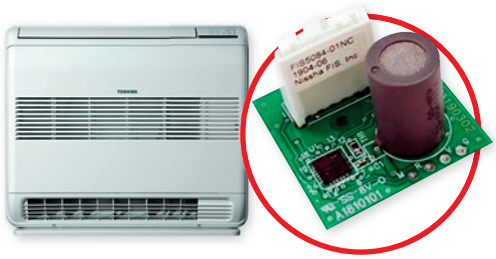
For equipment containing			Leak checks without leak detection	Leak checks with leak detection
Between 5 and 50 tonnes CO_2 equivalent	2.38 and 23.8kg R410A	7.41 and 74.1kg R32	Every 12 months	Every 24 months
Between 50 and 500 tonnes CO_2 equivalent	23.8 and 238kg R32	74.1 and 740kg R32	Every 6 months	Every 12 months
More than 500 tonnes CO_2 equivalent	More than 238kg R410A	More than 740kg R32	Every 3 months	Every 6 months

Toshiba leak detection system

Residential

Increase console installation flexibility!

R32 refrigerant leak detection sensor is available as an option for RAS Console. This accessory offers a total flexibility to install a Console with large R32 multisplit systems in average room surface (minimum room surface 7sqm in combination with RAS-5M34U2AVG according to IEC 60335-2-40).



Light Commercial

This is the first Toshiba product delivered with an embedded leak detection sensor.

To ease product integration in various types of light commercial applications, Toshiba floor standing unit is delivered with plug & play embedded R32 refrigerant leak detection sensor. Its integrated remote controller will inform end user on sensor status and leakage risks with an alarm.

Business

Meet buildings constraints, select the appropriate answer.

For buildings with large spaces

Only one flow selector unit is needed

In case of leak detection:

- Audible and visible alarm on concerned leak detector
- Fault code on remotes
- Refrigerant pump down

System is turned off in case of leak detection

For buildings with many individual rooms

Multiple flow selector units are needed

In case of leak detection:

- Audible and visible alarm on concerned leak detector
- Fault code on remotes
- Individual shut down

System continues to run, only concerned area is turned off

ECODESIGN & ENERGY LABELLING

The European 2030 climate and energy framework for improving energy efficiency will have a significant impact on the heating, ventilation and air conditioning sectors.
Today, buildings are responsible for the largest energy consumption, with HVAC systems being the most energy-intensive of all. The HVAC sector is now committed to manufacturing energy-efficient products for its clients to favour sustainable development.

ECODESIGN

In the European Union, the Ecodesign Directive encourages HVAC manufacturers to design products taking into consideration their environmental impact throughout entire product lifecycle.
It establishes a framework for the setting of mandatory energy efficiency requirements for all energy-related products (ERPs).

Ecodesign and Energy Labelling for Air-to-Water heat pumps

Air-to-Water heat pumps have been subject by the Ecodesign (< 400kW) and Energy Labelling (< 70kW) regulations since 26 September 2015. Heat pumps launched before this date are not concerned and all must conform to display the CE mark.

For more information visit
www.ecodesign.toshiba-airconditioning.eu

New energy efficiency metric: Seasonal efficiency (SEER and SCOP)

The Seasonal Coefficient of Performance is a new European parameter to rate heat pumps in terms of energy efficiency. It is an update to the Coefficient of Performance, which previously recorded the power consumed to power produced ration in heating and cooling modes for one operating point.

Unlike the EER/COP, the SEER/SCOP takes into account performances during cooler seasons because it indicates temperature variations by including numerous realistic measurement points. When combined, this results in a more accurate energy classification.

SEER/SCOP compared to EER/COP

	TEMPERATURE	CAPACITY (KW)	AUXILIARY MODES (KWH)	HOURS
EER COP	One temperature requirement	Full load	Auxiliary power modes are not considered	N/A
SEER SCOP	Numerous rating temperatures (range of average temperatures)	Partial load + Full load	Incl. consumption auxiliary modes: - Standby mode - Off mode - Thermostat off, etc.	Number of hours at each air temperature (in hours)

SEASONAL COEFFICIENT OF PERFORMANCE CALCULATION

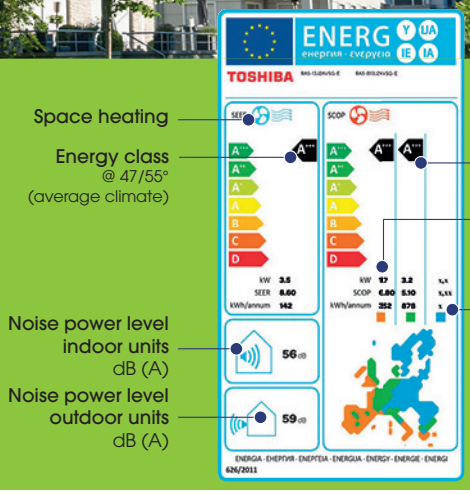
This is the ratio between annual heating/cooling demand and annual energy input over an entire heating/cooling season.

$$SCOP = \frac{\text{ANNUAL HEATING DEMAND}}{\text{ANNUAL ENERGY INPUT}}$$

$$SEER = \frac{\text{ANNUAL COOLING DEMAND}}{\text{ANNUAL ENERGY INPUT}}$$

Energy Labelling

The Energy Labelling regulation was created to offer end users information about a product's energy efficiency rating.
European Energy Labelling regulations also assign ratings from G to A++ based on their energy efficiency, inciting better ratings in the sector and providing clients with clearer information.



Designed for the future

Toshiba Air Conditioning is committed to designing products and solutions with increasingly lower environmental impacts. This is subsequently reducing indirect CO_2 emissions generated by electricity consumption. Toshiba Air Conditioning long-standing commitment to sustainable development is ahead of schedule for the European climate and energy package requirements for 2030.

All Toshiba Air Conditoning products sold today in Europe are fully compliant with the latest Ecodesign directives.

Lot 1: Air-to-Water heating systems up to 400kW including air-to-water heat pumps
>>> ESTIA™ SPLIT.

Lot 2: Water heaters and hot water storage tanks. Including tanks >>> ESTIA DHW-HP.

Lot 6: Residential and non residential ventilation including air treatment VN units.

Lot 10: Air-to-Air heat pumps up to 12kW
>>>> SEIYA™ Classic, SEIYA™, SHORAI™ Edge, HAORI™, DAISEIKAI™ 10, Console, Digital Inverter, Super Digital Inverter.

Lot 11: Electric motors from 125W to 500kW including ventilation fans.

Lot 21: Heat pumps above 12kW including residential, light commercial systems and VRF >>> Digital Inverter™ Classic, Digital Inverter™, Super Digital Inverter™, Big Digital Inverter™, MiNi SMMS-e™, SMMS-e™, SHRM-e™, SMMS-u™ and SHRM Advance™.

Toshiba Air Conditioning dedicated public website provides energy labels with detailed performances for all systems.

For more information visit
www.ecodesign.toshiba-airconditioning.eu

EXPERIENCE THE FUTURE

TO **GUIDE YOU**

MAX EFFICIENCY

CAPACITY

OPERATION

D.H.W

SOUND LEVEL

AIR FLOW

INDIVIDUAL HOUSING

COLLECTIVE HOUSING

SHOPS

SHOPPING CENTRES

BUSINESSES

ADMINISTRATION

HEALTHCARE

HOTELS

NEW AIR-TO-AIR SYSTEM

Toshiba Air Conditioning is unveiling its DAISEIKAI™ 10, bringing new levels of sustainability, sleek design and performance to home comfort. First available in Nordic countries, Toshiba Air Conditioning is now introducing a version of its DAISEIKAI 10 to suit average and warm climate conditions across Europe.

In addition to its best-in-class A+++ energy rating in cooling and heating, and ultra-quiet indoor unit operation, the DAISEIKAI 10 boasts several intelligent features to elevate homeowners' lifestyle, such as multiple controller solutions including a luxury remote control, Wi-Fi/app, and smart speaker voice control, motion tracking function and plasma ionizer complete with an ultra-pure filter PM 2.5 and a coated coil.

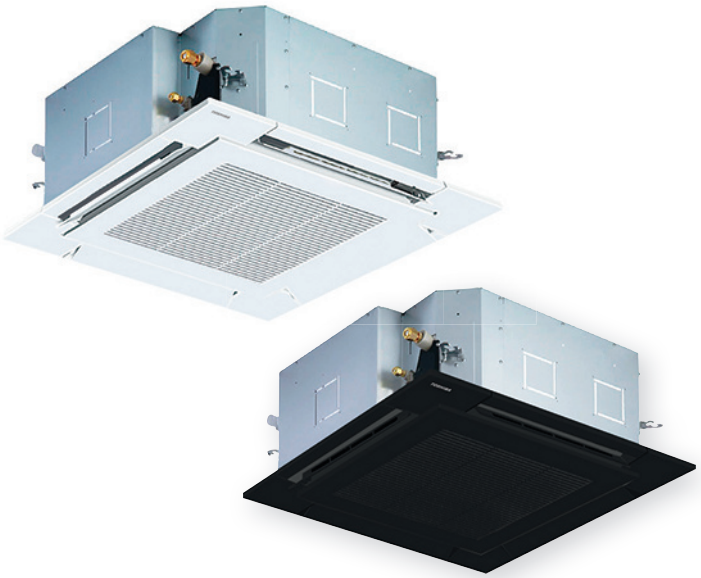
For over 50 years, Toshiba Air Conditioning has been providing its clients with comprehensive and high-quality solutions. The new SEIYA™ Classic is no exception. Make savings with the A++ in cooling efficiency ratings for reduced energy consumption and true savings.

The compact SEIYA Classic is compatible with the Toshiba Multisplit System for time-saving solutions. The one-piece front grille provides a convenient access to all components. The maintenance of the dust filter is facilitated whereas the drain pan is easy to dismount.

NEW LIGHT COMMERCIAL PRODUCTS & BUSINESS PRODUCTS

A complete offer of cassette units for light commercial & business applications alike

Compact 4-way Cassette



Standard 4-way Cassette

Both Standard and Compact Cassettes for light commercial and business applications are now also available in black. A complete offer to answer any type of applications and a product mix that any customer would require.

NEW LIGHT COMMERCIAL PRODUCTS

High Wall IT Room

A new range of high wall products for IT rooms: Cooling only systems with SEER up to 6.60, air flow up to 1.600 m3/h and a high sensible heat ratio equal or superior to 80%. This is the solution for applications that require a stable and homogeneous ambient temperature.

The new DX Coil kit can control AHU up to 5 750 m3/h when connected to a light commercial condensing unit.
Two operating modes are available with the same DX kit: Return air control (TA) or capacity control (DCC), for maximum application flexibility.

ON YOUR OWN AS A FAMILY IN A GROUP ON YOUR OWN

Surpassing well-being

The EU aims to be climate-neutral by 2050, an economy with net-zero greenhouse gas emissions. Energy waste from residential heating and domestic hot water has been identified as a possible reduction target. Air-to-water heat pumps are classed as a form of renewable energy technology, contrary to heating systems that rely on fossil fuels or inefficient electrical heating. They are now considered to be ideal solutions for space heating and domestic hot water. Residential heat production using gas, oil or electricity increases atmospheric CO^2 emissions levels. In addition, these traditional heating systems are less efficient and therefore have higher running and maintenance costs. Toshiba Estía air-to-water heat pumps are the ideal solution for increasing energy efficiency, using air as its main source of energy. This all-in-one system is designed to ensure that the right temperature for space heating and domestic sanitary hot water is achieved quickly and efficiently, with the additional advantage of also functioning as a cooling source, in the warmer seasons.

TOSHIBA

RESIDENTIAL AIR TO WATER

AS A FAMILY IN A GROUP ON YOUR OWN AS A FAMILY

ESTIA SPLIT

Toshiba ESTIA air-to-water high efficiency Heat Pumps provide space heating and/or comfort cooling throughout the year.
The compact and silent outdoor units are associated with a large range of hydraulic modules. ESTIA solutions are available in several versions:

ESTIA SPLIT - Rated heating capacities (kW)		ODU Power supply	4.0	6.0	8.0	11.0	14.0
	**ESTIA SPLIT R32** All-In-One - 1 zone	220~240-1-50	●	●	●	●	●
		380~415-3N-50			●	●	●
	**ESTIA SPLIT R32** All-In-One - 2 zones	220~240-1-50	●	●	●	●	●
		380~415-3N-50			●	●	●
	**ESTIA SPLIT R32** Wall mounted	220~240-1-50	●	●	●	●	●
		380~415-3N-50			●	●	●

● R32

ESTIA Domestic Hot Water Heat Pump volumes (Litres)	190	260
	●	●

● R134a

ESTIA SPLIT

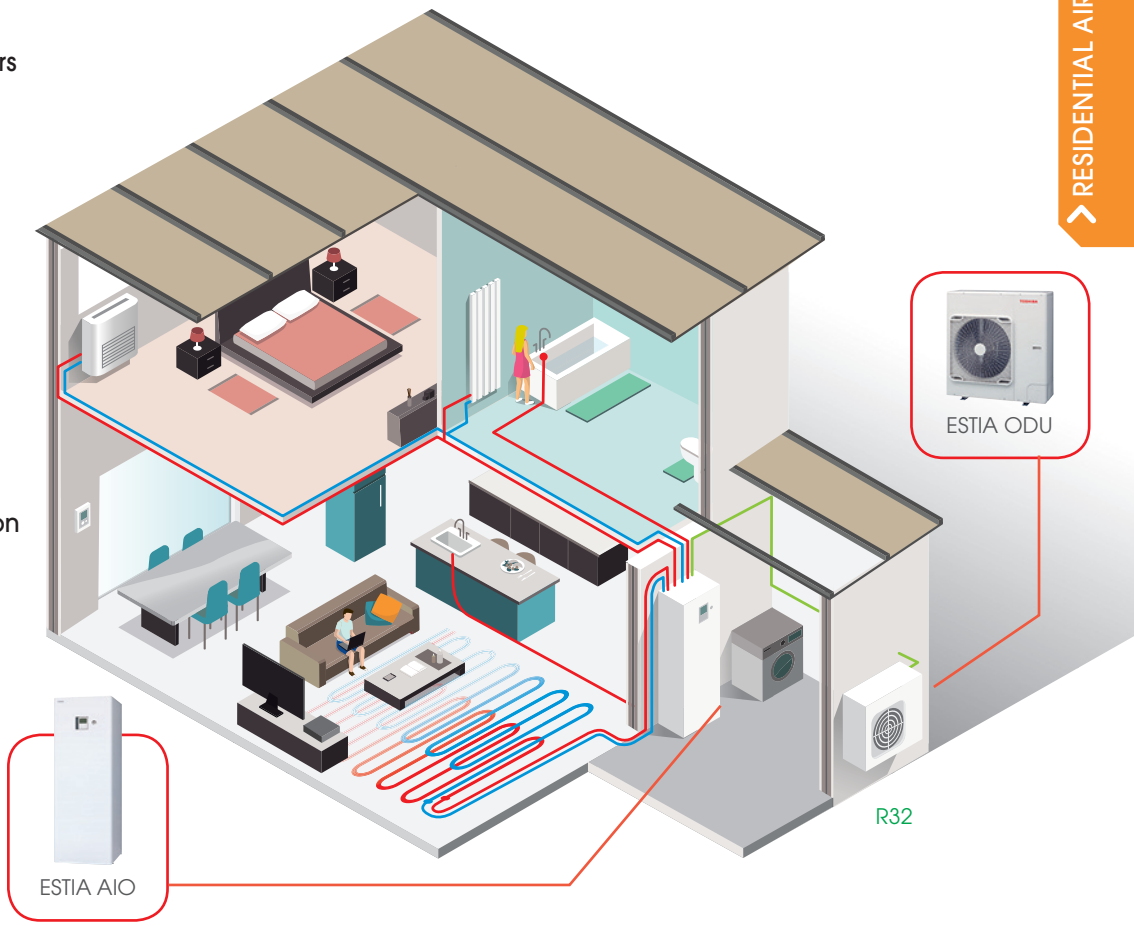
Space heating for any emitters

Under floor heating

Medium or low temperature radiators

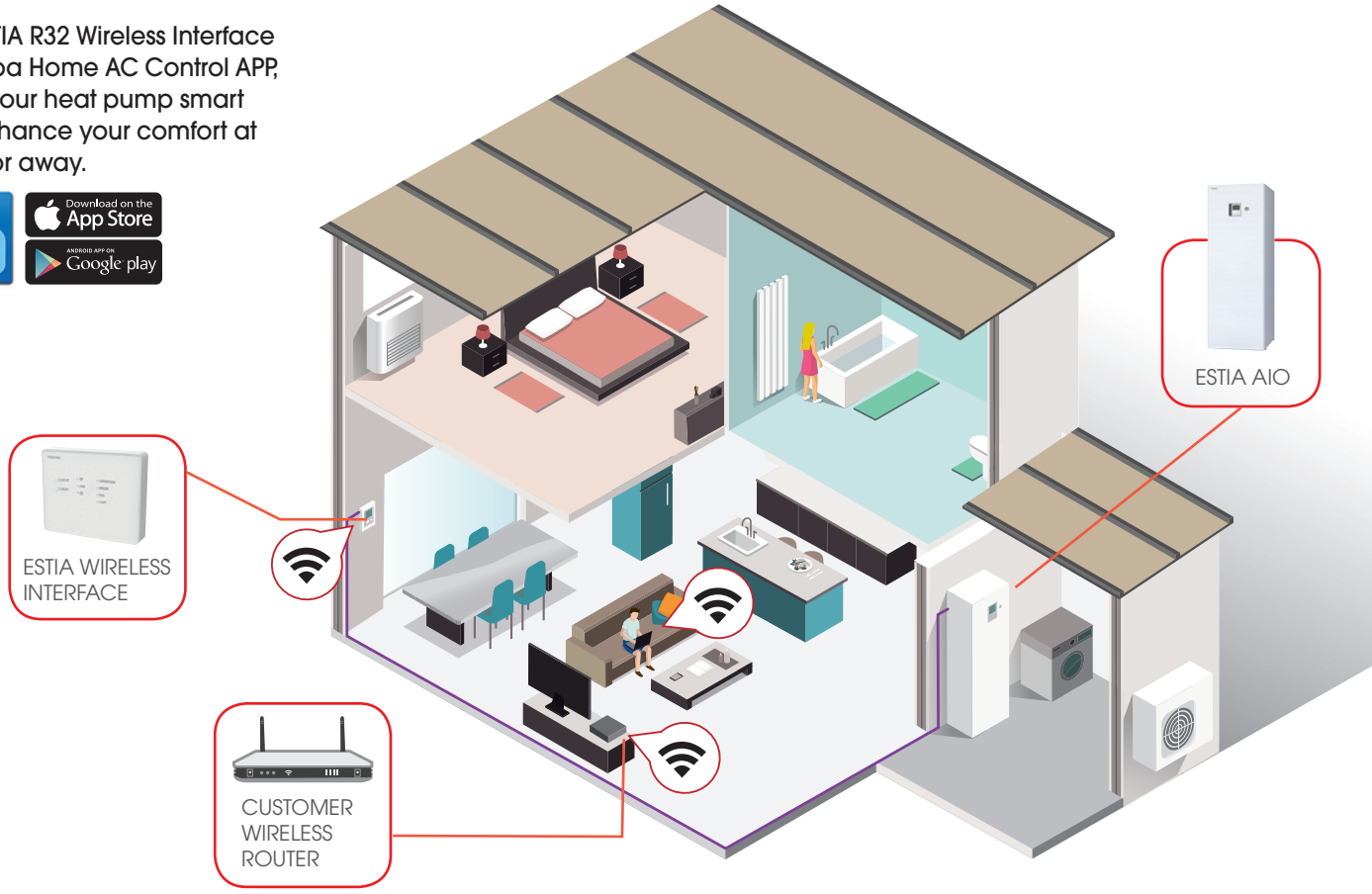
Fan coils
Comfort cooling & heating

Domestic hot water production



With ESTIA R32 Wireless Interface & Toshiba Home AC Control APP, make your heat pump smart and enhance your comfort at home or away.

Download on the App Store
Google play



ESTIA SPLIT R32 – WALL MOUNTED & ALL-IN-ONE

OUTDOOR UNITS

Toshiba has a long and successful experience in the production of air-to-air heat pumps. The same reliable and award-winning technology is also at the core of these new air-to-water heat pumps benefiting from the advanced inverter technology and the Toshiba DC twin-rotary compressor. ESTIA heat pumps operate with the reliable and safe R32 low GWP refrigerant.

HYDRO UNITS

Compact and silent outdoor units are associated with hydraulic modules on the indoor side: refrigeration connections to ease the installation.

ESTIA hydro modules are available in three versions:
• All-In-One with integrated DHW cylinder 1 zone:
Space heating & cooling, DHW production.
• All-In-One with integrated DHW cylinder 2 zones:
Dual-zone space heating & cooling, DHW production.
• Wall-mounted hydraulic module: Space heating & cooling provided with a compact module installed on the wall. DHW production possibility thanks to a remote tank.

HOT WATER TANK

The ESTIA tank is a compact stainless steel insulated tank producing domestic hot water for sanitary use.

The performance of the overall system is also maximised thanks to the integrated coaxial heat exchanger.

The internal electric heater is controlled to optimise the use of the system in the case of extreme outdoor air temperatures. This solution reduces running costs and guarantees a constant hot water temperature inside the tank.

CONTROLLER 2 zones with weekly timer

The large screen remote controller is designed to be simple, intuitive and easy to use.

The remote controller allows independent heating to a maximum of 2 zones and domestic hot water.

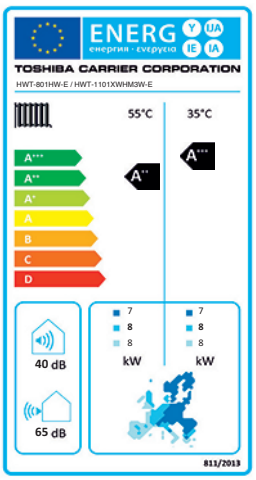
It regulates the water temperature and optimises the systems energy consumption. The anti-bacteria control and the hot water boost functions can easilly be activated.

The remote controller can also be used to set weekly timers for the system and, when used as a second remote controller, can be used to control room air temperature.

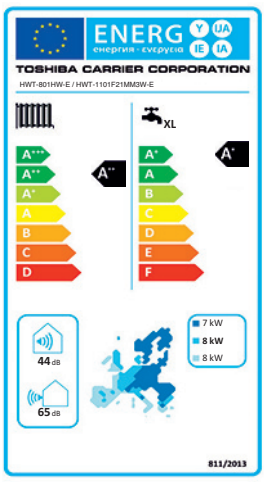
Leading energy efficiency A+++/A++* with COP up to 5.20 rated conditions.

With its best-in-class COP performance, the ESTIA air-to-water heat pump system delivers more heating power with less energy consumption. With the Toshiba advanced inverter, Estia air-to-water heat pump system only delivers the heating capacity required, thus reducing the amount of electricity used and the running costs of the heating system.

(*) The energy efficiency class range of this product is D➞A+++



ESTIA Space Heating Energy label



ESTIA combination & heater (with Domestic Hot Water) Energy label

ESTIA DOMESTIC HOT WATER HEAT PUMP

The best energy savings for sanitary hot water production throughout the year

Toshiba DHW-HP is providing best in class performances on the market with:

- A+* Energy Label Class
- High COP 3.69 according to EN16147
- Very low noise level and Silent function
- Variable air flow rate & high ESP fan up to 200 Pa
- Hot water production up to 65°C

The Toshiba DHW-HP provides 80% energy savings Vs traditional electric water heaters with best in class COP 3.69 (EN16147 LCIE certified). Compatible with solar systems (photovoltaic panels ready or solar built-in extra coil), and smart grid ready, makes it the best solution for increased energy savings.

The innovative and adaptive controller is user friendly with 5 operational modes AUTO, ECO, BOOST, SILENT and HOLIDAY.
Toshiba DHW-HP offers flexible control solutions with low electricity tariff mode, energy consumption display, Smart grid ready, Modbus connectivity, Air Cooling function & Floor Heating function with extra coil.

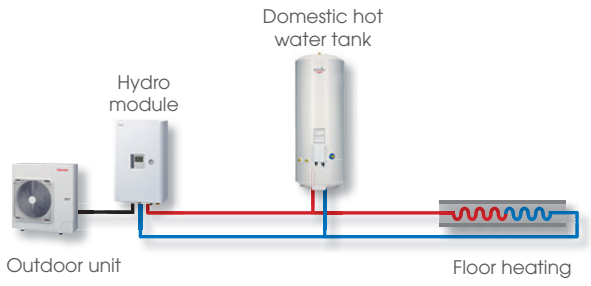
Toshiba DHW-HP is particularly reliable thanks to its anti-corrosion enamelled steel tank with magnesium anode.
The electrical heater back-up provides hot water at any time.

(*) The energy efficiency class range of this product is F➞A+

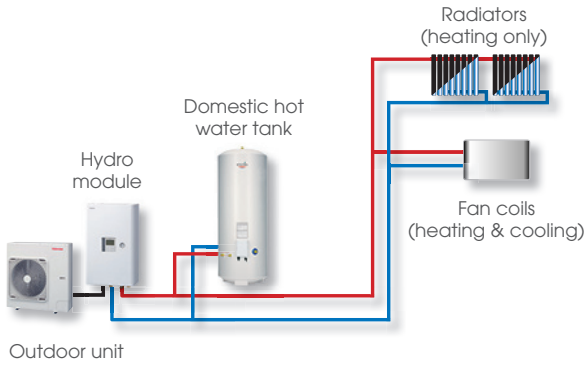
ONE SYSTEM, *FULL COMBINATIONS FLEXIBILITY*

For new houses or refurbishment projects ESTIA heat pumps offer a variety of combinations.
Some examples are shown below:

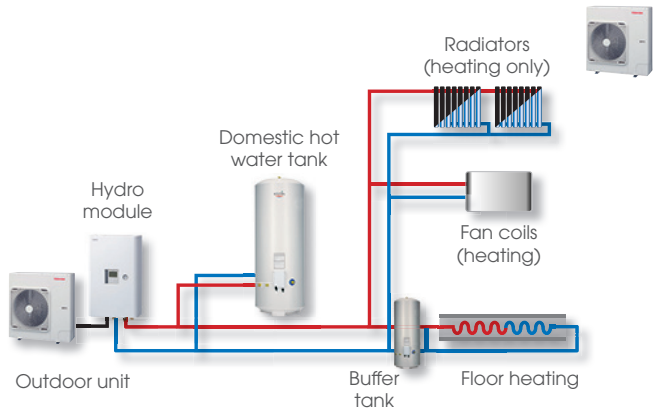
1 Space heating with domestic hot water



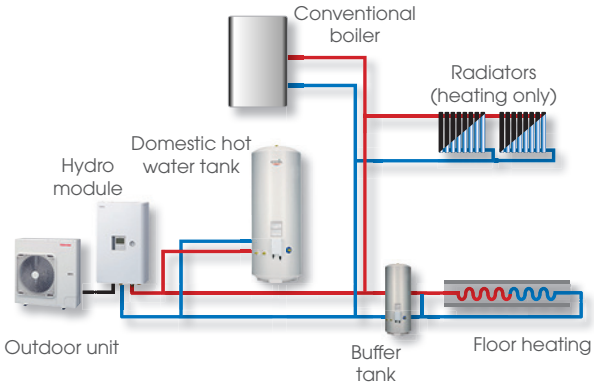
1 Space heating/cooling with domestic hot water



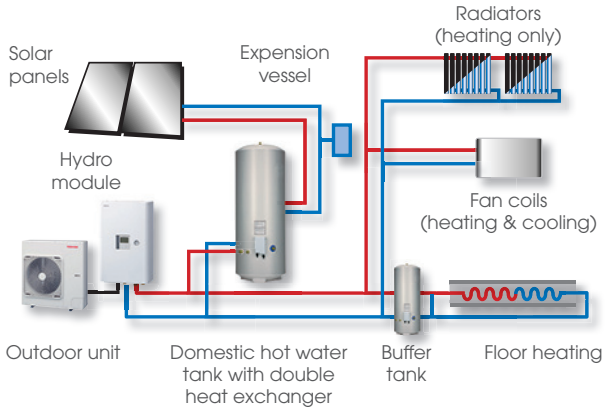
2 Space heating with domestic hot water



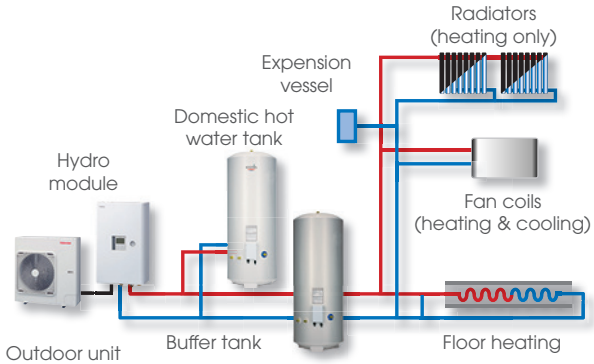
2 Space heating with domestic hot water & backup boiler



2 Space heating/cooling (multiple zones) with domestic hot water & solar panels



2 Space heating/cooling (multiple zones) with domestic hot water



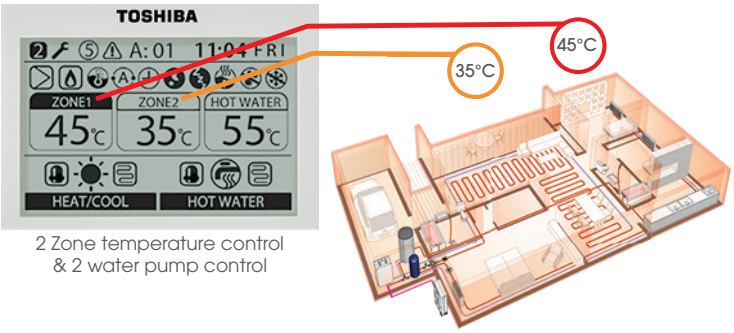
In existing dwellings already equipped with traditional gas or fuel boilers, the Toshiba ESTIA air-to-water heat pump system can be combined with the existing heating system to fully cover and optimise all heating needs, all year round. The boiler is then only used as a back-up source during some extreme weather days during the winter. The intelligent Toshiba control balances the energy source in the most efficient way.

Toshiba offers different control solutions to meet end users' and designers' expectations. From local individual control and settings to computer-based TCC-Link network, all indoor units can be programmed and set to suit the operational needs. Remote control systems offer a wide range of features including schedule timers, diagnostic functions, input/output signals, to name a few.

Toshiba offers a number of local control products that can be used to control a single indoor unit, or group of up to 8 indoor units, from a position adjacent to that indoor unit or group. It is possible to install these local controllers up to 500 m from the connected indoor unit which allows greater flexibility when designing the installation a site.

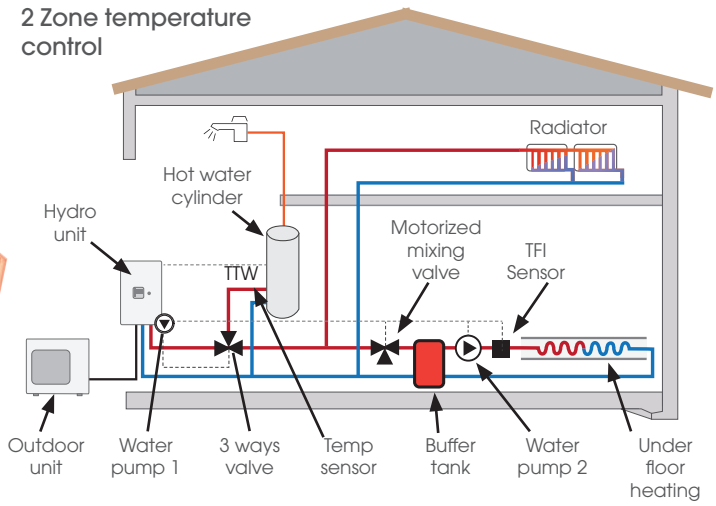
2 Zone & 2 water pump control

Space heating/cooling (multiple zones) with domestic hot water.



2 Zone temperature control & 2 water pump control

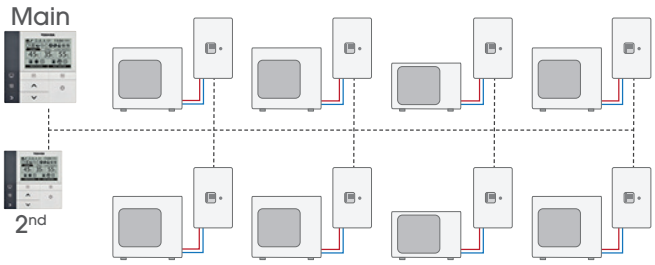
2 Zone temperature control



Control integration

ESTIA Master/Slave group control function allows up to 2 remote controllers to operate simultaneously up to 8 systems.
ESTIA Open protocol interfaces Modbus & KNX are available in Home Energy Management Systems.

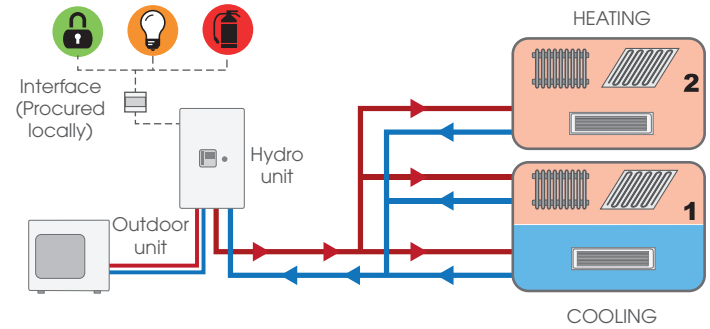
Group control function



One remote controller can operate simultaneously up to 8 systems

Note: Maximum connections configuration:
8 outdoors and 2 remote controllers

Open protocol interfaces



Modbus and KNX interfaces are available to use in Home Energy Management Systems

HWT-HW

ESTIA SPLIT R32 1PH – ALL-IN-ONE

ESTIA R32 All-In-One air-to-water reversible Heat Pumps provide space heating or comfort cooling throughout the year, with an integrated 210L Domestic Hot Water cylinder. They are ideal for new constructions and renovation.

High energy efficiency for superior energy savings

• A+++/A++* energy class in space heating low & medium temperature with part load efficiency ηs up to 183%.
• A+ energy class in domestic hot water production with part load efficiency ηs dhw up to 135%.

Silent operation

• Silent outdoor unit down to 26 dB(A) at 5m: No noise pollution for the neighborhoods.
• Silent indoor unit only 24 dB(A) at 1m.

Easy to install, easy to control

• Very compact outdoor unit (1 fan technology).
• Floor standing All-In-One hydro module 595x670mm footprint for easy integration.
• Second-zone kit factory fitted for easy management of two different leaving water temperatures (under floor heating & radiators).
• All components accessible on the facade: Simplified access for installation and maintenance.
• Large screen remote controller, intuitive and easy to use.
• Power consumption display.
• Compatible with the latest generations of connected thermostats.
• Remote control via smartphones: Wireless interface option compatible with the Toshiba Home AC Control App.

(*) The energy efficiency class range of this product is D→A+++

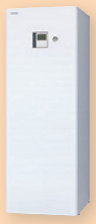
COP MAX	CAPACITY	OPERATION	HOT WATER
5.20	4kW >14kW	-25°C > +43°C	+20°C > +65°C

Best in class performances:

- **Toshiba Twin Rotary compressors** & inverter technology, with injection technology on sizes 8, 11 & 14kW
- **65°C maximum leaving water temperature** ideal for renovation and boiler replacement
- **COP Domestic Hot Water up to 3.27** (EN16147)
- Heat pump operation for **DHW production up to +43°C outside air temperature** to maximize energy savings
- **Back-up heaters** 3kW or 6kW or 9kW

ESTiA

Download on the App Store
Google play



INDOOR UNITS

1 zone
HWT-602S21S_W-E
HWT-1102S21S_W-E
HWT-1402S21S_W-E

2 zones
HWT-602S21M_W-E
HWT-1102S21M_W-E
HWT-1402S21M_V-E

OUTDOOR UNITS

HWT-401HW-E
HWT-601HW-E

HWT-801H(R)W-E
HWT-1101H(R)W-E
HWT-1401H(R)W-E

REMOTE CONTROLS

HWS-AMSU51-E

ESTIA SPLIT R32 1PH – ALL-IN-ONE

ESTIA SPLIT R32 1PH – ALL-IN-ONE Performance data

Outdoor unit					HWT-	401HW-E	601HW-E	801H(R)W-E	1101H(R)W-E	1401H(R)W-E
Hydro unit combination		Air T°	Water T°		HWT-	602S21***W-E	602S21***W-E	1102S21***W-E	1102S21***W-E	1402S21***W-E
Under floor heating	**Energy Efficiency Class - Average Climate - Low LWT**		**35°C**		**H**	**A+++******	**A+++**	**A+++**	**A+++**	**A+++**
	ETAs h (ηs) - Average Climate - Low LWT		35°C	%	H	178	180	182	179	183
	SCOP- Average Climate - Low LWT		**35°C**		**H**	**4.53**	**4.58**	**4.63**	**4.55**	**4.65**
	Max heating capacity	**+7°C**	**35°C**	**kW**	**H**	**7.25**	**7.25**	**11.90**	13.24	**18.39**
	Nominal heating capacity (rated)	+7°C	35°C	kW	H	4.00	6.00	8.00	11.00	14.00
	COP (rated)	+7°C	35°C	W/W	H	5.2	4.8	5.19	4.6	4.6
	Max heating capacity	**-7°C**	**35°C**	**kW**	**H**	**4.80**	**6.06**	**8.11**	**9.10**	**13.05**
	Heating capacity (*)	-7°C	35°C	kW	H	4.25	5.26	7.21	7.95	10.19
	COP	-7°C	35°C	W/W	H	3.06	2.97	2.70	2.54	2.61
	Max heating capacity	-10°C	35°C	kW	H	4.4	5.57	7.49	8.45	11.94
	Max heating capacity	-15°C	35°C	kW	H	3.73	4.75	6.46	7.37	10.08
	Heating capacity (*)	-15°C	35°C	kW	H	3.43	4.39	5.96	6.77	9.27
	COP	-15°C	35°C	W/W	H	2.54	2.56	2.40	2.27	2.41
Radiators heating & DHW	**Energy Efficiency Class - Average Climate - Medium LWT**		**55°C**		**H**	**A++******	**A++**	**A++**	**A++**	**A++**
	ETAs h (ηs) - Average Climate - Medium LWT		55°C	%	H	135	132	142	142	138
	SCOP - Average Climate - Medium LWT		**55°C**		**H**	**3.45**	**3.37**	**3.63**	3.62	**3.57**
	Max heating capacity	**+7°C**	**45°C**	**kW**	**H**	**6.97**	**6.97**	**11.75**	12.41	**16.3**
	Max heating capacity	-7°C	45°C	kW	H	4.48	5.80	8.00	8.44	11.94
	Max heating capacity	-15°C	45°C	kW	H	3.37	4.03	6.54	7.52	9.96
	Max heating capacity	**+7°C**	**55°C**	**kW**	**H**	**6.51**	**7.53**	**9.96**	**10.17**	**14.31**
	Max heating capacity	-7°C	55°C	kW	H	4.31	5.42	7.35	7.72	10.05
	Max heating capacity	-10°C	55°C	kW	H	-	-	7.00	7.38	9.92
	Max heating capacity	-15°C	55°C	kW	H	-	-	6.41	6.81	8.94
Cooling	Cooling capacity nominal	35°C	7/12°C	kW	C	4.00	5.00	6.00	8.00	10.00
	EER nominal			W/W	C	3.45	3.30	3.20	2.80	2.45
	Cooling capacity (**)	35°C	18/23°C	kW	C	5.28	6.28	7.64	10.21	12.50
	EER			W/W	C	4.65	4.13	3.93	3.39	3.10
	Cooling capacity (***)	35°C	18/23°C	kW	C	4.00	5.00	6.00	8.00	10.00
	EER			W/W	C	4.99	4.57	4.08	3.99	3.61

Energy Efficiencies Class & Seasonal space heating energy efficiency (ηs) are provided for Average Climate conditions in accordance with EN14825.
Max heating capacities are are shown at peak value during operation, at max compressor operating range in accordance with EN14511.
Nominal heating capacity are given at water delta T° 5°C and rated compressor operating frequency in accordance with EN14511
(*) Heating or Cooling capacities are shown at max compressor operating frequency in accordance with EN14511.
(**) Cooling capacity at rated compressor frequency from A35 W12/7 condition.
(***) Cooling capacity at compressor Hz and input so that capacity be rated.
(****) The energy efficiency class range of this product is D→A+++
- not available

ESTIA SPLIT R32 1PH – ALL-IN-ONE Physical data outdoor

Outdoor unit		HWT-	401HW-E	601HW-E	801HW-E	1101HW-E	801HRW-E	1101HRW-E	1401HW-E	1401HRW-E
Dimensions (HxWxD)	mm		630x800x300		1050x1010x370				1050 x 1010 x 370	
Weight	kg		42		75				88	
Sound power level (Point C) Heating *1 dB(A) for ENERGY LABEL	**dB(A)**		**59**	**59**	**60**	**60**	**60**	**60**	**62**	**62**
Sound power level (Max) H/C	dB(A)		65/62	65/62	65/63	65/63	65/63	65/63	72/70	72/70
Sound power level (Silent Mode) H/C	dB(A)		54/55	58/57	58/59	62/60	58/59	62/60	62/63	62/63
Sound pressure level (Rated) H/C at 1m (1)	**dB(A)**		**45/46**	**46/46**	**51/50**	**51/51**	**51/50**	**51/51**	**59/59**	**59/59**
Sound pressure level (Silent Mode) H/C et 1m (1)	**dB(A)**		**40/41**	**42/41**	**46/47**	**49/47**	**46/47**	**49/47**	**50/51**	**50/51**
Sound pressure level (Rated) H/C at 5m (2)	**dB(A)**		**31/32**	**32/32**	**37/36**	**37/37**	**37/36**	**37/37**	**45/45**	**45/45**
Sound pressure level (Silent Mode) H/C at 5m (2)	**dB(A)**		**26/27**	**28/27**	**32/33**	**35/33**	**32/33**	**35/33**	**36/37**	**36/37**
Compressor type			DC Twin rotary			DC Twin rotary w/injection			DC Twin rotary w/injection	
Refrigerant / Charge amount	kg		R32 / 0.9			R32 / 1.25			R32 / 1.4	
Flare connections (gas-liquid)	inch		4/8" - 2/8"			5/8" - 2/8"			5/8" - 2/8"	
Minimum pipe length	m		5			5			5	
Maximum pipe length (Chargeless / With Charge)	m		20 / 30			8 / 30			8 / 25	
Maximum height difference	m		30			30			25	
Chargeless pipe length	m		20			8			8	
Operating range in space heating*	°C		-20~25			-25~25			-25 ~ 25	
Operating range Domestic hot water	°C		-20~43			-25~43			-25 ~ 43	
Operating range in cooling	°C		10~43			10~43			10 ~ 43	
Bottom tape heater power	W		-	-	-	-	150		-	150
Power supply	V-ph-Hz					220/240-1-50			220/240-1-50	

* Depending on the conditions only back-up heater operates.
** Heater Operation in more than 35oC
(1) Noise pressure levels EN 12102 at 1m, open field directivity 2
(2) Noise pressure levels EN 12102 at 5m, open field directivity 2

ESTIA SPLIT R32 1PH – ALL-IN-ONE Physical data Hydro unit

Hydro unit					HWT-	602S21SxxW-E	602S21MxxW-E	1102S21SxxW-E	1102S21MxxW-E	1402S21SxxW-E	1402S21MxxW-E
	'xx'	Capacity		Supply	Max current	1 zone	2 zones	1 zone	2 zones	1 zone	2 zones
Electric back up	M3	3kW	3kW	220~240-1-50	13A	•	•	•	•	•	•
	M6	6kW	3+3kW	220~240-1-50	26A	•	•	•	•	•	•
	T6	6KW	3+3kW	380~415-3N-50	13A*2	•	•	•	•	•	•
	T9	9kW	3+3+3kW	380~415-3N-50	13A*3	-	-	•	•	•	•
Outdoor unit compatible size						**4. 6**		**8. 11**		**14**	
Load Profile						**L**		**XL**		**XL**	
DHW Energy Efficiency Class - Average Climate						**A+***		**A+**		**A+**	
DHW ETA WH(η WH) - Average Climate				**%**		**133**		**135**		**126**	
COP at Air7°C (EN16147)						**3.14**		**3.27**		**3.05**	
Heating time				**Hrs**		**1h38**		**0h55**		**0h41**	
Vmax @40°C				**L**		**234**		**235**		**244**	
Leaving water temperature (without electrical heater)				°C	H	20 ~ 55°C		20 ~ 65°C		20 ~ 65°C	
Maximum leaving water temperature (with electrical heater)				°C	H	55°C		65		65	
Leaving water temperature (cooling)				°C	C	7 ~ 25°C		7 ~ 25°C		7 ~ 25°C	
Tank	Water volume			L		210		210		210	
	Material					Stainless Steel (EN 1.4521)		Stainless Steel (EN 1.4521)		Stainless Steel (EN 1.4521)	
	Maxmum water pressure			bar		10		10		10	
Expension vessel volume				L		10		10		10	
Sound pressure level (Energy Label)				dB(A)		24	30	24	30	26	31
Sound power level (Energy Label)				dB(A)		40	45	40	45	42	46
Water Piping Diamiter	Heating and Cooling					R3/4 (Screw Connection)		R3/4 (Screw Connection)		R3/4 (Screw Connection)	
	DHW					R3/4 (Screw Connection)		R3/4 (Screw Connection)		R3/4 (Screw Connection)	
Dimensions (HxWxD)				mm		1700 x 595 x 670		1700 x 595 x 670		1700 x 595 x 670	
Weight				Kg		116	122	116	122 /123 (T9)	117	123 / 124 (T9)

(*) The energy efficiency class range of this product is F→A+

HWT-HW

ESTIA SPLIT R32 3PH – ALL-IN-ONE

ESTIA R32 All-In-One air-to-water reversible Heat Pumps provide space heating or comfort cooling throughout the year, with an integrated 210L Domestic Hot Water cylinder. They are ideal for new constructions and renovation.

High energy efficiency for superior energy savings

• A+++/A++* energy class in space heating low & medium temperature with part load efficiency ηs up to 180%.
• A+ energy class in domestic hot water production with part load efficiency ηs dhw up to 126%.

Silent operation

• Silent outdoor unit down to 34 dB(A) at 5m: No noise pollution for the neighborhoods.
• Silent indoor unit only 24 dB(A) at 1m.

Easy to install, easy to control

• Very compact outdoor unit (1 fan technology).
• Floor standing All-In-One hydro module 595x670mm footprint for easy integration.
• Second-zone kit factory fitted for easy management of two different leaving water temperatures (under floor heating & radiators).
• All components accessible on the facade: Simplified access for installation and maintenance.
• Large screen remote controller, intuitive and easy to use.
• Power consumption display.
• Compatible with the latest generations of connected thermostats.
• Remote control via smartphones: Wireless interface option compatible with the Toshiba Home AC Control App.

(*) The energy efficiency class range of this product is D→A+++

COP MAX	CAPACITY	OPERATION	HOT WATER
5.06	8kW >14kW	-25°C > +43°C	+20°C > +65°C

Best in class performances:

- **Toshiba Twin Rotary compressors** & inverter technology, with injection technology on sizes 8, 11 & 14kW
- **65°C maximum leaving water temperature** ideal for renovation and boiler replacement
- **COP Domestic Hot Water up to 3.05** (EN16147)
- Heat pump operation for **DHW production up to +43°C outside air temperature** to maximize energy savings
- **Back-up heaters** 3kW or 6kW or 9kW

ESTiA

Download on the App Store
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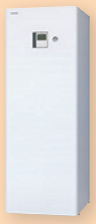

INDOOR UNITS

1 zone
HWT-1102S21S_W-E
HWT-1402S21S_W-E

2 zones
HWT-1102S21M_W-E
HWT-1402S21M_W-E

OUTDOOR UNITS

HWT-801H(R)8W-E
HWT-1101H(R)8W-E
HWT-1401H(R)8W-E

REMOTE CONTROLS

HWS-AMSU51-E

ESTIA SPLIT R32 3PH – ALL-IN-ONE Performance data

Outdoor unit Hydro unit combination		Air T°	Water T°		HWT- HWT-	801H8(R)W-E 1102S21***W-E	1101H8(R)W-E 1102S21***W-E	1401H8(R)W-E 1402S21***W-E
Under floor heating	**Energy Efficiency Class - Average Climate - Low LWT**		**35°C**		**H**	**A+++******	**A+++**	**A+++**
	ETAs h (ηs) - Average Climate - Low LWT		35°C	%	H	177	179	180
	SCOP- Average Climate - Low LWT		**35°C**		**H**	**4.51**	**4.56**	**4.57**
	Max heating capacity	**+7°C**	**35°C**	**kW**	**H**	**12.27**	**15.5**	**18.39**
	Nominal heating capacity (rated)	+7°C	35°C	kW	H	8	11	14
	COP (rated)	+7°C	35°C	W/W	H	5.06	4.74	4.60
	Max heating capacity	**-7°C**	**35°C**	**kW**	**H**	**8.23**	**10.49**	**13.05**
	Heating capacity (*)	-7°C	35°C	kW	H	7.39	8.99	10.19
	COP	-7°C	35°C	W/W	H	3.03	3.04	2.61
	Max heating capacity	-10°C	35°C	kW	H	7.59	9.57	11.94
	Max heating capacity	-15°C	35°C	kW	H	6.52	8.03	10.08
	Heating capacity (*)	-15°C	35°C	kW	H	5.98	7.43	9.27
	COP	-15°C	35°C	W/W	H	2.57	2.63	2.41
Radiators heating & DHW	**Energy Efficiency Class - Average Climate - Medium LWT**		**55°C**		**H**	**A++******	**A++**	**A++**
	ETAs h (ηs) - Average Climate - Medium LWT		55°C	%	H	140	138	139
	SCOP - Average Climate - Medium LWT		**55°C**		**H**	**3.59**	**3.52**	**3.55**
	Max heating capacity	**+7°C**	**45°C**	**kW**	**H**	**12.02**	**15.24**	**18.14**
	Max heating capacity	-7°C	45°C	kW	H	8.12	10.33	12.93
	Max heating capacity	-15°C	45°C	kW	H	6.4	7.91	10.07
	Max heating capacity	**+7°C**	**55°C**	**kW**	**H**	**11.77**	**14.97**	**17.89**
	Max heating capacity	-7°C	55°C	kW	H	8	10.17	12.81
	Max heating capacity	-10°C	55°C	kW	H	7.35	9.27	11.78
	Max heating capacity	-15°C	55°C	kW	H	6.27	7.78	10.05
Cooling	Cooling capacity nominal	35°C	7/12°C	kW	C	6.00	8.00	10.00
	EER nominal			W/W	C	2.87	2.62	2.45
	Cooling capacity (**)	35°C	18/23°C	kW	C	7.66	10.3	12.4
	EER			W/W	C	3.84	3.09	3.12
	Cooling capacity (***)	35°C	18/23°C	kW	C	6	8	10
	EER			W/W	C	3.98	3.8	3.61

Energy Efficiencies Class & Seasonal space heating energy efficiency (ηs) are provided for Average Climate conditions in accordance with EN14825
Max heating capacities are are shown at peak value during operation, at max compressor operating range in accordance with EN14511
Nominal heating capacity are given at water delta T° 5°C and rated compressor operating frequency in accordance with EN14511
(*) Heating or Cooling capacities are shown at max compressor operating frequency in accordance with EN14511
(**) Cooling capacity at rated compressor frequency from A35 W12/7 condition
(***) Cooling capacity at compressor Hz and input so that capacity be rated.
(****) The energy efficiency class range of this product is D➞A+++
- not available

ESTIA SPLIT R32 3PH – ALL-IN-ONE Physical data outdoor

Outdoor unit	HWT-	801H8W-E	1101H8W-E	801H8RW-E	1101H8RW-E	1401H8W-E	1401H8RW-E
Dimensions (HxWxD)	mm	1050x1010x370					
Weight	kg	92					
Sound power level (Point C) Heating *1 dB(A) for ENERGY LABEL	**dB(A)**	**61**	**61**	**61**	**61**	**62**	**62**
Sound power level (Max) H/C	dB(A)	71/66	72/67	71/66	72/67	72/70	72/70
Sound power level (Silent Mode) H/C	dB(A)	61/61	61/62	61/61	61/62	62/63	62/63
Sound pressure level (Rated) H/C at 1m (1)	**dB(A)**	**50/53**	**58/54**	**50/53**	**58/54**	**59/59**	**59/59**
Sound pressure level (Silent Mode) H/C et 1m (1)	**dB(A)**	**49/48**	**49/49**	**49/48**	**49/49**	**50/51**	**50/51**
Sound pressure level (Rated) H/C at 5m (2)	**dB(A)**	**36/39**	**44/40**	**36/39**	**44/40**	**45/45**	**45/45**
Sound pressure level (Silent Mode) H/C at 5m (2)	**dB(A)**	**35/34**	**35/35**	**35/34**	**35/35**	**36/37**	**36/37**
Compressor type		DC Twin rotary w/injection				DC Twin rotary w/injection	
Refrigerant / Charge amount	kg	R32 / 1.3				R32 / 1.4	
Flare connections (gas-liquid)	inch	5/8" - 2/8"					
Minimum pipe length	m	5					
Maximum pipe length (Chargeless / With Charge)	m	8 / 25					
Maximum height difference	m	25					
Chargeless pipe length	m	8					
Operating range in space heating*	°C	-25~25					
Operating range Domestic hot water	°C	-25~43					
Operating range in cooling	°C	10~43					
Bottom tape heater power	W	-	-	150		-	150
Power supply	V-ph-Hz	400 - 3 - 50					

* Depending on the conditions only back-up heater operates.
** Heater Operation in more than 35oC
(1) Noise pressure levels EN 12102 at 1m, open field directivity 2
(2) Noise pressure levels EN 12102 at 5m, open field directivity 2

ESTIA SPLIT R32 3PH – ALL-IN-ONE Physical data Hydro unit

Hydro unit					HWT-	1102S21SxxW-E	1102S21MxxW-E	1402S21SxxW-E	1402S21MxxW-E
	'xx'	Capacity		Supply	Max current	1 zone	2 zones	1 zone	2 zones
Electric back up	M3	3kW		3kW	220~240-1-50	•	•	•	•
	M6	6kW	3+3kW	220~240-1-50	26A	•	•	•	•
	T6	6KW	3+3kW	380~415-3N-50	13A*2	•	•	•	•
	T9	9kW	3+3+3kW	380~415-3N-50	13A*3	•	•	•	•
Outdoor unit compatible size						**8. 11**		**14**	
Load Profile						XL		XL	
DHW Energy Efficiency Class - Average Climate						**A+***		**A+**	
DHW ETA WH(η WH) - Average Climate				**%**		**125**		**126**	
COP at Air7°C (EN16147)						**3.03**		**3.05**	
Heating time				**Hrs**		**0h42**		**0h41**	
Vmax @40°C				**L**		**235**		**244**	
Leaving water temperature (without electrical heater)				°C	H	20 ~ 65°C		20 ~ 65°C	
Maximum leaving water temperature (with electrical heater)				°C	H	65		65	
Leaving water temperature (cooling)				°C	C	7 ~ 25°C		7 ~ 25°C	
Tank	Water volume			L		210		210	
	Material					Stainless Steel (EN 1.4521)		Stainless Steel (EN 1.4521)	
	Maxmum water pressure			bar		10		10	
Expension vessel volume				L		10		10	
Sound pressure level (Energy Label)				dB(A)		24	30	26	31
Sound power level (Energy Label)				dB(A)		40	45	42	46
Water Piping Diamiter	Heating and Cooling					R3/4 (Screw Connection)		R3/4 (Screw Connection)	
	DHW					R3/4 (Screw Connection)		R3/4 (Screw Connection)	
Water Piping Diamiter				mm		1700 x 595 x 670		1700 x 595 x 670	
Weight				Kg		116	122 / 123 (T9)	117	123 / 124 (T9)

(*) The energy efficiency class range of this product is F➞A+

HWT-HW

ESTIA SPLIT R32 1PH – WALL MOUNTED

ESTIA R32 wall-mounted air-to-water reversible Heat Pumps provide space heating or comfort cooling throughout the year. They are ideal for new constructions and renovation. They can be combined with a separated tank for domestic hot water production (150, 200 and 300L).

COP MAX	CAPACITY	OPERATION	HOT WATER
5.20	4kW >14kW	-25°C > +43°C	+20°C > +65°C

High energy efficiency for superior energy savings

• A+++/A++* energy class in space heating low & medium temperature with part load efficiency ηs up to 183%.
• A+/A energy class in domestic hot water production with part load efficiency ηs dhw up to 122%.

Silent operation

• Silent outdoor unit down to 26 dB(A) at 5m: No noise pollution for the neighborhoods.
• Silent indoor unit only 29 dB(A) at 1m.

Easy to install, easy to control

• Very compact outdoor unit (1 fan technology).
• Floor standing All-In-One hydro module 450x235mm footprint for easy integration
• The most compact wall-mounted hydro module on the market for easy integration.
• All components accessible on the facade: Simplified access for installation and maintenance.
• Possible management of a second water pump for 2 zones.
• Large screen remote controller, intuitive and easy to use.
• Power consumption display.
• Compatible with the latest generations of connected thermostats.
• Remote control via smartphones: Wireless interface option compatible with the Toshiba Home AC Control App.

(*) The energy efficiency class range of this product is D→A+++

Best in class performances:

- **Toshiba Twin Rotary compressors** & inverter technology, with injection technology on sizes 8, 11 & 14kW
- **65°C maximum leaving water temperature** ideal for renovation and boiler replacement
- **COP Domestic Hot Water up to 2.93** (EN16147)
- Heat pump operation for **DHW production up to +43°C outside air temperature** to maximize energy savings
- **Back-up heaters** 3kW or 6kW or 9kW

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INDOOR UNITS

HWT-601XWHM3W-E
HWT-601XWHM6W-E
HWT-601XWHT6W-E
HWT-1101XWHM3-E
HWT-1101XWHM6-E
HWT-1101XWHT6W-E
HWT-1101XWHT9W-E
HWT-1401XWHM3W-E
HWT-1401XWHM6W-E
HWT-1401WHT6W-E
HWT-1401XWHT9-E

OUTDOOR UNITS

HWT-401HW-E
HWT-601HW-E
HWT-801H(R)W-E
HWT-1101H(R)W-E
HWT-1401H(R)W-E

REMOTE CONTROLS

HWS-AMSU51-E

DOMESTIC HOT WATER TANKS

HWS-1501CSHM3-E
HWS-2101CSHM3-E
HWS-3001CSHM3-E

ESTIA SPLIT R32 1PH – WALL MOUNTED

ESTIA SPLIT R32 1PH – WALL MOUNTED Performance data

Outdoor unit					HWT-	401HW-E	601HW-E	801H(R)W-E	1101H(R)W-E	1401H(R)W-E
Hydro unit combination		Air T°	Water T°		HWT-	601XWH**W-E	601XWH**W-E	1101XWH**W-E	1101XWH**W-E	1401XWH**W-E
Under floor heating	**Energy Efficiency Class - Average Climate - Low LWT**		**35°C**		**H**	**A+++******	**A+++**	**A+++**	**A+++**	**A+++**
	ETAs h (ηs) - Average Climate - Low LWT		35°C	%	H	178	180	182	179	183
	SCOP- Average Climate - Low LWT		**35°C**		**H**	**4.53**	**4.58**	**4.63**	**4.55**	**4.65**
	Max heating capacity	**+7°C**	**35°C**	**kW**	**H**	**7.25**	**7.25**	**11.90**	**13.24**	**18.39**
	Nominal heating capacity (rated)	+7°C	35°C	kW	H	4.00	6.00	8.00	11.00	14.00
	COP (rated)	+7°C	35°C	W/W	H	5.2	4.8	5.19	4.6	4.6
	Max heating capacity	**-7°C**	**35°C**	**kW**	**H**	**4.80**	**6.06**	**8.11**	**9.10**	13.05
	Heating capacity (*)	-7°C	35°C	kW	H	4.25	5.26	7.21	7.95	10.19
	COP	-7°C	35°C	W/W	H	3.06	2.97	2.70	2.54	2.61
	Max heating capacity	-10°C	35°C	kW	H	4.4	5.57	7.49	8.45	11.94
	Max heating capacity	-15°C	35°C	kW	H	3.73	4.75	6.46	7.37	10.08
	Heating capacity (*)	-15°C	35°C	kW	H	3.43	4.39	5.96	6.77	9.27
	COP	-15°C	35°C	W/W	H	2.54	2.56	2.40	2.27	2.41
Radiators heating & DHW	**Energy Efficiency Class - Average Climate - Medium LWT**		**55°C**		**H**	**A++******	**A++**	**A++**	**A++**	**A++**
	ETAs h (ηs) - Average Climate - Medium LWT		55°C	%	H	135	132	142	142	138
	SCOP - Average Climate - Medium LWT		**55°C**		**H**	**3.45**	**3.37**	**3.63**	**3.62**	**3.53**
	Max heating capacity	**+7°C**	**45°C**	**kW**	**H**	**6.97**	**6.97**	**11.75**	**12.41**	**16.30**
	Max heating capacity	-7°C	45°C	kW	H	4.48	5.80	8.00	8.44	11.94
	Max heating capacity	-15°C	45°C	kW	H	3.37	4.03	6.54	7.52	9.96
	Max heating capacity	**+7°C**	**55°C**	**kW**	**H**	**6.51**	**7.53**	**9.96**	**10.17**	**14.31**
	Max heating capacity	-7°C	55°C	kW	H	4.31	5.42	7.35	7.72	10.50
	Max heating capacity	-10°C	55°C	kW	H	-	-	7.00	7.38	9.92
	Max heating capacity	-15°C	55°C	kW	H	-	-	6.41	6.81	8.94
Cooling	Cooling capacity nominal (rated comp Hz)	35°C	7/12°C	kW	C	4.00	5.00	6.00	8.00	10.00
	EER nominal			W/W	C	3.45	3.30	3.20	2.80	2.45
	Cooling capacity (**)	35°C	18/23°C	kW	C	5.28	6.28	7.64	10.21	12.50
	EER			W/W	C	4.65	4.13	3.93	3.39	3.10
	Cooling capacity (***)	35°C	18/23°C	kW	C	4.00	5.00	6.00	8.00	10.00
	EER			W/W	C	4.99	4.57	4.08	3.99	3.61

Energy Efficiencies Class & Seasonal space heating energy efficiency (ηs) are provided for Average Climate conditions in accordance with EN14825
Max heating capacities are are shown at peak value during operation, at max compressor operating range in accordance with EN14511
Nominal heating capacity are given at water delta T° 5°C and rated compressor operating frequency in accordance with EN14511
(*) Heating or Cooling capacities are shown at max compressor operating frequency in accordance with EN14511
(**) Cooling capacity at rated compressor frequency from A35 W12/7 condition
(***) Cooling capacity at compressor Hz and input so that capacity be rated.
(****) The energy efficiency class range of this product is D→A+++
- not available

ESTIA SPLIT R32 1PH – WALL MOUNTED Physical data outdoor

Outdoor unit		HWT-	401HW-E	601HW-E	801HW-E	1101HW-E	801HRW-E	1101HRW-E	1401HW-E	1401HRW-E
Dimensions (HxWxD)	mm		630x800x300			1050x1010x370			1050 x 1010 x 370	
Weight	kg		42			75			88	
Sound power level (Point C) Heating *1 dB(A) for ENERGY LABEL	**dB(A)**		**59**	**59**	**60**	**60**	**60**	**60**	**62**	**62**
Sound power level (Max) H/C	dB(A)		65/62	65/62	65/63	65/63	65/63	65/63	72/70	72/70
Sound power level (Silent Mode) H/C	dB(A)		54/55	58/57	58/59	62/60	58/59	62/60	62/63	62/63
Sound pressure level (Rated) H/C at 1m (1)	**dB(A)**		**45/46**	**46/46**	**51/50**	**51/51**	**51/50**	**51/51**	**59/59**	**59/59**
Sound pressure level (Silent Mode) H/C et 1m (1)	**dB(A)**		**40/41**	**42/41**	**46/47**	**49/47**	**46/47**	**49/47**	**50/51**	**50/51**
Sound pressure level (Rated) H/C at 5m (2)	**dB(A)**		**31/32**	**32/32**	**37/36**	**37/37**	**37/36**	**37/37**	**45/45**	**45/45**
Sound pressure level (Silent Mode) H/C at 5m (2)	**dB(A)**		**26/27**	**28/27**	**32/33**	**35/33**	**32/33**	**35/33**	**36/37**	**36/37**
Compressor type			DC Twin rotary			DC Twin rotary w/injection			DC Twin rotary w/injection	
Refrigerant / Charge amount	kg		R32 / 0.9			R32 / 1.25			R32 / 1.4	
Flare connections (gas-liquid)	inch		4/8" - 2/8"			5/8" - 2/8"			5/8" - 2/8"	
Minimum pipe length	m		5			5			5	
Maximum pipe length (Chargeless / With Charge)	m		20 / 30			8 / 30			8 / 25	
Maximum height difference	m		30			30			25	
Chargeless pipe length	m		20			8			8	
Operating range in space heating*	°C		-20~25			-25~25			-25 ~ 25	
Operating range Domestic hot water	°C		-20~43			-25~43			-25 ~ 43	
Operating range in cooling	°C		10~43			10~43			10 ~ 43	
Bottom tape heater power	W		-	-	-	-	150		-	150
Power supply	V-ph-Hz		220/240-1-50						220/240-1-50	

* Depending on the conditions only back-up heater operates.
** Heater Operation in more than 35oC
(1) Noise pressure levels EN 12102 at 1m, open field directivity 2
(2) Noise pressure levels EN 12102 at 5m, open field directivity 2

ESTIA SPLIT R32 1PH – WALL MOUNTED Physical data Hydro unit

Hydro unit					HWT-	601XWHxxW-E	1101XWHxxW-E	1401XWHxxW-E
	'xx'	Capacity		Supply	Max current	1 zone	1 zone	1 zone
Electric back up	M3	3kW	3kW	220~240-1-50	13A	•	•	•
	M6	6kW	3+3kW	220~240-1-50	26A	•	•	•
	T6	6KW	3+3kW	380~415-3N-50	13A*2	•	•	•
	T9	9kW	3+3+3kW	380~415-3N-50	13A*3	-	•	•
Outdoor unit compatible size						**4. 6**	**8. 11**	**14**
Leaving water temperature (without electrical heater)				°C	H	20 ~ 55°C	20 ~ 65°C	20 ~ 65°C
Maximum leaving water temperature (with electrical heater)				°C	H	55	65	65
Leaving water temperature (cooling)				°C	C		7 ~ 25°C	
Dimensions (HxWxD)				mm			720 x 450 x 235	
Weight				Kg			27	
Sound power level (H/C)				dB(A)			40/40	
Sound pressure level at 1m				dB(A)			29	
Water Piping Diamiter	Heating and Cooling						R3/4 (Screw Connection)	

ESTIA SPLIT R32 – WALL MOUNTED Physical data Sanitary Hot Water tank

Domestic hot water tank		HWS-	1501CSHM3-E			2101CSHM3-E			3001CSHM3-E	
Outdoor unit		HWT-	40/601HW-E	80/1101H(R)W-E	1401H(R)W-E	40/601HW-E	80/1101H(R)W-E	1401H(R)W-E	40/601HW-E	80/1101H(R)W-E	1401H(R)W-E
Water volume	litres			150			210			300	
Material				Stainless steel			Stainless steel			Stainless steel	
Maxmum water pressure	bar			6			6			6	
Max water temperature	°C			75			75			75	
Electric heater	kW			2.7			2.7			2.7	
Power supply	V-ph-Hz			220/240-1-50			220/240-1-50			220/240-1-50	
Load Profile			L	L	L	L	XL	XL	XL	XL	XL
DHW Energy Efficiency Class			**A+***	**A**	**A**	**A+**	**A**	**A**	**A**	**A**	**A**
DHW ETA WH(η WH) - Average Climate	**%**		**120**	**106**	**88**	**115**	**118**	**107**	**122**	**113**	**106**
COP at Air7°C (EN16147)			**2.87**	**2.53**	**2.11**	**2.72**	**2.83**	**2.6**	**2.93**	**2.71**	**2.54**
Height	mm			1090			1474			2040	
Diameter	mm			550			550			550	
Weight	Kg			31			41			60	

(*) The energy efficiency class range of this product is F→A+

HWS-_XWH

ESTIA SPLIT R32 3PH – WALL MOUNTED

ESTIA R32 All-In-One air-to-water reversible Heat Pumps provide space heating or comfort cooling throughout the year, with an integrated 210L Domestic Hot Water cylinder. They are ideal for new constructions and renovation.

High energy efficiency for superior energy savings

• A+++/A++* energy class in space heating low & medium temperature with part load efficiency ηs up to 180%.
• A+ energy class in domestic hot water production with part load efficiency ηs dhw up to 113%.

Silent operation

• Silent outdoor unit down to 34 dB(A) at 5m: No noise pollution for the neighborhoods.
• Silent indoor unit only 29 dB(A) at 1m.

Easy to install, easy to control

• Very compact outdoor unit (1 fan technology).
• Floor standing All-In-One hydro module 450x235mm footprint for easy integration.
• Second-zone kit factory fitted for easy management of two different leaving water temperatures (under floor heating & radiators).
• All components accessible on the facade: Simplified access for installation and maintenance.
• Large screen remote controller, intuitive and easy to use.
• Power consumption display.
• Compatible with the latest generations of connected thermostats.
• Remote control via smartphones: Wireless interface option compatible with the Toshiba Home AC Control App.

(*) The energy efficiency class range of this product is D→A+++

COP MAX	CAPACITY	OPERATION	HOT WATER
5.06	8kW >14kW	-25°C > +43°C	+20°C > +65°C

Best in class performances:

- **Toshiba Twin Rotary compressors** & inverter technology, with injection technology on sizes 8, 11 & 14kW
- **65°C maximum leaving water temperature** ideal for renovation and boiler replacement
- **COP Domestic Hot Water up to 2.75** (EN16147)
- Heat pump operation for **DHW production up to +43°C outside air temperature** to maximize energy savings
- **Back-up heaters** 3kW or 6kW or 9kW

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INDOOR UNITS

HWT-1101XWHM3-E
HWT-1101XWHM6-E
HWT-1101XWHT6W-E
HWT-1101XWHT9W-E
HWT-1401XWHM3W-E
HWT-1401XWHM6W-E
HWT-1401WHT6W-E
HWT-1401XWHT9-E

OUTDOOR UNITS

HWT-801H(R)8W-E
HWT-1101H(R)8W-E
HWT-1401H(R)8W-E

REMOTE CONTROLS

HWS-AMSU51-E

DOMESTIC HOT WATER TANK

HWS-1501CSHM3-E
HWS-2101CSHM3-E
HWS-3001CSHM3-E

ESTIA SPLIT R32 3PH – WALL MOUNTED

ESTIA SPLIT R32 3PH – WALL MOUNTED Performance data

Outdoor unit					HWT-	801H8(R)W-E	1101H8(R)W-E	1401H8(R)W-E
Hydro unit combination		Air T°	Water T°		HWT-	1101XWH**W-E	1101XWH**W-E	1401XWH**W-E
Under floor heating	**Energy Efficiency Class - Average Climate - Low LWT**		**35°C**		**H**	**A+++******	**A+++**	**A+++**
	ETAs h (ηs) - Average Climate - Low LWT		35°C	%	H	177	179	180
	SCOP- Average Climate - Low LWT		**35°C**		**H**	**4.51**	**4.56**	**4.57**
	Max heating capacity	**+7°C**	**35°C**	**kW**	**H**	**12.27**	**15.5**	**18.39**
	Nominal heating capacity (rated)	+7°C	35°C	kW	H	8	11	14
	COP (rated)	+7°C	35°C	W/W	H	5.06	4.74	4.60
	Max heating capacity	**-7°C**	**35°C**	**kW**	**H**	**8.23**	**10.49**	**13.05**
	Heating capacity (*)	-7°C	35°C	kW	H	7.39	8.99	10.19
	COP	-7°C	35°C	W/W	H	3.03	3.04	2.61
	Max heating capacity	-10°C	35°C	kW	H	7.59	9.57	11.94
	Max heating capacity	-15°C	35°C	kW	H	6.52	8.03	10.08
	Heating capacity (*)	-15°C	35°C	kW	H	5.98	7.43	9.27
	COP	-15°C	35°C	W/W	H	2.57	2.63	2.41
Radiators heating & DHW	**Energy Efficiency Class - Average Climate - Medium LWT**		**55°C**		**H**	**A++******	**A++**	**A++**
	ETAs h (ηs) - Average Climate - Medium LWT		55°C	%	H	140	138	139
	SCOP - Average Climate - Medium LWT		**55°C**		**H**	**3.59**	**3.52**	**3.55**
	Max heating capacity	**+7°C**	**45°C**	**kW**	**H**	**12.02**	**15.24**	**18.14**
	Max heating capacity	-7°C	45°C	kW	H	8.12	10.33	12.93
	Max heating capacity	-15°C	45°C	kW	H	6.40	7.91	10.07
	Max heating capacity	**+7°C**	**55°C**	**kW**	**H**	**11.77**	**14.97**	**17.89**
	Max heating capacity	-7°C	55°C	kW	H	8.00	10.17	12.81
	Max heating capacity	-10°C	55°C	kW	H	7.35	9.27	11.78
	Max heating capacity	-15°C	55°C	kW	H	6.27	7.78	10.05
Cooling	Cooling capacity nominal (rated comp Hz)	35°C	7/12°C	kW	C	6.00	8.00	10.00
	EER nominal			W/W	C	2.87	2.62	2.45
	Cooling capacity (**)	35°C	18/23°C	kW	C	7.66	10.3	12.4
	EER			W/W	C	3.84	3.09	3.12
	Cooling capacity (***)	35°C	18/23°C	kW	C	6	8	10
	EER			W/W	C	3.98	3.8	3.61

Energy Efficiencies Class & Seasonal space heating energy efficiency (ηs) are provided for Average Climate conditionsin accordance with EN14825
Max heating capacities are are shown at peak value during operation, at max compressor operating range in accordance with EN14511
Nominal heating capacity are given at water delta T° 5°C and rated compressor operating frequency in accordance with EN14511
(*) Heating or Cooling capacities are shown at max compressor operating frequency in accordance with EN14511
(**) Cooling capacity at rated compressor frequency from A35 W12/7 condition
(****) Cooling capacity atcompressor Hz and input so that capacity be rated.
(****) The energy efficiency class range of this product is D➞A+++
- not available

ESTIA SPLIT R32 3PH – WALL MOUNTED Physical data outdoor unit

Outdoor unit		HWT-	801H8W-E	1101H8W-E	801H8RW-E	1101H8RW-E	1401H8W-E	1401H8RW-E
Dimensions (HxWxD)	mm		1050x1010x370					
Weight	kg		92					
Sound power level (Point C) Heating *1dB(A) for ENERGY LABEL	**dB(A)**		**61**	**61**	**61**	**61**	**62**	**62**
Sound power level (Max) H/C	dB(A)		71/66	72/67	71/66	72/67	72/70	72/70
Sound power level (Silent Mode) H/C	dB(A)		61/61	61/62	61/61	61/62	62/63	62/63
Sound pressure level (Rated) H/C at 1m (1)	**dB(A)**		**50/53**	**58/54**	**50/53**	**58/54**	**59/59**	**59/59**
Sound pressure level (Silent Mode) H/C et 1m (1)	**dB(A)**		**49/48**	**49/49**	**49/48**	**49/49**	**50/51**	**50/51**
Sound pressure level (Rated) H/C at 5m (2)	**dB(A)**		**36/39**	**44/40**	**36/39**	**44/40**	**45/45**	**45/45**
Sound pressure level (Silent Mode) H/C at 5m (2)	**dB(A)**		**35/34**	**35/35**	**35/34**	**35/35**	**36/37**	**36/37**
Compressor type				DC Twin rotary w/injection			DC Twin rotary w/injection	
Refrigerant / Charge amount	kg			R32 / 1.3			R32 / 1.4	
Flare connections (gas-liquid)	inch				5/8" - 2/8"			
Minimum pipe length	m				5			
Maximum pipe length (Chargeless / With Charge)	m				8 / 25			
Maximum height difference	m				25			
Chargeless pipe length	m				8			
Operating range in space heating*	°C				-25~25			
Operating range Domestic hot water	°C				-25~43			
Operating range in cooling	°C				10~43			
Bottom tape heater power	W		-	-	150		-	150
Power supply	V-ph-Hz				400 - 3 - 50			

* Depending on the conditions only back-up heater operates.
** Heater Operation in more than 35oC
(1) Noise pressure levels EN 12102 at 1m, open field directivity 2
(2) Noise pressure levels EN 12102 at 5m, open field directivity 2

ESTIA SPLIT R32 3PH – WALL MOUNTED Physical data hydro unit

Hydro unit					HWT-	601XWHxxW-E	1101XWHxxW-E	1401XWHxxW-E
	'xx'	Capacity		Supply	Max current	1 zone	1 zone	1 zone
Electric back up	M3	3kW	3kW	220~240-1-50	13A	•	•	•
	M6	6kW	3+3kW	220~240-1-50	26A	•	•	•
	T6	6KW	3+3kW	380~415-3N-50	13A*2	•	•	•
	T9	9kW	3+3+3kW	380~415-3N-50	13A*3	-	•	•
Outdoor unit compatible size						**4. 6**	**8. 11**	**14**
Leaving water temperature (without electrical heater)				°C	H	20 ~ 55°C	20 ~ 65°C	20 ~ 65°C
Maximum leaving water temperature (with electrical heater)				°C	H	55	65	65
Leaving water temperature (cooling)				°C	C		7 ~ 25°C	
Dimensions (HxWxD)				mm			720 x 450 x 235	
Weight				Kg			27	
Sound power level (H/C)				dB(A)			40/40	
Sound pressure level at 1m				dB(A)			29	
Water Piping Diamiter	Heating and Cooling						R3/4 (Screw Connection)	

ESTIA SPLIT R32 3PH – WALL MOUNTED Physical data sanitary hot water tank

Domestic hot water tank		HWS-	1501CSHM3-E		2101CSHM3-E		3001CSHM3-E	
Outdoor unit		HWT-	80/1101H8(R)W-E	1401H8(R)W-E	80/1101H8(R)W-E	1401H8(R)W-E	80/1101H8(R)W-E	1401H8(R)W-E
Water volume	litres		150		210		300	
Material			Stainless steel		Stainless steel		Stainless steel	
Maxmum water pressure	bar		6		6		6	
Max water temperature	°C		450		75		75	
Electric heater	kW		2.7		2.7		2.7	
Power supply	V-ph-Hz		220/240-1-50		220/240-1-50		220/240-1-50	
Load Profile			L	L	L	XL	XL	XL
DHW Energy Efficiency Class			**A***	**A**	**A**	**A**	**A**	**A**
DHW ETA WH(η WH) - Average Climate	**%**		**101**	**88**	**113**	**107**	**110**	**106**
COP at Air7°C (EN16147)			**2.42**	**2.11**	**2.75**	**2.6**	**2.66**	**2.54**
Height	mm		1090		1474		2040	
Diameter	mm		550		550		550	
Weight	Kg		31		41		60	

(*) The energy efficiency class range of this product is F➞A+

HWS-G_CNMR-E

ESTIA DOMESTIC HOT WATER HEAT PUMP

The Toshiba DHW-HP is designed to provide the customer with best in class performance and energy savings, for sanitary hot water production, throughout the year. Thanks to its large operating range, high external static pressure fan and low noise operation the Toshiba DHW-HP is suitable for all types of installation.

COP MAX	OPERATION	HOT WATER
3.69	-7°C > +40°C	Up to 65°C

Comfort & ease of installation

• Sanitary hot water can be produced throughout the year, using only the heat pump, thanks to the innovative design of the unit and the large operating temperature range (Air -7°C to +40°C). Installation is simplified due to the slimline chassis design (Ø603mm) and easy access to water pipe connections.

Highest efficiency for best energy savings

• The Toshiba DHW-HP provides 80% energy savings Vs traditional electric water heaters with best in class COP 3.69 (EN16147 LCIE certified). Compatible with solar systems (photovoltaic panels ready or solar built-in extra coil) , and smart grid ready, makes it the best solution for increased energy savings.

Innovative & reliable

• Anti-corrosion protection with enamelled steel tank and magnesium anode.
Back-up electrical heater to secure hot water production at any time.

Intuitive & adaptative control

• User friendly control with 5 operational modes AUTO, ECO, BOOST, SILENT and HOLIDAY. Flexible control solutions: Low electricity tariff mode, energy consumption display, Modbus connectivity, Air Cooling function & Floor Heating function with extra coil.

Best in class performances:

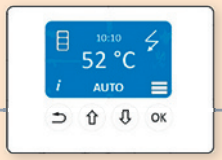
- Energy class A+ (ErP 2017)
- Heat pump hot water production from -7°C to + 40°C outside air temperature
- Hot water temperature to 60°C without the use of electric heaters
- Adjustable airflow rate (0-800m³/h)
- Best in class fan external static pressure (up to 200Pa)
- Low noise operation
- Slimline chassis design (Ø603mm)
- Flexible control options including Modbus connectivity
- Compatible with other renewable technologies solar thermal and solar photovoltaic (advanced option only)
- Smart Grid Ready (advanced option only)

ESTIA

DHW-HP UNITS

HWS-G190
HWS-G260

REMOTE CONTROLS



DHW-HP
Control panel

ESTIA DOMESTIC HOT WATER HEAT PUMP Performance data

Domestic Hot Water Heat Pump		HWS-G1901CNMR-E	HWS-G2601CNMR-E
Energy Class	Label	A+*	A+
η_{WH}	%	146	150
COP at Air7°C W10°C-52,9°C (EN16147)		3,57	3.69
COP at Air15°C W10°C-52,9°C (EN16147)		3,90	3,87
Heat pump operating range (min/max)	°C	-7 / +40	-7 / +40
Heat up time (A7°C W10°C-53,5°C)	hr:mm	06:27	09:12
Maximum quantity of usable hot water Vmax 40 volume (W52.9°C)	liters	247	347
Cylinder volume	liters	190	260
Cylinder profile		L	XL
Maximum water temperature (heat pump & elect.heater)	°C	65	65
Maximum water temperature (heat pump only)	°C	60	60
Corrosion protection		Magnesium anode	Magnesium anode
Noise power level - Ducted (ISO12102)	dB(A)	49.0	49.0
Noise pressure level @2m - Ducted	dB(A)	32.0	32.0
Noise power level - Non ducted (ISO12102)	dB(A)	55.6	55.6
Noise pressure level @2m - Non ducted	dB(A)	38.6	38.6
Airflow rate nominal (min - max)	m^3/h	450 (0 - 800)	450 (0 - 800)
Maximum fan power	W	85	85
Maximum external static pressure	Pa	200	200
Air duct connections	mm	160	160
Minimum room volume (non ducted unit)	m^3	60	60
Maximum power input	W	2185	2185
Electrical heater power	W	1500	1500
Maximum compressor power	W	600	600
Auxiliary power input (Paux)	W	1.61	1.61
Standby power input (Pes)	W	17	20

(*) The energy efficiency class range of this product is F→A+

ESTIA DOMESTIC HOT WATER HEAT PUMP Physical data

Domestic Hot Water Heat Pump		HWS-G1901CNMR-E	HWS-G2601CNMR-E
Dimensions (Height x Diameter)	mm	1600 x 620	1600 x 620
Required height for installation	mm	1868	2223
Weight (dry / wet)	kg	94 / 284	100/350
Refrigerant		R134A	R134A
Refrigerant charge	kg	1.2	1.28
Refrigerant charge CO_2 equivalent	ton	1.72	1.83
Water connections (cold & hot water)	inch	3/4	3/4
Standard water connection entry angle	deg.	45	45
Condensates water connections	mm	Diam19	Diam19
Max water side operating pressure	Mpa	0.6	0.6
Power supply	V-ph-Hz	230-1-50	230-1-50

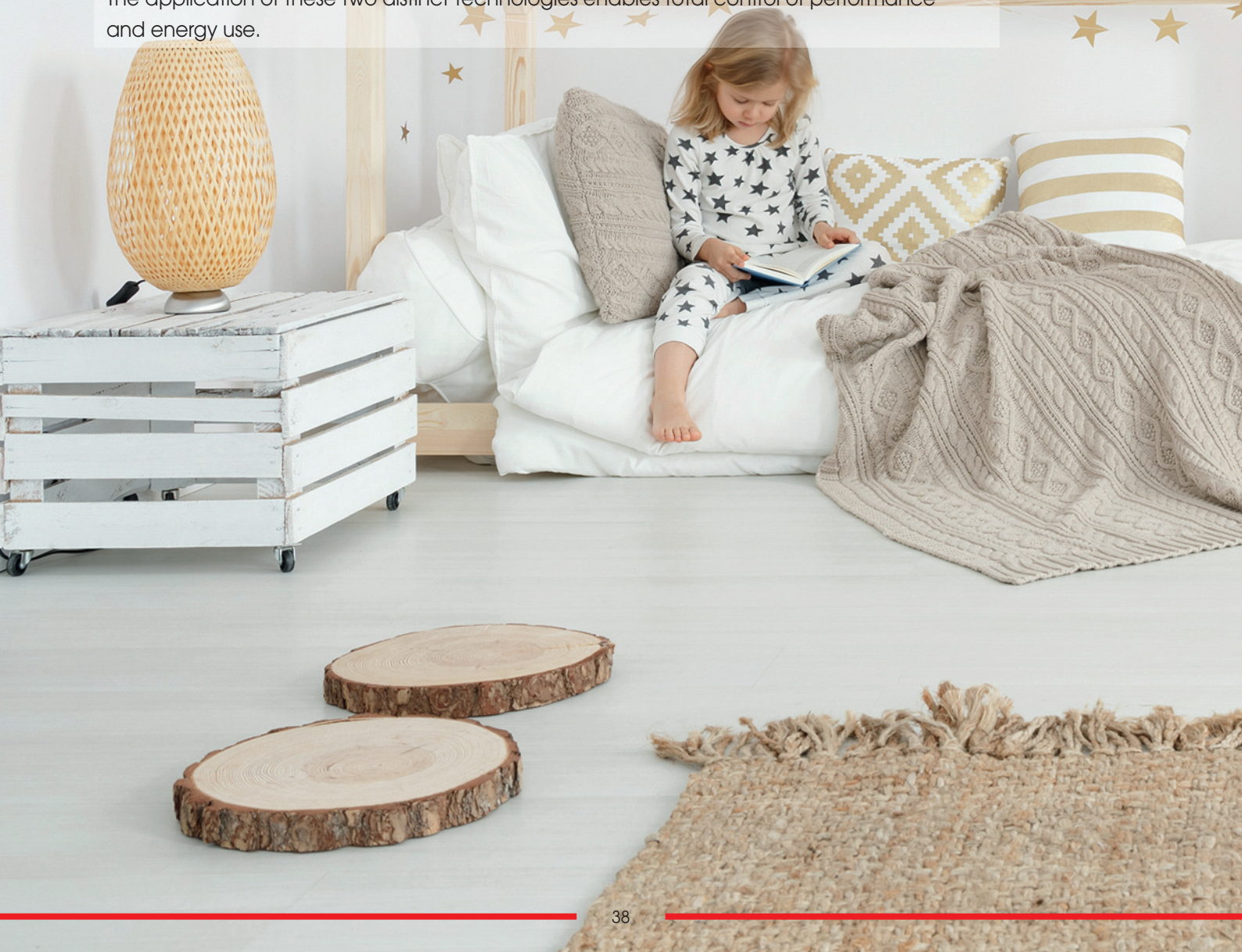
(1) Sound pressure calculation based on spherical sound propagation and infinite room (directivity factor Q=1)

ESTIA DOMESTIC HOT WATER HEAT PUMP Product configurations

Description	Model name	Functions
190l cylinder + 180°C variant water connection position	HWS-G1901CNRR-E	Alternative water connection entry position for flexible installation
190l cylinder + deluxe PCB	HWS-G1901CNXR-E	Deluxe PCB option allowing connection of: - Solar Photovoltaic - Smart Grid Ready - Additional pump / ventilation damper
190l cylinder + deluxe PCB + heating coil	HWS-G1901ENXR-E	All of the features of the deluxe PCB option with the additional benefit of connection to a solar thermal system
260l cylinder + 180°C variant water connection position	HWS-G2601CNRR-E	Alternative water connection entry position for flexible installation
260l cylinder + deluxe PCB	HWS-G2601CNXR-E	Deluxe PCB option allowing connection of: - Solar Photovoltaic - Smart Grid Ready - Additional pump / ventilation damper
260l cylinder + deluxe PCB + heating coil	HWS-G2601ENXR-E	All of the features of the deluxe PCB option with the additional benefit of connection to a solar thermal system

ON YOUR OWN AS A FAMILY IN A GROUP ON YOUR OWN

In 1981, Toshiba was the first company to incorporate inverter technology into air conditioning systems. Ever since, it has retained its technological advantage over its competitors.
Its development of the new and exclusive DC hybrid inverter system has reaffirmed its ability to innovate and remain a technological leader, even in fast-growing markets. But for Toshiba, innovation also involves working alongside international institutions that carefully evaluate the impact of new technologies on our environment.
Toshiba combines technological development with concern for future generations, resulting in a range of extremely energy-efficient air conditioners, which reduce greenhouse gas emissions at the source. Toshiba's continuous research led to the development of PWM (Pulse Width Modulation) technology, which is used in combination with traditional PAM (Pulse Amplitude Modulation) control.
The application of these two distinct technologies enables total control of performance and energy use.



TOSHIBA

RESIDENTIAL AIR-TO-AIR

AS A FAMILY IN A GROUP ON YOUR OWN AS A FAMILY

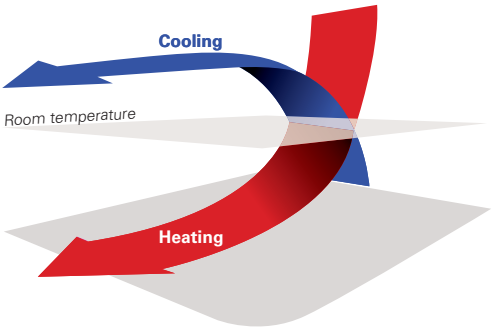
HIGH WALLS & CONSOLES

When technology meets comfort

> Innovation, efficiency, high reliability, energy savings, environmental respect ...
These are the powerful values at the heart of Toshiba's DNA.
For over 50 years Toshiba has been providing its clients with the guaranteed accuracy and expertise of flawless Japanese quality. Technological, stylish, highly efficient and environmentally-friendly, the Toshiba monosplit units proudly upholds the values rooted firmly in its name.

> The development of the new and exclusive DC hybrid inverter system has reaffirmed this ability to innovate and maintain technological leadership in a fast-growing market. But for Toshiba, innovation also means a strong commitment to international institutions that carefully evaluate the impact of new technologies on our environment. Toshiba combines technological development with care for future generations: the result is a range of extremely energy-efficient air conditioners, reducing greenhouse gas emissions at source.

Toshiba continuous research into the development of PWM technology, which together with the traditional PAM control, allows total control of the systems performance and energy usage.



PAM — The new Hybrid Inverter features PAM (Pulse Amplitude Modulation) for the highest levels of power.

PWM — PWM (Pulse With Modulation) for energy efficiency.

The Future Is Now

> Energy efficiency by design
Toshiba products are designed to optimise energy performance at any time of year. This in turn reduces the amount of indirect $C0_2$ emissions generated by the electricity consumption.

> Lowest level refrigerant charge
Toshiba is committed to minimising the refrigerant charge of its products and has made this a key performance indicator for all new product developments.

> European F-GAS regulation
R32 is today the right alternative to R410A. The European F-gas regulation (517/2014) has been in force since 1 January 2015 and will progressively phase down the use of hydrofluorocarbons (HFCs) in the heating and cooling systems of the future. Toshiba already offers new heating and cooling systems operating with R32, which will be the alternative to R410A in the years ahead. The new R32 refrigerant ensures an ideal balance between energy-efficiency and respect for the environment. The quantities of HFCs that are placed on the market will be gradually reduced in a step-by-step approach, until they finally reach a minimum level by 2030.

R32 REFRIGERANT

HFC consumption related to tons of CO_2 equivalent

2018 -37%

2024 -69%

2030 -79%

DAISEIKAI 10
Wood or White

HAORI

SHORAI EDGE
Black or White

SEIYA CLASSIC

CONSOLE

R32 REFRIGERANT

ADVANCED TECHNOLOGY AVAILABLE WITH R32 REFRIGERANT

Toshiba Home AC Control

Take complete control of your comfort with the Toshiba Home AC Control App. Simple to use on your smartphone or tablet, both at home and on the move. Fully compatible, the adapter can be used with all Toshiba High-wall and Console units.

RAS-S4KVP(D)G-E
DAISEIKAI 10

DESIGN AWARD 2024

The new aesthetic of the DAISEIKAI™ derives from its material concept – "Go back to the Earth." Its natural wood grille, sourced from PEFC-certified sustainable forests, makes the product unique in the air conditioning and heat pump market. Every wood grille with its own grain, texture and colour tone makes the DAISEIKAI 10 bespoke to each home, while a timeless white panel is also available. Furthermore, recycled materials make up 43% of DAISEIKAI 10's plastic components. Compatible with Monosplit & Multisplit outdoor units (B-codes).

Best-in-class energy rating in cooling and heating A+++/A+++*

Extremely silent
- Ultra-quiet system: Indoor unit less than 19dB(A) for a good nights sleep.
- Silent Condensing Unit function halves the sound level down to 40dB(A).

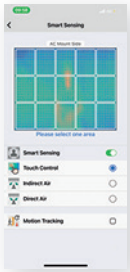
Premium indoor air quality
- Ultra-Pure filter: Captures up to 94% of PM 2.5 particulates.
- Plasma ionizer: Absorbs and decomposes smoke, food smells and bad odors.
- Resin coated coil: Special coating for a coil which is as clean as new.

Intelligent features for better lifestyle
- Smart speaker voice control to modulate comfort for an easier life.
- Energy monitoring to help control energy bills and make true savings.
- Motion tracking function (Occupancy and high activity detection).
- HADA-CARE for better air distribution in cooling mode.
- Fireplace mode: Diffusion of heat from your fireplace or other heat sources.
- On-Demand Defrost, to clear the ice at your convenience (one-time setting).
- Strong Defrost, Toshiba Air Conditioning's unique function for heavy anti-frost surveillance mode.
- Intelligent Defrost for continued heating cycle inside the house.

(*) The energy efficiency class range of this product category is D→A+++

MAX EFFICIENCY	CAPACITY	OPERATION
SEER **10.7** SCOP **5.3**	**2.5**kW > **5**kW	**-20**°C > **+46**°C

Touch Control: Enjoy a new level of comfort with Smart Sensing control function app. Just tap on any of the 15 areas displayed by the thermal map to design the airflow direction.



Download on the App Store
Google play
works with the Google Assistant
WORKS WITH amazon alexa

UNIQUE ON THE MARKET*
*As at 1 December 2023

INDOOR UNITS

RAS-B10S4KVDG-E
RAS-B13S4KVDG-E
RAS-B18S4KVDG-E

RAS-B10S4KVPG-E
RAS-B13S4KVPG-E
RAS-B18S4KVPG-E

OUTDOOR UNITS

RAS-B10S4KVPG-E
RAS-B13S4KVPG-E
RAS-B18S4KVPG-E

1 2

REMOTE CONTROLS

Delivered with the unit
1- WH-UD01UE
2- WH-UD02UE

DAISEIKAI 10 Performance data

Outdoor unit Indoor unit	White Wood	Europe		RAS-10S4AVPG-E RAS-B10S4KVPG-E RAS-B10S4KVDG-E	RAS-13S4AVPG-E RAS-B13S4KVPG-E RAS-B13S4KVDG-E	RAS-18S4AVPG-E RAS-B18S4KVPG-E RAS-B18S4KVDG-E
Cooling capacity		**kW**		**2.50**	**3.50**	**5.00**
Cooling range (min. - max.)		kW		(0.60 - 3.50)	(0.90 - 4.20)	(0.90 - 6.0)
Power input (min. -rated - max.)		kW	C	(0.16 - 0.47 - 0.82)	(0.20 - 0.80 - 1.10)	(0.20 - 1.40 - 2.20)
Pdesignc		kW		2.5	3.5	5.0
EER		W/W		5.32	4.38	3.57
SEER				10.7	9.7	8.6
Energy efficiency class D→A+++*			C	A+++	A+++	A+++
Seasonal electricity consumption		kWh/a	C	82	126	203
Heating capacity		**kW**		**3.2**	**4.0**	**6.0**
Heating range (min. - max.)		kW		(0.65 - 5.80)	(0.70 - 6.30)	(0.80 - 7.20)
Power input (min. -rated - max.)		kW	H	(0.16 - 0.60 - 1.50)	(0.18- 0.80 - 1.60)	(0.19 - 1.45 - 1.90)
Pdesignh (Tbiv-10°C)		kW		3.0	3.6	4.5
COP		W/W		5.33	5.00	4.14
SCOP				5.3	5.2	4.8
Energy efficiency class D→A+++*			H	A+++	A+++	A++
Seasonal electricity consumption		kWh/a	H	792	969	1312
SCOPw				6.2	6.2	6.5
Energy efficiency class D→A+++*				A+++	A+++	A+++

(*) The energy efficiency class range of this product category is D→A+++

DAISEIKAI 10 Physical data indoor

Indoor unit	White Wood	Europe		RAS-B10S4KVPG-E RAS-B10S4KVDG-E	RAS-B13S4KVPG-E RAS-B13S4KVDG-E	RAS-B18S4KVPG-E RAS-B18S4KVDG-E
Air Flow (H)		m³/h - l/s	C	700 - 194	750 - 208	800 - 222
Air Flow (l)		m³/h - l/s	C	300 - 83	330 - 91	350 - 97
Sound pressure level (h/l (q))		dB(A)	C	40/24 (19)	41/26 (20)	44/25 (22)
Sound power level (H)		dB(A)	C	53	54	57
Air Flow (H)		m³/h - l/s	H	750 - 208	800 - 222	810 - 225
Air Flow (l)		m³/h - l/s	H	330 - 91	360 - 100	370- 102
Sound pressure level (h/l (q))		dB(A)	H	41/25 (19)	42/24 (20)	45/26 (22)
Sound power level (H)		dB(A)	H	54	55	58
Dimensions (hxwxd) White		mm		293 x 930 x 255	293 x 930 x 255	293 x 930 x 255
Dimensions (hxwxd) Woods		mm		293 x 940 x 257	293 x 940 x 257	293 x 940 x 257
Weight White/Wood		kg		14/16	14/16	14/16

DAISEIKAI 10 Physical data outdoor

Outdoor unit	Europe		RAS-10S4AVPG-E	RAS-13S4AVPG-E	RAS-18S4AVPG-E
Air Flow (max)		m³/h - l/s	2100 - 583	2160 - 600	2220 - 616
Sound pressure level (H)		dB(A)	44	45	47
Sound pressure level (Silent CDU#2)		dB(A)	40	41	42
Sound power level (H)		dB(A)	57	58	60
Sound power level (Silent CDU#2)		dB(A)	53	54	55
Operating range		°C	-15 ~ 46	-15 ~ 46	-15 ~ 46
Air Flow (max)		m³/h - l/s	2100 - 583	2160 - 600	2220 - 616
Sound pressure level (H)		dB(A)	45	46	49
Sound pressure level (Silent CDU#2)		dB(A)	41	42	44
Sound power level (H)		dB(A)	58	59	62
Sound power level (Silent CDU#2)		dB(A)	54	55	57
Operating range		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24
Dimensions (hxwxd)		mm	630 x 800 x 300	630 x 800 x 300	630 x 800 x 300
Weight		kg	38	38	38
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"
Minimum pipe length		m	2	2	2
Maximum pipe length		m	25	25	25
Maximum height difference		m	15	15	15
Chargeless pipe length		m	15	15	15
Remote White/Wood			WH-UD02UE / WH-UD01UE	WH-UD02UE / WH-UD01UE	WH-UD02UE / WH-UD01UE
Refrigerant charging (R32)		kg	0.96	0.96	1.0
Power supply		V-ph-Hz	220-240/1/50	220-240/1/50	220-240/1/50

C: cooling mode
H: heating mode

RAS-B-N4KVRG-E
HAORI

HAORI™, the air conditioner that respects your universe with a truly elegant design, featuring a stylish textile fabric cover. Innovation, efficiency, high reliability, energy savings, respect for the environment: these powerful values are at the heart of everything we do at Toshiba Air Conditioning. HAORI™ offers energy efficient A+++ cooling and heating performances, with R32 refrigerant.
Compatible with Monosplit & Multisplit outdoor units (B-codes).

MAX EFFICIENCY	CAPACITY	OPERATION
SEER **8.7** SCOP **5.1**	**2.5**kW > **4.6**kW	**-15**°C > **+46**°C

Truly elegant design featuring a stylish textile fabric cover.

High energy class A+++ / A+++*
• Heating and cooling modes ensure exceptional energy savings and unparalleled comfort levels.

Ultra-quiet system
• HAORI™ Silent function halves the sound level of the outdoor unit down to 37 dB(A), while its Quiet function reduces noise from the indoor unit to less than 19 dB(A) for a good night's sleep.

Indoor Air Quality
• Ultra Pure filter: Captures up to 94% of PM 2.5 particulates.
• Plasma ionizer: Absorbs and decomposes smoke, food smells and bad odors.
• Resin coated coil: Special coating for a coil which is as clean as new.

Intuitive control
• Smart speaker voice control to easily modulate comfort for an easier life.
• Energy monitoring to help control energy bills and make true savings.
• HADA-CARE to set louver position to generate indirect air flow for better air distribution to homogenize room temperature in cooling mode.
• Fireplace mode: Diffusion of heat from your fireplace or other heat sources.
• High Power capacity booster to reach comfort set point very fast.
• ON-OFF timer provides a very convenient automatic programmable stop function.
• 8°C button for anti-frost during holiday periods.
• ECO mode to reduce energy bills.
• On-demand Defrost heating even in the harshest part of winter.

(*) The energy efficiency class range of this product category is D→A+++

R32 REFRIGERANT · CE · UKCA · EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

> **Toshiba's innovative inverter technology**

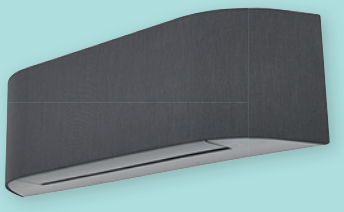
> **Luxury remote control** features a magnetic wall mounted holder

> **Silent modes** with indoor unit Quiet mode & Silent outdoor unit function

> **Enhance your comfort at home or away** with Toshiba Home AC app

> **HAORI features** energy monitoring and speaker voice control functions compatible with Google Home Assistant & Amazon Alexa.

Download on the App Store · Google play · works with the Google Assistant · WORKS WITH amazon alexa



INDOOR UNITS

RAS-B10N4KVRG-E1
RAS-B13N4KVRG-E
RAS-B16N4KVRG-E

OUTDOOR UNITS

RAS-10J2AVSG-E1
RAS-13J2AVSG-E1
RAS-16J2AVSG-E1

REMOTE CONTROLS

Delivered with the unit
WH-UA01UE

HAORI Performance data

Outdoor unit Indoor unit	Europe		RAS-10J2AVSG-E1 RAS-B10N4KVRG-E1	RAS-13J2AVSG-E1 RAS-B13N4KVRG-E	RAS-16J2AVSG-E1 RAS-B16N4KVRG-E
Cooling capacity	**kW**		**2.5**	**3.5**	**4.6**
Cooling range (min. - max.)	kW		(0.89 - 3.20)	(1.00 - 4.10)	(1.20 - 5.30)
Power input (min. -rated - max.)	kW	C	(0.19 - 0.54 - 0.79)	(0.25 - 0.80 - 1.12)	(0.34 - 1.35 - 1.72)
Pdesignc	kW		2.5	3.5	4.6
EER	W/W		4.63	4.38	3.41
SEER			8.60	8.70	7.80
Energy efficiency class D→A+++*		C	A+++	A+++	A++
Seasonal electricity consumption	kWh/a	C	102	142	206
Heating capacity	**kW**		**3.2**	**4.2**	**5.5**
Heating range (min. - max.)	kW		(0.90 - 4.70)	(1.00 - 5.30)	(1.10 - 6.30)
Power input (min. -rated - max.)	kW	H	(0.18 - 0.74 - 1.23)	(0.20 - 1.08 - 1.55)	(0.30 - 1.52 - 1.90)
Pdesignh	kW		2.5	3.2	4.00
COP	W/W		4.32	3.89	3.62
SCOP			5.10	5.10	4.60
Energy efficiency class D→A+++*		H	A+++	A+++	A++
Seasonal electricity consumption	kWh/a	H	684	876	1214

(*) The energy efficiency class range of this product category is D→A+++

HAORI Physical data indoor

Indoor unit	Europe		RAS-B10N4KVRG-E1	RAS-B13N4KVRG-E	RAS-B16N4KVRG-E
Air flow (h)	m^3/h - l/s	C	600 - 166	670 - 186	690 - 180
Air flow (l)	m^3/h - l/s	C	300 - 83	320 - 89	340 - 83
Sound pressure level (h/q)	dB(A)	C	41/19	43/19	45/21
Sound power level (h)	dB(A)	C	54	56	58
Air flow (h)	m^3/h - l/s	H	610 - 169	680 - 189	730 - 186
Air flow (l)	m^3/h - l/s	H	300 - 86	320 - 89	360 - 83
Sound pressure level (h/q)	dB(A)	H	41/19	43/19	45/22
Sound power level (h)	dB(A)	H	54	56	58
Dimensions (hxwxd)	mm		300 x 987 x 210	300 x 987 x 210	300 x 987 x 210
Weight	kg		11	11	12
Remote controller			WH-UA01UE	WH-UA01UE	WH-UA01UE

HAORI Physical data outdoor

Outdoor unit	Europe		RAS-10J2AVSG-E1	RAS-13J2AVSG-E1	RAS-16J2AVSG-E1
Air flow (max)	m^3/h - l/s	C	1890 - 524	1950 - 540	2040 - 566
Sound pressure level (h)	dB(A)	C	44	46	48
Sound pressure level (Silent CDU#2)	dB(A)	C	37	39	40
Sound power level (h)	dB(A)	C	57	59	61
Sound power level ((Silent CDU#2)	dB(A)	C	50	52	53
Operating range	°C	C	-15 ~ 46	-15 ~ 46	-15 ~ 46
Air flow (max)	m^3/h - l/s	H	1890 - 524	1950 - 540	2040 - 566
Sound pressure level (h)	dB(A)	H	46	48	50
Sound pressure level (Silent CDU#2)	dB(A)	H	39	43	43
Sound power level (h)	dB(A)	H	59	61	63
Sound power level ((Silent CDU#2)	dB(A)	H	52	56	56
Operating range	°C	H	-15 ~ 24	-15 ~ 24	-15 ~ 24
Dimensions (hxwxd)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg		26	30	33
Compressor type			DC Rotary	DC Rotary	DC Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2
Maximum pipe length	m		20	20	20
Maximum height difference	m		12	12	12
Chargeless pipe length	m		15	15	15
Refrigerant charging (R32)	kg		0.55	0.8	0.8
Power supply	V-ph-Hz		230-1-50	230-1-50	230-1-50

C: cooling mode
H: heating mode

RAS-G3KVSG-E

SHORAI EDGE BLACK & WHITE

SHORAI™ Edge, a fresh take on design and performance, benefits from Toshiba's latest innovative inverter and compressor technology. It is designed to deliver high performance, making everyday comfort a reality for all. SHORAI™ Edge offers energy efficient A+++ cooling and heating performances, with R32 refrigerant.
Compatible with Monosplit & Multisplit outdoor units (B-codes).

MAX EFFICIENCY	CAPACITY	OPERATION
SEER **8.6** SCOP **5.1**	**2.0**kW > **7.0**kW	**-15**°C > **+46**°C

High energy class A+++ / A+++*

• Heating and cooling modes ensure exceptional energy savings and unparalleled comfort levels.

Absolute silent operation

• SHORAI™ Edge's Silent function halves the sound level of the outdoor unit down to 36 dB(A), while its Quiet function reduces noise from the indoor unit to less than 19 dB(A) for a good night's sleep.

Indoor Air Quality

• Ultra-Pure filter: Captures up to 94% of PM 2.5 particulates.
• Coated coil: which helps prevent water and dust from sticking to the coil.
• Self-cleaning function: maintains the coil condition and maximizes performance as well as efficiency.

Smart control

• Smart speaker voice control functions to easily modulate your comfort for an easier life.
• Energy monitoring to help control your energy bills and make true savings.
• HADA-CARE to set louver position to generate indirect air flow for better air distribution to homogenize room temperature.
• High Power capacity booster to reach comfort set point very fast.
• On-Off timer provides a very convenient automatic programmable stop function.
• 8°C button for anti-frost during holiday periods.
• ECO mode to reduce energy bills.
• On-Demand Defrost even in the harshest part of winter.

(*) The energy efficiency class range of this product catgery is D→A+++

> **Modern edge design** with discreet diming lights. Available in black or white colors.

> **Toshiba's innovative inverter technology**

> **Wi-Fi control ready** with **Toshiba Home AC Control** adaptor inside FCU

> **Silent modes** with indoor unit Quiet mode & Silent outdoor unit function

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EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

INDOOR UNITS

RAS-B07G3KVSG(B)-E
RAS-B10G3KVSG(B)-E
RAS-B13G3KVSG(B)-E
RAS-B16G3KVSG(B)-E
RAS- B18G3KVSG(B)-E
RAS-B22G3KVSG(B)-E
RAS-B24G3KVSG(B)-E

OUTDOOR UNITS

RAS-07J2AVSG-E1
RAS-10J2AVSG-E1
RAS-13J2AVSG-E1
RAS-16J2AVSG-E1
RAS-18J2AVSG-E1
RAS-22J2AVSG-E1
RAS-24J2AVSG-E1

REMOTE CONTROLS

Delivered with the unit
1- WH-UA06UE
2- WH-UA04UE

SHORAI EDGE BLACK & WHITE Performance data

Outdoor unit Indoor unit White Indoor unit Black			RAS-07J2AVSG-E1 RAS-B07G3KVSG-E RAS-B07G3KVSGB-E	RAS-10J2AVSG-E1 RAS-B10G3KVSG-E RAS-B10G3KVSGB-E	RAS-13J2AVSG-E1 RAS-B13G3KVSG-E RAS-B13G3KVSGB-E	RAS-16J2AVSG-E1 RAS-B16G3KVSG-E RAS-B16G3KVSGB-E	RAS-18J2AVSG-E1 RAS-B18G3KVSG-E RAS-B18G3KVSGB-E	RAS-22J2AVSG-E1 RAS-B22G3KVSG-E RAS-B22G3KVSGB-E	RAS-24J2AVSG-E1 RAS-B24G3KVSG-E RAS-B24G3KVSGB-E
Cooling capacity	**kW**		**2.0**	**2.5**	**3.5**	**4.6**	**5.0**	**6.1**	**7.0**
Cooling range (min. - max.)	kW		(0.89 - 2.90)	(0.89 - 3.20)	(1.00 - 4.10)	(1.20 - 5.30)	(1.20 - 6.00)	(1.39 - 6.70)	(1.70 - 7.70)
Power input (min. -rated - max.)	kW	C	(0.19 - 0.39 - 0.67)	(0.19 - 0.54 - 0.79)	(0.25 - 0.90 - 1.12)	(0.34 - 1.35 - 1.72)	(0.35 - 1.42 - 2.00)	(0.36 - 1.99 - 2.20)	(0.38 - 2.25 - 2.55)
Pdesignc	kW		2.0	2.5	3.5	4.6	5.0	6.1	7.0
EER	W/W		5.13	4.63	3.89	3.41	3.52	3.07	3.11
SEER			8.5	8.6	8.6	7.8	7.3	7.3	6.3
Energy efficiency class D→A+++*		C	A+++	A+++	A+++	A++	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	82	102	142	206	242	292	389
Heating capacity	**kW**		**2.5**	**3.2**	**4.2**	**5.5**	**6.0**	**7.0**	**8.0**
Heating range (min. - max.)	kW		(0.90 - 3.60)	(0.90 - 4.80)	(1.00 - 5.30)	(1.10 - 6.50)	(1.10 - 6.50)	(1.15 - 7.50)	(1.70 - 8.80)
Power input (min. -rated - max.)	kW	H	(0.16 - 0.50 - 0.80)	(0.16 - 0.70 - 1.23)	(0.20 - 1.08 - 1.55)	(0.24 - 1.52 - 1.90)	(0.25 - 1.59 - 1.75)	(0.26 - 1.88 - 2.10)	(0.29 - 2.35 - 2.75)
Pdesignh	kW		2.3	2.5	3.2	4.00	4.3	4.7	6.3
COP	W/W		5.00	4.57	3.89	3.62	3.77	3.72	3.40
SCOP			5.1	5.1	5.1	4.6	4.6	4.6	4.1
Energy efficiency class D→A+++*		H	A+++	A+++	A+++	A++	A++	A++	A+
Seasonal electricity consumption	kWh/a	H	631	686	878	1217	1309	1430	2149

(*) The energy efficiency class range of this product category is D→A+++

SHORAI EDGE BLACK & WHITE Physical data indoor

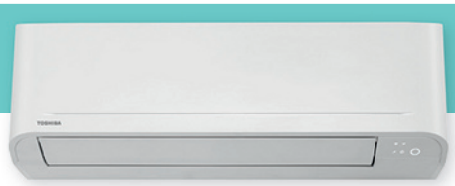
Indoor unit White Indoor unit Black			RAS-B07G3KVSG-E RAS-B07G3KVSGB-E	RAS-B10G3KVSG-E RAS-B10G3KVSGB-E	RAS-B13G3KVSG-E RAS-B13G3KVSGB-E	RAS-B16G3KVSG-E RAS-B16G3KVSGB-E	RAS-B18G3KVSG-E RAS-B18G3KVSGB-E	RAS-B22G3KVSG-E RAS-B22G3KVSGB-E	RAS-B24G3KVSG-E RAS-B24G3KVSGB-E
Air Flow (h)	m^3/h - l/s	C	660 - 183	660 - 183	732 - 203	750 - 208	990 - 274	1032 - 286	1122 - 311
Air Flow (l)	m^3/h - l/s	C	312 - 86	312 - 86	342 - 95	360 - 100	570 - 158	690 - 191	720 - 199
Sound pressure level (h/q)	dB(A)	C	40/19	40/19	43/19	44/21	44/26	45/27	47/28
Sound power level (h)	dB(A)	C	53	53	56	57	57	58	60
Air Flow (h)	m^3/h - l/s	H	660 - 183	660 - 183	732 - 203	768 - 213	990 - 274	1080 - 299	1140 - 316
Air Flow (l)	m^3/h - l/s	H	312 - 86	312 - 86	342 - 95	360 - 100	570 - 158	690 - 191	750 - 208
Sound pressure level (h/q)	dB(A)	H	40/19	40/19	43/19	44/22	44/26	46/27	48/28
Sound power level (h)	dB(A)	H	53	53	56	57	57	59	61
Dimensions (hxwxd)	mm		293x800x226	293x800x226	293x800x226	293x800x226	320x1053x245	320x1053x245	320x1053x245
Weight	kg		10	10	10	10	14	14	14
Remote controller (White)			WH-UA06UE	WH-UA06UE	WH-UA06UE	WH-UA06UE	WH-UA06UE	WH-UA06UE	WH-UA06UE
Remote controller (Black)			WH-UA04UE	WH-UA04UE	WH-UA04UE	WH-UA04UE	WH-UA04UE	WH-UA04UE	WH-UA04UE

SHORAI EDGE BLACK & WHITE Physical data outdoor

Outdoor unit			RAS-07J2AVSG-E	RAS-10J2AVSG-E1	RAS-13J2AVSG-E1	RAS-16J2AVSG-E1	RAS-18J2AVSG-E	RAS-22J2AVSG-E	RAS-24J2AVSG-E
Air Flow (max)	m^3/h - l/s	C	1890 - 524	1890 - 524	1950 - 540	2040 - 566	2076 - 576	2184 - 607	2916 - 810
Sound pressure level (h)	dB(A)	C	44	44	46	48	48	49	50
Sound pressure level (Silent CDU#2)	dB(A)	C	36	37	39	40	42	43	43
Sound power level (h)	dB(A)	C	57	57	59	61	63	62	63
Sound power level (Silent CDU#2)	dB(A)	C	49	50	52	53	55	56	56
Operating range	°C	C	-15~46	-15~46	-15~46	-15~46	-15~46	-15~46	-15~46
Air Flow (max)	m^3/h - l/s	H	1890 - 524	1890 - 524	1950 - 540	2040 - 566	2076 - 576	2184 - 607	2916 - 810
Sound pressure level (h)	dB(A)	H	46	46	48	50	50	51	53
Sound pressure level (Silent CDU#2)	dB(A)	H	38	39	43	43	44	46	46
Sound power level (h)	dB(A)	H	59	59	61	63	63	64	66
Sound power level (Silent CDU#2)	dB(A)	H	51	52	56	56	57	59	59
Operating range	°C	H	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24	-15~24
Dimensions (hxwxd)	mm		550x780x290	550x780x290	550x780x290	550x780x290	550x780x290	550x780x290	630x800x300
Weight	kg		26	26	30	33	34	34	42
Compressor type			DC Rotary	DC Rotary	DC Rotary	DC Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2	2	2	2	2
Maximum pipe length	m		20	20	20	20	20	20	25
Maximum height difference	m		12	12	12	12	12	12	15
Chargeless pipe length	m		15	15	15	15	15	15	15
Refrigerant charging(R32)	kg		0.55	0.55	0.8	0.8	1.1	1.1	1.14
Power supply	V-ph-Hz		230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50

C: cooling mode
H: heating mode

RAS-B2KVG-E
SEIYA CLASSIC



SEIYA™ Classic, is a comprehensive and high-quality solution that uses Toshiba Inverter and compressor technologies with R32 refrigerant to offer A++/A+ cooling and heating performances, leading to true energy savings and year-round comfort.

Compatible with Monosplit & Multisplit outdoor units (B-codes).

MAX EFFICIENCY	CAPACITY	OPERATION
SEER **6.1** SCOP **4.0**	**1.5**kW > **6.5**kW	**-10**°C > **+46**°C

High Energy Class A++ / A++*
- High energy efficiency class in cooling.
- Low energy consumption in all conditions.

Silent operation
- Quiet function reduces noise from the indoor unit to less than 19 dB(A) for a good nights sleep.
- Silent function halves the sound level of the outdoor unit down to 45 dB(A).

Indoor Air Quality
- Coated coil: Helps prevent water and dust from sticking to the coil. As the coil keeps clean, energy efficiency is maintained, and healthy, odourless air is circulated through the unit.

Easy to control
- Smart speaker voice control function to easily modulate your comfort for an easier life.
- Energy monitoring to help control your energy bills and make true savings.
- High Power capacity booster to reach comfort set point very fast.
- On / Off timer provides a very convenient automatic programmable stop function.
- 8°C button for anti-frost during holiday periods.
- ECO mode to reduce energy bills.
- On Demand Defrost function even in the harshest part of winter.

(*) The energy efficiency class range of this product category is D→A+++

> **Compact** with a width of just 770mm for maximized space availability within the room.

> **Convenient access** to all the components through a one-piece front grille

> **Self-cleaning function:** maintains the coil condition and maximizes performance as well as efficiency.

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INDOOR UNITS

RAS-B05B2KVG-E
RAS-B07B2KVG-E
RAS-B10B2KVG-E
RAS-B13B2KVG-E
RAS-B16B2KVG-E
RAS-B18B2KVG-E
RAS-B24B2KVG-E

OUTDOOR UNITS

RAS-05B2AVG-E
RAS-07B2AVG-E
RAS-10B2AVG-E
RAS-13B2AVG-E
RAS-16B2AVG-E
RAS-18B2AVG-E
RAS-24B2AVG-E

REMOTE CONTROLS

Delivered with the unit
WH-TG01NE

SEIYA CLASSIC Performance data

Outdoor unit Indoor unit	Europe		RAS-05B2AVG-E RAS-B05B2KVG-E	RAS-07B2AVG-E RAS-B07B2KVG-E	RAS-10B2AVG-E RAS-B10B2KVG-E	RAS-13B2AVG-E RAS-B13B2KVG-E	RAS-16B2AVG-E RAS-B16B2KVG-E	RAS-18B2AVG-E RAS-B18B2KVG-E	RAS-24B2AVG-E RAS-B24B2KVG-E
Cooling capacity	**kW**		**1.50**	**2.00**	**2.50**	**3.30**	**4.20**	**5.00**	**6.50**
Cooling range (min. - max.)	kW		(0.58 - 2.00)	(0.76 - 2.40)	(0.80 - 3.00)	(1.00 - 3.60)	(1.10 - 4.70)	(1.10 - 5.50)	(1.1 - 7.1)
Power input (min. -rated - max.)	kW	C	(0.16 - 0.36 - 0.58)	(0.20 - 0.60 - 0.74)	(0.21 - 0.72 - 1.00)	(0.25 - 1.17 - 1.35)	(0.35 - 1.37 - 1.70)	(0.35 - 1.73 - 1.90)	(0.25 - 2.30 - 2.40)
Pdesignc	kW		1.5	2	2.5	3.3	4.2	5.0	6.5
EER	W/W		4.17	3.33	3.47	2.82	3.07	2.89	2.83
SEER			6.1	6.1	6.1	6.1	6.1	6.1	6.1
Energy efficiency class D→A+++*		C	A++	A++	A++	A++	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	86	115	143	189	241	287	373
Heating capacity	**kW**		**2.0**	**2.5**	**3.2**	**3.6**	**5.0**	**5.4**	**7.0**
Heating range (min. - max.)	kW		(0.58 - 2.90)	(0.76 - 3.30)	(0.76 - 3.90)	(0.76 - 4.50)	(0.85 - 6.00)	(1.10 - 6.00)	(1.2 - 8.0)
Power input (min. -rated - max.)	kW	H	(0.14 - 0.47 - 0.85)	(0.16 - 0.64 - 0.94)	(0.18 - 0.84 - 1.11)	(0.18 - 1.02 - 1.25)	(0.25 - 1.45 - 1.90)	(0.27 - 1.65 - 1.88)	(0.27 - 2.10 - 2.50)
Pdesignh (Tbiv-7°C)	kW		1.6	2.0	2.1	2.3	3.3	3.7	4.4
COP	W/W		4.26	3.91	3.81	3.53	3.45	3.27	3.33
SCOP			4.0	4.0	4.0	4.0	4.0	4.0	4.0
Energy efficiency class		H	A+	A+	A+	A+	A+	A+	A+
Seasonal electricity consumption	kWh/a	H	560	700	735	805	1151	1294	1538
SCOPw			4.6	4.6	4.6	4.6	4.6	4.7	4.8
Energy efficiency class D→A+++*			A++	A++	A++	A++	A++	A++	A++

(*) The energy efficiency class range of this product category is D→A+++

SEIYA CLASSIC Physical data indoor

Indoor unit	Europe		RAS-B05B2KVG-E	RAS-B07B2KVG-E	RAS-B10B2KVG-E	RAS-B13B2KVG-E	RAS-B16B2KVG-E	RAS-B18B2KVG-E	RAS-B24B2KVG-E
Air flow (H)	m³/h - l/s	C	480 - 134	490 - 136	620 - 172	650 - 180	760 - 212	790 - 219	1070 - 298
Air flow (l)	m³/h - l/s	C	190 - 53	200 - 55	230 - 64	230 - 64	330 - 92	480 - 133	660 - 183
Sound pressure level (h/q)	dB(A)	C	39/19	40/19	41/19	42/20	44/22	47/26	48/29
Sound power level (H)	dB(A)	C	52	53	54	55	57	60	61
Air flow (H)	m³/h - l/s	H	480 - 134	500 - 140	620 - 172	620 - 172	760 - 212	840 - 233	860 - 239
Air flow (l)	m³/h - l/s	H	190 - 53	200 - 55	230 - 64	230 - 64	340 - 94	500 - 139	730 - 203
Sound pressure level (h/q)	dB(A)	H	38/19	39/19	40/20	42/20	43/23	48/26	48/29
Sound power level (H)	dB(A)	H	51	52	53	55	56	61	61
Dimensions (hxwxd)	mm		288 x 770 x 225	288 x 770 x 225	288 x 770 x 225	288 x 770 x 225	293 x 798 x 230	293 x 798 x 230	320 x 1050 x 250
Weight	kg		9	9	9	9	10	10	14

SEIYA CLASSIC Physical data outdoor

Outdoor unit	Europe		RAS-05B2AVG-E	RAS-07B2AVG-E	RAS-10B2AVG-E	RAS-13B2AVG-E	RAS-16B2AVG-E	RAS-18B2AVG-E	RAS-24B2AVG-E
Air flow (max)	m³/h - l/s	C	1760 - 489	1800 - 500	1800 - 500	1980 - 550	2160 - 600	2160 - 600	2220 - 617
Sound pressure level (H)	dB(A)	C	49	49	49	50	2	52	2
Sound pressure level (Silent CDU#2)	dB(A)	C	44	44	45	45	45	46	2
Sound power level (H)	dB(A)	C	62	62	62	63	65	65	2
Sound power level (Silent CDU#2)	dB(A)	C	57	57	58	58	58	59	2
Operating range	°C	C	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46	-10 ~ 46
Air flow (max)	m³/h - l/s	H	1760 - 489	1800 - 500	1800 - 500	1980 - 550	2160 - 600	2160 - 600	2220 - 617
Sound pressure level (H)	dB(A)	H	50	51	51	52	53	53	57
Sound pressure level (Silent CDU#2)	dB(A)	H	44	44	45	45	47	48	2
Sound power level (H)	dB(A)	H	63	64	64	65	66	66	70
Sound power level (Silent CDU#2)	dB(A)	H	57	57	58	58	60	61	2
Operating range	°C	H	-10 ~ 24	-10 ~ 24	-10 ~ 24	-10 ~ 24	-10 ~ 24	-10 ~ 24	-10 ~ 24
Dimensions (hxwxd)	mm		530 x 660 x 240	530 x 660 x 240	530 x 660 x 240	530 x 660 x 240	550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg		20	20	21	21	29	29	32
Compressor type			DC Rotary	DC Rotary	DC Rotary	DC Rotary	DC Rotary	DC Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2	2	2	2	2
Maximum pipe length	m		10	10	10	10	15	15	15
Maximum height difference	m		8	8	8	8	8	8	8
Chargeless pipe length	m		10	10	10	10	10	10	10
Remote controller			WH-TG01NE	WH-TG01NE	WH-TG01NE	WH-TG01NE	WH-TG01NE	WH-TG01NE	WH-TG01NE
Refrigerant charging (R32)	kg		0.44	0.44	0.49	0.54	0.68	0.93	1.23
Power supply	V-ph-Hz		220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50

C: cooling mode
H: heating mode

RAS-J2FVG-E
CONSOLE

This innovative and compact unit has been designed to be installed on the floor and in low wall applications, fitting perfectly under the window sills or in a low ceiling attic.
Compatible with Monosplit & Multisplit outdoor units (B-codes).

MAX EFFICIENCY	CAPACITY	OPERATION
SEER **7.20** SCOP **4.7**	**2.5**kW > **5.0**kW	**-15**°C > **+46**°C

High energy class A++ / A++*
- High energy efficiency class, both in cooling and heating.
- Low energy consumption in all conditions.

Bi-flow air diffusion system
- This feature enables users to select the favorable air flow outlet between the two available positions at the top and bottom front of the unit.
- The unique floor heating function, allows the unit to deliver a powerful flow at floor level for a uniform and comfortable room heating.

Indoor Air Quality
- IAQ's technology is able to seriously inhibit the reproductive ability of harmful elements. Its deodorizing power absorbs and decomposes, smoke, food smells and bad odors.
- Self-cleaning function is designed to reduce the humidity that causes mould to form inside an air-conditioning unit. This advanced, efficient system reduces moisture in the coils for healthier air to breathe.

User friendly control
- Child-lock function on the unit display panel.
- Brightness level control of the display unit to reduce the led light glow.
- Automatic restart function in case of unexpected electricity supply line power cuts.
- Fireplace mode: Diffusion of heat from your fireplace or other heat sources.
- On-Demand Defrost even in the harshest part of winter.
- Standard functions: Weekly timer 24h, Power select, ECO, 8°C.

(*) The energy efficiency class range of this product category is D→A+++*

> **Toshiba's innovative inverter technology**
>
> **Air blown upwards and downwards** for uniform distribution within the room
>
> **Wifi control compatible**

Download on the App Store
Google play
works with the Google Assistant
WORKS WITH amazon alexa

R32 REFRIGERANT
CE
UK CA
EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

INDOOR UNITS

RAS-B10J2FVG-E
RAS-B13J2FVG-E
RAS-B18J2FVG-E

OUTDOOR UNITS

RAS-10J2AVSG-E1
RAS-13J2AVSG-E1
RAS-18J2AVSG-E1

REMOTE CONTROLS

Delivered with the unit
WH-TA12LE

CONSOLE

CONSOLE Performance data

Outdoor unit Indoor unit			RAS-10J2AVSG-E1 RAS-B10J2FVG-E	RAS-13J2AVSG-E1 RAS-B13J2FVG-E	RAS-18J2AVSG-E1 RAS-B18J2FVG-E
Cooling capacity	**kW**		**2,5**	**3,5**	**5,0**
Cooling range (min. - max.)	kW		0.95 - 3.2	1.05 - 4.1	1.2 - 5.6
Power input (min. -rated - max.)	kW	C	0.21 - 0.59 - 0.90	0.27 - 0.87 - 1.20	0.34 - 1.68 - 2.00
Pdesignc	kW		2.5	3.5	5.0
EER	W/W		4.24	4.02	2.98
SEER			7.2	7.0	6.8
Energy efficiency class D→A+++*		C	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	121	174	257
Heating capacity	**kW**		**3.2**	**4.2**	**6.0**
Heating range (min. - max.)	kW		0.85 - 4.40	1.0 - 5.0	1.3 - 6.3
Power input (min. -rated - max.)	kW	H	0.18 - 0.82 - 1.25	0.22 - 1.27 - 1.55	0.31 - 2.05 - 2.20
Pdesignh	kW		2.5	3.0	4.0
COP	W/W		3.90	3.31	2.93
SCOP			4.7	4.7	4.6
Energy efficiency class D→A+++*		H	A++	A++	A++
Seasonal electricity consumption	kWh/a	H	744	893	1217

(*) The energy efficiency class range of this product category is D→A+++

CONSOLE Physical data indoor

Indoor unit			RAS-B10J2FVG-E	RAS-B13J2FVG-E	RAS-B18J2FVG-E
Air Flow (h)	m^3/h - l/s	C	492 - 136	528 - 146	600 - 166
Air Flow (l)	m^3/h - l/s	C	258 - 71	270 - 75	366 - 101
Sound pressure level (h/q)	dB(A)	C	39/23	40/24	46/31
Sound power level (h)	dB(A)	C	52	53	59
Air Flow (h)	m^3/h - l/s	H	492 - 136	552 - 153	660 - 183
Air Flow (l)	m^3/h - l/s	H	258 - 71	288 - 80	366 - 101
Sound pressure level (h/q)	dB(A)	H	39/23	40/24	47/31
Sound power level (h)	dB(A)	H	52	53	60
Dimensions (h x w x d)	mm		600 x 700 x 220	600 x 700 x 220	600 x 700 x 220
Weight	kg		16	16	16

CONSOLE Physical data outdoor

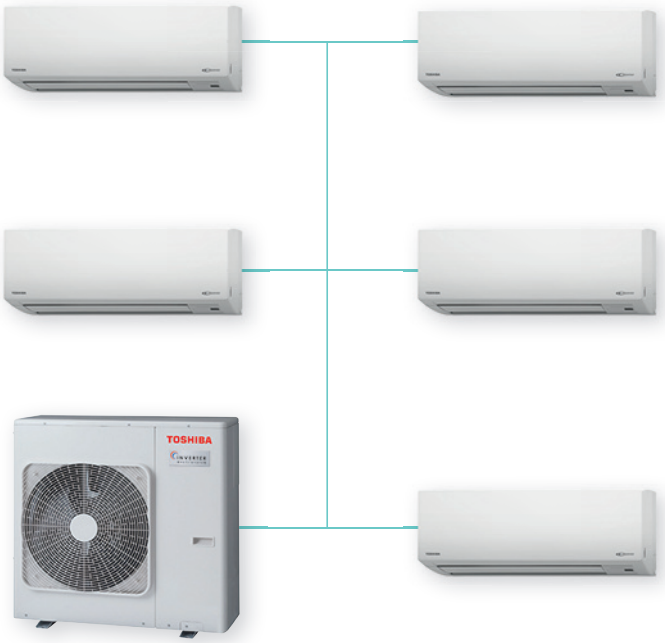
Outdoor unit			RAS-10J2AVSG-E1	RAS-13J2AVSG-E1	RAS-18J2AVSG-E1
Air Flow (max)	m^3/h - l/s	C	1890 - 524	1950 - 540	2076 - 576
Sound pressure level (h)	dB(A)	C	45	47	49
Sound pressure level (Silent CDU#2)	dB(A)	C	38	40	43
Sound power level (h)	dB(A)	C	58	60	62
Sound power level (Silent CDU#2)	dB(A)	C	51	53	56
Operating range	°C	C	-15 ~ 46	-15 ~ 46	-15 ~ 46
Air Flow (max)	m^3/h - l/s	H	1890 - 524	1950 - 540	2076 - 576
Sound pressure level (h)	dB(A)	H	47	49	51
Sound pressure level (Silent CDU#2)	dB(A)	H	40	43	45
Sound power level (h)	dB(A)	H	60	62	64
Sound power level (Silent CDU#2)	dB(A)	H	53	57	58
Operating range	°C	H	-15 ~ 24	-15 ~ 24	-15 ~ 24
Dimensions (h x w x d)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290
Weight	kg		26	30	34
Compressor type			DC Rotary	DC Rotary	DC Twin Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2
Maximum pipe length	m		20	20	20
Maximum height difference	m		12	12	12
Chargeless pipe length	m		15	15	15
Refrigerant charging(R32)	kg		0,55	0,8	1,10
Power supply	V-ph-Hz		230-1-50	230-1-50	230-1-50

C: cooling mode
H: heating mode

MULTISPLIT

Comfort & flexibility

• Toshiba Inverter multi-split systems feature higher standards of indoor air quality, sound levels and environmental awareness. Special attention has been dedicated to night-time comfort, with the improvement of the silent operation mode, available in indoor units.
• One outdoor unit can serve up to five indoor units for exceptional flexibility and reliability. Toshiba Inverter multi system outdoor units are lightweight and compact. Just one outdoor unit takes up little space on a wall or in a yard. It keeps the exterior of buildings neat with quieter operation. Choose from four types of indoor units, high-wall, ducted, compact 4-way cassette and console type to suit any application.



High quality & savings

• Toshiba high-quality multi-split systems contribute to drastically reducing operating costs and increasing energy efficiency. The multi-split outdoor unit achieves efficiency in partial load conditions where the Toshiba inverters deliver their best performance. Toshiba's new super-efficient DC twin-rotary compressor enables top-class performance at low energy Consumption (SEER up to 6.90 & SCOP up to 4.60). With this efficient unit, operating costs decrease dramatically, compared to other multi-split systems.
• Toshiba solutions are studied and verified in every tiny element and are recognised universally by air conditioning professionals for their total reliability. In fact, for Toshiba quality has always been a priority and today and into the future, the quality of Toshiba products will continue to differentiate us from other manufacturers.

Fast and precise temperature management, with Toshiba Twin-rotary Inverter compressors.

MULTISPLIT INVERTER R32 & R410A

Luxury through technology in RAS multi-split inverter systems

- From 2 to 5 rooms with high efficiency product.
- Just one outdoor unit can serve up to five indoor rooms.
- Wide choice of internal units: high-walls, cassettes, duct-type and/or console.
- Compressor DC Twin-Rotary on the whole range.
- Large operating map down to -20°C in heating mode and up to +46°C in cooling.
- Up to 80 meters of frigorific connections for any installation type.
- Full line up avaible with R32.

Space saving & silent

- Toshiba Air Conditioning multi-split inverter system outdoor units are lightweight and compact. Just one outdoor unit takes up little space on a wall or in a yard. It keeps the exterior of buildings looking neat and offers quiet operating noise levels.

R32 REFRIGERANT

CE

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

MAX EFFICIENCY	CAPACITY	OPERATION
SEER **8.7** SCOP **4.8**	**3**kW > **10**kW	**-20**°C > **+46**°C

INDOOR UNITS

DAISEIKAI 10
HAORI
SHORAI EDGE
SEIYA
SEIYA Classic

Console
Duct
Compact 4-way Cassette
Compact 1-way Cassette

OUTOOR UNITS

RAS-2M10G3AVG-E
RAS-2M14G3AVG-E

RAS-2M18G3AVG-E
RAS-3M18G3AVG-E

RAS-3M26G3AVG-E
RAS-4M27G3AVG-E
RAS-5M34G3AVG-E

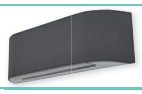
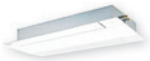
CONTROLS

Wireless remote controls

Weekly remote control optional

Wired remote control (Cassette & Duct only)

CHOOSE YOUR ADAPTED SYSTEM SOLUTION

	MULTISPLIT INDOOR UNITS							
Indoor Units sizes	05	07	10	13	16	18	22	24
Indoor Units cooling capacity	1.5 kW	2.0 kW	2.5 kW	3.5 kW	4.5 kW	5.0 kW	6.0 kW	7.0 kW
High-wall - DAISEIKAI 10 Wood or White RAS-B**S4KVPG-E RAS-B**S4KVDG-E 			●	●		●		
Hi-wall - HAORI RAS-M/B**N4KVRG-E/TR 		●	●	●	●			
Hi-wall - SHORAI Edge black or white RAS-M/B**G3KVSG-E/TR RAS-M/B**G3KVSGB-E/TR 	●	●	●	●	●	●	●	●
Hi-wall - SEIYA RAS-B**E2KVG-E/TR 	●	●	●	●	●			
High-wall - SEIYA Classic RAS-B**B2KVG-E 	●	●	●	●	●	●		●
Console RAS-B**J2FVG-E/TR 		●	●	●		●		
Compact 4-way cassette RAS-M**G3YVG-E/TR 	●	●	●	●	●	●		●
Compact 1-way Cassette RAS-M**S4MUVG-E/TR 			●	●	●			
Ducted RAS-M**U2DVG-E1/TR 		●	●	●	●		●	●

● : Indoor units available sizes

	MULTISPLIT OUTDOOR							
Outdoor Units sizes	05	07	10	13	16	18	22	24
Outdoor units Cooling capacity	1.5 kW	2.0 kW	2.5 kW	3.5 kW	4.5 kW	5.0 kW	6.0 kW	7.0 kW
2 Rooms RAS-2M10G3AVG-E/TR ***CDU Cooling capacity: 3.3 kW*** 	●	●	●					
2 Rooms RAS-2M14G3AVG-E/TR ***CDU Cooling capacity: 4.0 kW*** 	●	●	●	●				
2 Rooms RAS-2M18G3AVG-E/TR ***CDU Cooling capacity: 5.2 kW*** 	●	●	●	●	●			
3 Rooms RAS-3M18G3AVG-E/TR ***CDU Cooling capacity: 5.2 kW*** 	●	●	●	●	●			
3 Rooms RAS-3M26G3AVG-E/TR ***CDU Cooling capacity: 7.5 kW*** 	●	●	●	●	●	●	●	●
4 Rooms RAS-4M27G3AVG-E/TR ***CDU Cooling capacity: 8.0 kW*** 	●	●	●	●	●	●	●	●
5 Rooms RAS-5M34G3AVG-E/TR ***CDU Cooling capacity: 10.0 kW*** 	●	●	●	●	●	●	●	●

● : Indoor units sizes compatibility with outdoor units

COMPATIBILITIES	2 ROOMS			3 ROOMS		4 ROOMS	5 ROOMS
	RAS-2M10G3AVG-E/TR	RAS-2M14G3AVG-E/TR	RAS-2M18G3AVG-E/TR	RAS-3M18G3AVG-E/TR	RAS-3M26G3AVG-E/TR	RAS-4M27G3AVG-E/TR	RAS-5M34G3AVG-E/TR
IDU sizes							
05	•	•	•	•	•	•	•
07	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•
13		•	•	•	•	•	•
16			•	•	•	•	•
18					•	•	•
22					•	•	•
24					•	•	•

• : compatibilities

TOSHIBA

CDU PERFORMANCES

Performance data

Outdoor unit			2-room Multisplit RAS-2M10G3AVG-E	2-room Multisplit RAS-2M14G3AVG-E	2-room Multisplit RAS-2M18G3AVG-E	3-room Multisplit RAS-3M18G3AVG-E	3-room Multisplit RAS-3M26G3AVG-E	4-room Multisplit RAS-4M27G3AVG-E	5-room Multisplit RAS-5M34G3AVG-E
Cooling capacity	**kW**		**3.3**	**4.0**	**5.2**	**5.2**	**7.0**	**8.0**	**10.0**
Cooling capacity (min. - max.)	kW		1.20 - 4.1	1.5 - 4.9	1.6 - 6.5	2.0 - 7.5	2.0 - 9.0	2.0 - 10.0	2.5 - 11.5
Power input	kW	C	0.67	0.85	1.20	1.00	1.75	1.90	2.60
EER	W/W		4.93	4.71	4.33	5.20	4.00	4.21	3.85
SEER			8.6	8.7	8.7	8.6	8.5	8.3	7.2
Energy efficiency class D→A+++*		C	A+++	A+++	A+++	A+++	A+++	A++	A++
Heating capacity	**kW**		**4.0**	**4.4**	**5.6**	**6.8**	**8.7**	**9.0**	**12.0**
Heating capacity (min. - max.)	kW		1.00 - 4.90	1.00 - 5.20	1.30 - 8.20	1.90 - 8.30	2.0 - 11.5	2.0 - 12.0	2.2 - 14.2
Power input	kW	H	0.85	0.90	1.14	1.45	2.00	1.90	2.80
COP	W/W		4.71	4.89	4.91	4.69	4.35	4.74	4.24
SCOP			4.7	4.8	4.8	4.8	4.6	4.5	4.3
Energy efficiency class D→A+++*		H	A++	A++	A++	A++	A++	A+	A+

(*) The energy efficiency class range of this product category is D→A+++

Physical data outdoor

Outdoor unit			2-room Multisplit RAS-2M10G3AVG-E	2-room Multisplit RAS-2M14G3AVG-E	2-room Multisplit RAS-2M18G3AVG-E	3-room Multisplit RAS-3M18G3AVG-E	3-room Multisplit RAS-3M26G3AVG-E	4-room Multisplit RAS-4M27G3AVG-E	5-room Multisplit RAS-5M34G3AVG-E
Air Flow	m³/h - l/s	C	2100-583	1800-500	2600-722	2600-722	3400-944	3400-944	3700-1028
Sound pressure level(r/l)	dB(A)	C	47/43	46/41	48/45	48/45	49/43	50/44	52/45
Sound power level	dB(A)	C	60	59	61	61	62	63	65
Operating range	°C	C	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46
Air Flow	m³/h - l/s	H	2100-583	2250-625	2600-722	2800-778	3700-1028	3700-1028	4400-1222
Sound pressure level(r/l)	dB(A)	H	51/46	52/46	50/44	52/46	53/45	54/45	56/47
Sound power level	dB(A)	H	64	65	63	65	66	67	69
Operating range	°C	H	-20/24	-20/24	-20/24	-20/24	-20/24	-20/24	-20/24
Dimensions (HxWxD)	mm		550 x 780 x 290	550 x 780 x 290	630 x 800 x 300	630 x 800 x 300	890 x 900 x 320	890 x 900 x 320	890 x 900 x 320
Weight	kg		31	35	43	44	67	68	78
Compressor type			DC Single Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections - gas			3/8" x 2	3/8" x 2	3/8" x 2	3/8" x 2 + 1/2"×1	3/8" x 1 + 1/2"×2	3/8" x 2 + 1/2"×2	3/8" x 3 + 1/2"×2
Flare connections - liquid			1/4" x 2	1/4" x 2	1/4" x 2	1/4" x 3	1/4" x 3	1/4" x 4	1/4" x 5
Maximum pipe length (per unit/total)	m		15/20	20/30	20/30	25/50	25/ 70	25 / 70	25 / 80
Maximum height difference	m		10	10	10	10	15	15	15
Refrigerant charge	kg		0.8	0.95	1.2	1.25	1.90	2.05	2.39
Chargeless pipe length	m		20	30	30	50	40	40	40
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

C: cooling mode
H: heating mode
-E: European Union
-TR: Turkey

RAS MULTI
INDOOR UNITS

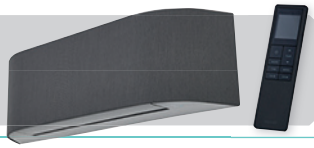
DAISEIKAI 10

- Unique natural wood grille
- Toshiba indoor air quality with Ultra-Pure filter and Plasma Air Purifier
- Smart sensing control
- On-demand Defrost
- Extremely silent operation

Physical data indoor

Indoor unit		White Wood	RAS-B10S4KVPG-E RAS-B10S4KVDG-E	RAS-B13S4KVPG-E RAS-B13S4KVDG-E	RAS-B18S4KVPG-E RAS-B18S4KVDG-E
Air Flow	m³/h - l/s	C	700 -194	750 - 208	800 - 222
Sound pressure level (h/q)	dB(A)	C	40/19	41/20	44/22
Sound power level (h/q)	dB(A)	C	53/32	54/33	57/35
Air Flow	m³/h - l/s	H	750 - 208	800 - 222	810 - 225
Sound pressure level (h/q)	dB(A)	H	41/19	42/20	45/22
Sound power level (h/q)	dB(A)	H	54/32	55/33	58/35
Dimensions (hxwxd) White	mm		293 x 930 x 255	293 x 930 x 255	293 x 930 x 255
Dimensions (hxwxd) Woods	mm		293 x 940 x 257	293 x 940 x 257	293 x 940 x 257
Weight White/Wood	kg		14/16	14/16	14/16
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"

HAORI



- Truly elegant design featuring a stylish textile fabric cover
- Toshiba Ultra Pure Filter PM 2.5 & Toshiba Plasma Ionizer
- Toshiba HAORI luxury remote control
- Wifi adaptor inside FCU
- Silent operation

Physical data indoor

Indoor unit			RAS-M07N4KVRG-E	RAS-B10N4KVRG-E	RAS-B13N4KVRG-E	RAS-B16N4KVRG-E
Air flow (h)	m³/h - l/s	C	600 - 166	600 - 166	670 - 186	690 - 180
Sound pressure level (h/q)	dB(A)	C	41/19	41/19	43/19	45/21
Sound power level (h)	dB(A)	C	54	54	56	58
Air flow (h)	m³/h - l/s	H	610 - 169	610 - 169	680 - 189	730 - 186
Sound pressure level (h/q)	dB(A)	H	41/19	41/19	43/19	45/22
Sound power level (h)	dB(A)	H	54	54	56	58
Dimensions (hxwxd)	mm		300 x 987 x 210	300 x 987 x 210	300 x 987 x 210	300 x 987 x 210
Weight	kg		11	11	11	12
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"

SHORAI EDGE

- Toshiba Ultra Pure Filter PM2.5
- 3D airlfow with 6 unique airflow patterns
- Wifi adaptor inside FCU
- HADA care flow
- Silent operation

Physical data indoor

Indoor unit	White Black		RAS-M 05G3KVSG-E RAS-M05G3KVSGB-E	RAS-B07G3KVSG-E RAS-B07G3KVSGB-E	RAS-B10G3KVSG-E RAS-B10G3KVSGB-E	RAS-B13G3KVSG-E RAS-B13G3KVSGB-E	RAS-B16G3KVSG-E RAS-B16G3KVSGB-E	RAS-B18G3KVSG-E RAS-B18G3KVSGB-E	RAS-B22G3KVSG-E RAS-B22G3KVSGB-E	RAS-B24G3KVSG-E RAS-B24G3KVSGB-E
Air Flow	m³/h - l/s	C	600 - 168	660 - 183	660 - 183	730 - 203	750 - 208	990 - 275	1032 - 286	1120 - 311
Sound pressure level (h/l)	dB(A)	C	37/19	40/19	40/19	43/ 19	44/21	44/26	45/27	47/28
Sound power level (h/l)	dB(A)	C	50/32	53/32	53/32	56/32	57/34	57/39	58/40	60/41
Air Flow	m³/h - l/s	H	600 - 168	660 - 183	660 - 183	730 - 203	760 - 211	990 - 275	1080 - 300	1140 - 316
Sound pressure level (h/l)	dB(A)	H	37/19	40/19	40/19	43/19	44/22	44/26	46/27	48/28
Sound power level (h)	dB(A)	H	50/32	53/32	53/32	56/32	57/35	57/39	59/40	61/41
Dimensions (h x w x d)	mm		293x800x226	293x800x226	293x800x226	293x800x226	293x800x226	320x1053x245	320x1053x245	320x1053x245
Weight	kg		9	10	10	10	10	14	14	14
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"

SEIYA

- Elegant compact design
- Toshiba Ultra Fresh Filter PM2.5
- WiFi adaptor inside FCU
- Silent operation

Physical data indoor

Indoor unit			RAS-B05E2KVG-E	RAS-B07E2KVG-E	RAS-B10E2KVG-E	RAS-B13E2KVG-E	RAS-B16E2KVG-E	RAS-B18E2KVG-E	RAS-B24E2KVG-E
Air Flow	m³/h - l/s	C	480 - 134	500 - 140	510 - 142	540 - 150	750 - 208	790 - 220	1070 - 298
Sound pressure level (h/q)	dB(A)	C	37/19	38/19	39/19	41/20	43/21	47/26	48/29
Sound power level (H)	dB(A)	C	50	51	52	54	56	60	61
Air Flow	m³/h - l/s	H	480 - 134	500 - 140	510 - 144	560 - 158	760 - 212	840 - 233	860 - 239
Sound pressure level (h/q)	dB(A)	H	37/19	38/19	39/20	42/20	43/22	48/26	48/29
Sound power level (H)	dB(A)	H	50	51	52	55	56	61	61
Dimensions (h x w x d)	mm		288 x 770 x 225	288 x 770 x 225	288 x 770 x 225	288 x 770 x 225	293 x 798 x 230	293 x 798 x 230	320 x 1050 x 250
Weight	kg		9	9	9	9	9	9	15
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"

C: cooling mode
H: heating mode

INDOOR UNITS

SEIYA CLASSIC

- Elegant compact design
- Self-cleaning function
- WiFi adaptor inside FCU (accessory)
- Silent operation

Physical data indoor

Indoor unit			RAS-B05B2KVG-E	RAS-B07B2KVG-E	RAS-B10B2KVG-E	RAS-B13B2KVG-E	RAS-B16B2KVG-E	RAS-B18B2KVG-E	RAS-B24B2KVG-E
Air Flow	m³/h - l/s	C	480- 134	490 - 136	620 - 172	650 - 180	760 - 212	790 - 219	1070 - 298
Sound pressure level (h/q)	dB(A)	C	39/19	40/19	41/19	42/20	44/22	47/26	48/29
Sound power level (h)	dB(A)	C	52	53	54	55	57	60	61
Air Flow	m³/h - l/s	H	480- 134	500 - 140	620 - 172	620 - 172	760 - 212	840 - 233	860 - 239
Sound pressure level (h/q)	dB(A)	H	38/19	39/19	40/20	42/20	43/23	48/26	48/29
Sound power level (h)	dB(A)	H	51	52	53	55	56	61	61
Dimensions (HxWxD)	mm		288 x 770 x 225	288 x 770 x 225	288 x 770 x 225	288 x 770 x 225	293 x 798 x 230	293 x 798 x 230	320x1050x250
Weight	kg		9	9	9	9	10	10	14
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"

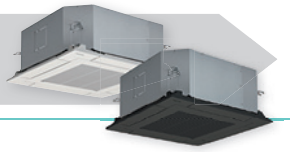
CONSOLE

- Bi-flow air delivery system (floor heating)
- Silent operation outdoor unit
- Wireless remote control
- R32 refrigerant gas sensor accessory inside FCU (RB-I301-E)

Physical data indoor

Indoor unit			RAS-M07J2FVG-E	RAS-B10J2FVG-E	RAS-B13J2FVG-E	RAS-B18J2FVG-E
Air Flow	m³/h - l/s	C	490 - 136	492 - 136	528 - 146	600 - 167
Sound pressure level (h/l)	dB(A)	C	39/23	39/23	40/24	46/31
Sound power level (h/l)	dB(A)	C	52/36	52/36	53/37	59/44
Air Flow	m³/h - l/s	H	490 - 136	492 - 136	552 - 153	660 - 183
Sound pressure level (h/l)	dB(A)	H	39/23	39/23	40/24	47/31
Sound power level (h/l)	dB(A)	H	52/36	52/36	53/37	60/44
Dimensions (h x w x d)	mm		600 x 700 x 220	600 x 700 x 220	600 x 700 x 220	600 x 700 x 220
Weight	kg		16	16	16	16
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"

COMPACT 4-WAY CASSETTE



- Wide airflow in all directions
- Compact chassis with only 244mm height for easy installation
- Wired or Wireless remote control / Occupency sensor option
- Indiviudal louver control / Dual & cycle swing

Physical data indoor

Indoor unit			RAS-M10S4MUVG-E	RAS-M13S4MUVG-E	RAS-M16S4MUVG-E
Air flow (h/l)	m³/h - l/s	C	590 - 164	620 - 172	660 - 183
Sound pressure level (h/l)	dB(A)	C	37/30	39/33	41/33
Sound power level	dB(A)	C	50/43	52/46	54/46
Air flow (h/l)	m³/h - l/s	H	590 - 164	620 - 172	660 - 183
Sound pressure level (h/l)	dB(A)	H	37/30	39/33	41/33
Sound power level	dB(A)	H	50/43	52/46	54/46
Dimensions (HxWxD)	mm		244 x 575 x 575	244 x 575 x 575	244 x 575 x 575
Weight	kg		16	16	16
Flare connections (gas – liquid)			3/8" – 1/4"	3/8" – 1/4"	1/2" – 1/4"

COMPACT 1-WAY CASSETTE

- Elegant white panel design to complement any interior
- 150mm chassis height suitable for ceilings with limited void space
- Embedded drain pump for improved system reliability and simplified installation

Physical data indoor

Indoor unit			RAS-M05G3YVG-E	RAS-M07G3YVG-E	RAS-M10G3YVG-E	RAS-M13G3YVG-E	RAS-M16G3YVG-E	RAS-M18G3YVG-E	RAS-M24G3YVG-E
Air flow (h/l)	m³/h - l/s	C	480 - 113	500 - 139	520 - 144	540 - 150	750 - 208	800 - 222	940 - 261
Sound pressure level (h/l)	dB(A)	C	37/25	38/25	39/26	40/26	39/33	40/33	46/37
Sound power level	dB(A)	C	50/38	51/38	52/39	53/39	52/46	53/46	59/50
Air flow (h/l)	m³/h - l/s	H	480 - 113	500 - 139	520 - 144	540 - 150	750 - 208	800 - 222	940 - 261
Sound pressure level (h/l)	dB(A)	H	37/25	38/25	39/26	40/26	39/33	40/33	46/37
Sound power level	dB(A)	H	50/38	51/38	52/39	53/39	52/46	53/46	59/50
Dimensions (HxWxD)	mm		150 x 990 x 450	150 x 990 x 450	150 x 990 x 450	150 x 990 x 450	300 x 1180 x 450	300 x 1180 x 450	300 x 1180 x 450
Weight	kg		16	16	16	16	16	16	16
Flare connections (gas – liquid)			3/8" – 1/4"	3/8" – 1/4"	1/2" – 1/4"	1/2" – 1/4"	1/2" – 1/4"	1/2" – 1/4"	1/2" – 1/4"

DUCT

- Slim unit (only 210mm height)
- Adjustable external static pressure
- Condensate drain pump included (up to 350mm height)
- Air filters in option

Indoor unit			RAS-M07U2DVG-E	RAS-M10U2DVG-E	RAS-M13U2DVG-E	RAS-M16U2DVG-E	RAS-M22U2DVG-E	RAS-M24U2DVG-E
Air flow (h/l)	m³/h	C	570 / 380	570 / 380	610 / 385	780 / 420	1000/740	1060/760
Sound pressure level (h/l) *1	dB(A)	C	35 / 27	35 / 27	37 / 27	35 / 24	38/32	39/33
Sound power level (h/l) *1	dB(A)	C	50 / 42	50 / 42	52 / 42	50 / 39	53/47	54/48
Air flow (h/l)	m³/h – l/s	H	570 / 380	570 / 380	610 / 385	780 / 450	1000/740	1060/760
Sound pressure level (h/l) *1	dB(A)	H	35 / 27	35 / 27	37 / 27	35 / 25	38/32	39/33
Sound power level (h/l) *1	dB(A)	H	50 / 42	50 / 42	52 / 42	50 / 40	53/47	54/48
Dimensions (h x w x d)	mm		210 x 700 x 450	210 x 700 x 450	210 x 700 x 450	210 x 900 x 450	210 x 1100 x 450	210 x 1100 x 450
Weight	kg		16	16	16	19	22	22
Flare connections (gas – liquid)			3/8" – 1/4"	3/8" – 1/4"	3/8" – 1/4"	1/2" – 1/4"	1/2" – 1/4"	1/2" – 1/4"
External static pressure (stand / middle1 / middle2 / upper)	Pa		10 / 20 / 35 /45	10 / 20 / 35 /45	10 / 20 / 35 /45	10 / 20 / 35 /45	10 / 20 / 35 /45	10 / 20 / 35 /45

C: cooling mode. H: heating mode. *1:Back in Take. External static pressure 35Pa.

RAS-2M10G3AVG-E - Performances data Bi-split size 10

	Operating status	Combination		Unit capacity (kW)		Cooling capacity (kW)			Power input (W)			Operating current (A)	Lot.10			EER
		Unit A	Unit B	Unit A	Unit B	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	1 unit operation	05	-	1.50	-	1.00	1.50	2.00	230	362	500	-	-	-	-	-
		07	-	2.00	-	1.00	2.00	2.90	230	487	890	-	-	-	-	-
		10	-	2.50	-	1.00	2.50	3.20	230	662	1140	-	-	-	-	-
	2 unit operation	05	05	1.50	1.50	1.20	3.00	4.00	200	609	1040	3.18	3.00	8.00	A++	4.93
		07	05	1.89	1.41	1.20	3.30	4.10	200	697	1050	3.39	3.30	8.20	A++	4.73
		10	05	2.06	1.24	1.20	3.30	4.10	200	697	1050	3.39	3.30	8.20	A++	4.73
		07	07	1.65	1.65	1.20	3.30	4.10	200	670	1050	3.31	3.30	8.60	A+++	4.93
		10	07	1.83	1.47	1.20	3.30	4.10	200	670	1050	3.31	3.30	8.60	A+++	4.93
		10	10	1.65	1.65	1.20	3.30	4.10	200	670	1050	3.31	3.30	8.60	A+++	4.93

	Operating status	Combination		Unit capacity (kW)		Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10		Label*		COP
		Unit A	Unit B	Unit A	Unit B	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	1 unit operation	05	-	2.00	-	0.90	2.00	2.50	210	460	690	-	-	-	-	-	-	-
		07	-	2.50	-	0.90	2.50	3.60	190	520	920	-	-	-	-	-	-	-
		10	-	3.20	-	0.90	3.20	4.80	190	740	1460	-	-	-	-	-	-	-
	2 unit operation	05	05	2.00	2.00	1.00	4.00	4.90	180	960	1240	4.45	2.70	4.60	5.70	A++	A+++	4.17
		07	05	2.22	1.78	1.00	4.00	4.90	170	880	1140	4.09	2.70	4.60	5.60	A++	A+++	4.55
		10	05	2.46	1.54	1.00	4.00	4.90	170	880	1140	4.09	2.70	4.60	5.60	A++	A+++	4.55
		07	07	2.00	2.00	1.00	4.00	4.90	170	840	1100	3.91	2.70	4.70	5.80	A++	A+++	4.71
		10	07	2.25	1.75	1.00	4.00	4.90	170	840	1100	3.91	2.70	4.70	5.80	A++	A+++	4.71
		10	10	2.00	2.00	1.00	4.00	4.90	170	840	1100	3.91	2.70	4.70	5.80	A++	A+++	4.71

RAS-2M14G3AVG-E - Performances data Bi-split size 14

	Operating status	Combination		Unit capacity (kW)		Cooling capacity (kW)			Power input (W)			Operating current (A)	Lot.10			EER
		Unit A	Unit B	Unit A	Unit B	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	1 unit operation	05	-	1.50	-	1.10	1.50	2.00	260	360	470	-	-	-	-	
		07	-	2.00	-	1.20	2.00	2.90	260	440	710	-	-	-	-	
		10	-	2.50	-	1.20	2.50	3.20	260	600	870	-	-	-	-	
		13	-	3.50	-	1.30	3.50	4.10	260	990	1300	-	-	-	-	
	2 unit operation	05	05	1.50	1.50	1.40	3.00	4.70	240	650	1250	3.26	3.00	8.10	A++	4.63
		07	05	2.00	1.50	1.40	3.50	4.90	240	780	1250	3.64	3.50	8.30	A++	4.47
		10	05	2.50	1.50	1.40	4.00	4.90	240	950	1250	4.41	4.00	7.60	A++	4.23
		13	05	2.80	1.20	1.50	4.00	4.90	230	910	1200	4.23	4.00	8.10	A++	4.39
		07	07	2.00	2.00	1.50	4.00	4.90	230	920	1250	4.27	4.00	7.90	A++	4.33
		10	07	2.22	1.78	1.50	4.00	4.90	230	920	1200	4.27	4.00	7.90	A++	4.33
		13	07	2.55	1.45	1.50	4.00	4.90	230	890	1180	4.14	4.00	8.20	A++	4.51
		10	10	2.00	2.00	1.50	4.00	4.90	230	920	1200	4.27	4.00	7.90	A++	4.33
		13	10	2.33	1.67	1.50	4.00	4.90	230	890	1150	4.14	4.00	8.20	A++	4.51
		13	13	2.00	2.00	1.50	4.00	4.90	230	850	1150	3.96	4.00	8.70	A+++	4.71

	Operating status	Combination		Unit capacity (kW)		Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10		Label*		COP
		Unit A	Unit B	Unit A	Unit B	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	1 unit operation	05	-	2.00	-	1.00	2.00	2.50	230	510	680	-	-	-	-	-	-	
		07	-	2.50	-	1.00	2.50	3.60	230	680	950	-	-	-	-	-	-	
		10	-	3.20	-	1.00	3.20	4.80	230	1010	1490	-	-	-	-	-	-	
		13	-	4.20	-	1.00	4.20	5.20	230	1400	1610	-	-	-	-	-	-	
	2 unit operation	05	05	2.00	2.00	1.00	4.00	5.10	200	960	1300	4.45	2.80	4.50	5.60	A+	A+++	4.17
		07	05	2.44	1.96	1.00	4.40	5.20	200	1090	1300	5.04	3.10	4.50	5.70	A+	A+++	4.04
		10	05	2.71	1.69	1.00	4.40	5.20	200	1090	1300	5.04	3.10	4.60	5.80	A++	A+++	4.04
		13	05	2.98	1.42	1.00	4.40	5.20	200	1010	1280	4.68	3.10	4.60	5.80	A++	A+++	4.36
		07	07	2.20	2.20	1.00	4.40	5.20	200	1020	1300	4.72	3.10	4.60	5.70	A++	A+++	4.31
		10	07	2.47	1.93	1.00	4.40	5.20	200	1020	1280	4.72	3.10	4.60	5.80	A++	A+++	4.31
		13	07	2.76	1.64	1.00	4.40	5.20	200	940	1280	4.36	3.10	4.70	5.80	A++	A+++	4.68
		10	10	2.20	2.20	1.00	4.40	5.20	200	1020	1250	4.72	3.10	4.60	5.70	A++	A+++	4.31
		13	10	2.50	1.90	1.00	4.40	5.20	200	940	1250	4.36	3.10	4.70	5.90	A++	A+++	4.68
		13	13	2.20	2.20	1.00	4.40	5.20	200	900	1220	4.18	3.10	4.80	5.90	A++	A+++	4.89

RAS-2M18G3AVG-E - Performances data Bi-split size 18

	Operating status	Combination		Unit capacity (kW)		Cooling capacity (kW)			Power input (W)			Operating current (A)	Lot.10			EER
		Unit A	Unit B	Unit A	Unit B	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	1 unit operation	05	-	1.50	-	1.20	1.50	2.00	250	350	500	-	-	-	-	-
		07	-	2.00	-	1.20	2.00	2.90	250	480	780	-	-	-	-	-
		10	-	2.50	-	1.20	2.50	3.20	250	640	900	-	-	-	-	-
		13	-	3.50	-	1.30	3.50	4.10	250	940	1320	-	-	-	-	-
		16	-	4.60	-	1.30	4.60	5.00	250	1370	2060	-	-	-	-	-
	2 unit operation	05	05	1.50	1.50	1.50	3.00	4.80	270	570	1290	3.07	3.00	7.10	A++	5.26
		07	05	2.00	1.50	1.50	3.50	4.90	270	710	1300	3.42	3.50	7.80	A++	4.93
		10	05	2.50	1.50	1.50	4.00	5.60	270	880	1680	4.09	4.00	8.00	A++	4.55
		13	05	3.50	1.50	1.60	5.00	6.40	270	1250	2120	5.75	5.00	7.50	A++	4.00
		16	05	3.92	1.28	1.60	5.20	6.50	270	1340	2090	6.15	5.20	7.40	A++	3.88
		07	07	2.00	2.00	1.60	4.00	5.80	270	860	1700	4	4.00	8.10	A++	4.65
		10	07	2.50	2.00	1.60	4.50	6.40	270	1060	2110	4.9	4.50	7.70	A++	4.25
		13	07	3.31	1.89	1.60	5.20	6.50	270	1290	2100	5.93	5.20	7.80	A++	4.03
		16	07	3.62	1.58	1.60	5.20	6.50	270	1300	2110	5.97	5.20	7.80	A++	4.00
		10	10	2.50	2.50	1.60	5.00	6.40	270	1240	2110	5.71	5.00	7.70	A++	4.03
		13	10	3.03	2.17	1.60	5.20	6.50	270	1280	2100	5.89	5.20	7.80	A++	4.06
		16	10	3.37	1.83	1.60	5.20	6.50	270	1260	1860	5.8	5.20	7.80	A++	4.13
		13	13	2.60	2.60	1.60	5.20	6.50	270	1240	1880	5.71	5.20	8.10	A++	4.19
		16	13	2.95	2.25	1.60	5.20	6.50	270	1210	1880	5.57	5.20	8.70	A+++	4.30
		16	16	2.60	2.60	1.60	5.20	6.50	270	1190	1880	5.48	5.20	8.70	A+++	4.37

(*) The energy efficiency class range of this product category is D→A+++

RAS-2M18G3AVG-E / TR - Performances data Bi-split size 18

Heating, 230 V

Operating status	Combination		Unit capacity (kW)		Heating capacity (kW)			Power input (W)			Operating current (A)		Lot.10	Label*			COP
	Unit A	Unit B	Unit A	Unit B	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
1 unit operation	05	-	2.00	-	1.00	2.00	2.50	260	510	720	-	-	-	-	-	-	-
	07	-	2.50	-	1.00	2.50	3.60	230	680	950	-	-	-	-	-	-	-
	10	-	3.20	-	1.00	3.20	4.80	230	1110	1460	-	-	-	-	-	-	-
	13	-	4.20	-	1.10	4.20	5.30	230	1530	1810	-	-	-	-	-	-	-
	16	-	5.50	-	1.10	5.50	6.20	230	2340	2530	-	-	-	-	-	-	-
2 unit operation	05	05	2.00	2.00	1.20	4.00	5.90	240	850	1820	3.96	2.28	4.10	5.00	A+	A++	4.71
	07	05	2.50	2.00	1.30	4.50	6.10	240	990	1780	4.59	2.57	4.20	5.20	A+	A+++	4.55
	10	05	3.20	2.00	1.30	5.20	7.30	240	1270	2300	5.84	2.97	4.30	5.30	A+	A+++	4.09
	13	05	3.79	1.81	1.30	5.60	7.80	240	1290	2490	5.93	3.20	4.50	5.60	A+	A+++	4.34
	16	05	4.11	1.49	1.30	5.60	8.20	240	1280	2470	5.89	3.20	4.60	5.80	A++	A+++	4.38
	07	07	2.50	2.50	1.30	5.00	7.20	240	1130	2250	5.22	2.85	4.40	5.50	A+	A+++	4.42
	10	07	3.14	2.46	1.30	5.60	8.20	240	1340	2510	6.15	3.20	4.60	5.80	A++	A+++	4.18
	13	07	3.51	2.09	1.30	5.60	8.20	240	1240	2440	5.71	3.20	4.60	5.80	A++	A+++	4.52
	16	07	3.85	1.75	1.30	5.60	8.20	240	1220	2420	5.62	3.20	4.60	5.80	A++	A+++	4.59
	10	10	2.80	2.80	1.30	5.60	8.20	240	1340	2510	6.15	3.20	4.60	5.80	A++	A+++	4.18
	13	10	3.18	2.42	1.30	5.60	8.20	240	1240	2440	5.71	3.20	4.60	5.80	A++	A+++	4.52
	16	10	3.54	2.06	1.30	5.60	8.20	240	1220	2420	5.62	3.20	4.60	5.80	A++	A+++	4.59
	13	13	2.80	2.80	1.30	5.60	8.20	240	1150	2360	5.31	3.20	4.70	6.00	A++	A+++	4.87
	16	13	3.18	2.42	1.30	5.60	8.20	240	1140	2340	5.26	3.20	4.80	6.00	A++	A+++	4.91
	16	16	2.80	2.80	1.30	5.60	8.20	240	1110	2320	5.13	3.20	4.90	6.10	A++	A+++	5.05

RAS-3M18G3AVG-E - Performances data Tri-split size 18

Cooling, 230 V

Operating status	Combination			Unit cacacity (kW)			Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
1 unit operation	05	-	-	1.50	-	-	1.20	1.50	2.00	280	350	490	-	-	-	-	-
	07	-	-	2.00	-	-	1.20	2.00	2.90	270	460	830	-	-	-	-	-
	10	-	-	2.50	-	-	1.20	2.50	3.20	270	600	940	-	-	-	-	-
	13	-	-	3.50	-	-	1.20	3.50	4.10	260	990	1230	-	-	-	-	-
	16	-	-	4.60	-	-	1.20	4.60	5.30	260	1530	2330	-	-	-	-	-
2 unit operation	05	05	-	1.50	1.50	-	1.40	3.00	4.80	360	650	1340	3.26	3.00	6.50	A++	4.62
	07	05	-	2.00	1.50	-	1.60	3.50	4.90	350	770	1380	3.6	3.50	6.70	A++	4.54
	10	05	-	2.50	1.50	-	1.60	4.00	5.60	350	940	1590	4.36	4.00	6.80	A++	4.27
	13	05	-	3.50	1.50	-	1.60	5.00	6.40	340	1360	2410	6.24	5.00	7.00	A++	3.69
	16	05	-	3.92	1.28	-	1.60	5.20	6.50	340	1470	2440	6.73	5.20	7.00	A++	3.56
	07	07	-	2.00	2.00	-	1.60	4.00	5.80	350	920	1600	4.27	4.00	6.90	A++	4.36
	10	07	-	2.50	2.00	-	1.60	4.50	6.40	350	1120	2450	5.17	4.50	6.80	A++	4.01
	13	07	-	3.31	1.89	-	1.60	5.20	6.50	340	1420	2430	6.51	5.20	7.10	A++	3.65
	16	07	-	3.62	1.58	-	1.60	5.20	6.50	340	1400	2430	6.42	5.20	7.20	A++	3.71
	10	10	-	2.50	2.50	-	1.60	5.00	6.40	350	1370	2430	6.29	5.00	7.00	A++	3.64
	13	10	-	3.03	2.17	-	1.70	5.20	6.50	340	1420	2460	6.51	5.20	7.10	A++	3.65
	16	10	-	3.37	1.83	-	1.70	5.20	6.50	340	1400	2460	6.42	5.20	7.20	A++	3.71
	13	13	-	2.60	2.60	-	1.70	5.20	6.60	330	1340	2460	6.15	5.20	7.40	A++	3.87
	16	13	-	2.95	2.25	-	1.70	5.20	6.70	330	1330	2430	6.11	5.20	7.40	A++	3.92
	16	16	-	2.60	2.60	-	1.70	5.20	6.70	330	1310	2460	6.02	5.20	7.50	A++	3.98
3 unit operation	05	05	05	1.50	1.50	1.50	1.70	4.50	6.00	300	830	1480	3.87	4.50	8.30	A++	5.39
	07	05	05	2.00	1.50	1.50	1.70	5.00	6.90	300	980	1990	4.54	5.00	8.50	A+++	5.11
	10	05	05	2.36	1.42	1.42	1.70	5.20	7.50	300	1050	2480	4.86	5.20	8.40	A++	4.96
	13	05	05	2.80	1.20	1.20	1.70	5.20	7.50	300	1020	2490	4.72	5.20	8.50	A+++	5.07
	16	05	05	3.15	1.03	1.03	1.90	5.20	7.50	300	1030	2530	4.77	5.20	8.40	A++	5.06
	07	07	05	1.89	1.89	1.42	1.90	5.20	7.50	300	1040	2510	4.81	5.20	8.50	A+++	5.00
	10	07	05	2.17	1.73	1.30	1.90	5.20	7.50	300	1040	2510	4.81	5.20	8.50	A+++	5.00
	13	07	05	2.60	1.49	1.11	1.90	5.20	7.50	300	1010	2490	4.68	5.20	8.60	A+++	5.11
	16	07	05	2.95	1.28	0.96	2.00	5.20	7.50	300	1000	2480	4.63	5.20	8.60	A+++	5.17
	10	10	05	2.00	2.00	1.20	2.00	5.20	7.50	300	1040	2490	4.81	5.20	8.50	A+++	5.00
	13	10	05	2.43	1.73	1.04	2.00	5.20	7.50	300	1010	2490	4.68	5.20	8.60	A+++	5.11
	16	10	05	2.78	1.51	0.91	2.00	5.20	7.50	300	1010	2460	4.68	5.20	8.60	A+++	5.17
	13	13	05	2.14	2.14	0.92	2.00	5.20	7.50	300	990	2460	4.59	5.20	8.60	A+++	5.20
	16	13	05	2.49	1.90	0.81	2.00	5.20	7.50	300	990	2490	4.59	5.20	8.80	A+++	5.27
	07	07	07	1.73	1.73	1.73	2.00	5.20	7.50	300	1020	2460	4.72	5.20	8.60	A+++	5.12
	10	07	07	2.00	1.60	1.60	2.00	5.20	7.50	300	1020	2460	4.72	5.20	8.60	A+++	5.12
	13	07	07	2.43	1.39	1.39	2.00	5.20	7.50	300	1000	2430	4.63	5.20	8.60	A+++	5.22
	16	07	07	2.78	1.21	1.21	2.00	5.20	7.50	300	1000	2420	4.63	5.20	8.60	A+++	5.20
	10	10	07	1.86	1.86	1.49	2.00	5.20	7.50	300	1020	2470	4.72	5.20	8.60	A+++	5.12
	13	10	07	2.28	1.63	1.30	2.00	5.20	7.50	300	990	2470	4.59	5.20	8.60	A+++	5.22
	16	10	07	2.63	1.43	1.14	2.00	5.20	7.50	300	1000	2440	4.63	5.20	8.60	A+++	5.20
	13	13	07	2.02	2.02	1.16	2.00	5.20	7.50	300	990	2430	4.59	5.20	8.80	A+++	5.22
	16	13	07	2.37	1.80	1.03	2.00	5.20	7.50	300	980	2470	4.54	5.20	8.80	A+++	5.28
	10	10	10	1.73	1.73	1.73	2.00	5.20	7.50	300	1020	2440	4.72	5.20	8.60	A+++	5.12
	13	10	10	2.14	1.53	1.53	2.00	5.20	7.50	300	1000	2430	4.63	5.20	8.60	A+++	5.22
	16	10	10	2.49	1.35	1.35	2.00	5.20	7.50	300	1000	2400	4.63	5.20	8.60	A+++	5.20
	13	13	10	1.92	1.92	1.37	2.00	5.20	7.50	300	990	2380	4.59	5.20	8.60	A+++	5.22

(*) The energy efficiency class range of this product category is D→A+++

RAS-3M18G3AVG-E - Performances data Tri-split size 18

	Operating status	Combination			Unit capacity (kW)			Heating capacity (kW)			Power input (W)			Operating current (A)		Lot.10		Label*		COP
		Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	1 unit operation	05			2.00			1.00	2.00	2.50	260	820	1170	-	-	-	-	-	-	-
		07			2.50			1.10	2.50	3.60	270	1090	1480	-	-	-	-	-	-	-
		10			3.20			1.10	3.20	4.80	270	1320	1860	-	-	-	-	-	-	-
		13			4.20			1.20	4.20	5.30	270	1560	1970	-	-	-	-	-	-	-
		16			5.50			1.30	5.50	6.50	270	1980	2330	-	-	-	-	-	-	-
	2 unit operation	05	05		2.00	2.00		1.60	4.00	6.10	300	1070	1930	4.95	2.05	4.30	5.70	A+	A+++	3.74
		07	05		2.50	2.00		1.60	4.50	6.10	300	1210	1880	5.57	2.31	4.30	5.70	A+	A+++	3.72
		10	05		3.20	2.00		1.60	5.20	7.30	300	1380	2320	6.33	2.67	4.40	5.70	A+	A+++	3.77
		13	05		4.20	2.00		1.80	6.20	7.80	340	1650	2400	7.53	3.19	4.30	5.70	A+	A+++	3.76
		16	05		4.99	1.81		1.90	6.80	8.20	340	1810	2380	8.23	3.50	4.30	5.80	A+	A+++	3.76
		07	07		2.50	2.50		1.80	5.00	7.20	340	1330	2260	6.11	2.57	4.30	5.70	A+	A+++	3.76
		10	07		3.20	2.50		1.80	5.70	8.20	340	1530	2420	6.99	2.93	4.30	5.70	A+	A+++	3.73
		13	07		4.20	2.50		1.90	6.70	8.20	340	1800	2340	8.19	3.44	4.40	5.80	A+	A+++	3.72
		16	07		4.68	2.13		1.90	6.80	8.20	340	1820	2330	8.28	3.50	4.40	5.80	A+	A+++	3.74
		10	10		3.20	3.20		1.90	6.40	8.20	340	1710	2420	7.79	3.29	4.60	5.90	A++	A+++	3.74
		13	10		3.86	2.94		1.90	6.80	8.20	340	1830	2340	8.32	3.50	4.60	5.90	A++	A+++	3.72
		16	10		4.30	2.50		1.90	6.80	8.20	340	1820	2330	8.28	3.50	4.60	5.90	A++	A+++	3.74
		13	13		3.40	3.40		1.90	6.80	8.20	340	1800	2280	8.19	3.50	4.60	5.90	A++	A+++	3.78
		16	13		3.86	2.94		1.90	6.80	8.20	340	1820	2260	8.28	3.50	4.60	5.90	A++	A+++	3.74
		16	16		3.40	3.40		1.90	6.80	8.20	340	1810	2240	8.23	3.50	4.60	5.90	A++	A+++	3.76
	3 unit operation	05	05	05	2.00	2.00	2.00	1.90	6.00	7.50	350	1380	1990	6.33	3.08	4.70	5.90	A++	A+++	4.35
		07	05	05	2.50	2.00	2.00	1.90	6.50	8.30	350	1510	2010	6.91	3.34	4.70	5.80	A++	A+++	4.30
		10	05	05	3.02	1.89	1.89	1.90	6.80	8.30	350	1620	2010	7.39	3.50	4.70	5.80	A++	A+++	4.20
		13	05	05	3.48	1.66	1.66	1.90	6.80	8.30	350	1570	1970	7.17	3.50	4.70	5.80	A++	A+++	4.33
		16	05	05	3.94	1.43	1.43	1.90	6.80	8.30	350	1520	1960	6.95	3.50	4.70	5.70	A++	A+++	4.47
		07	07	05	2.43	2.43	1.94	1.90	6.80	8.30	350	1600	1980	7.30	3.50	4.70	5.80	A++	A+++	4.25
		10	07	05	2.83	2.21	1.77	1.90	6.80	8.30	350	1600	1980	7.30	3.50	4.70	5.70	A++	A+++	4.25
		13	07	05	3.28	1.95	1.56	1.90	6.80	8.30	360	1510	1940	6.91	3.50	4.70	5.70	A++	A+++	4.50
		16	07	05	3.74	1.70	1.36	1.90	6.80	8.30	360	1510	1930	6.91	3.50	4.60	5.70	A++	A+++	4.50
		10	10	05	2.59	2.59	1.62	1.90	6.80	8.30	350	1600	1980	7.30	3.50	4.60	5.70	A++	A+++	4.25
		13	10	05	3.04	2.31	1.45	1.90	6.80	8.30	360	1510	1940	6.91	3.50	4.60	5.70	A++	A+++	4.50
		16	10	05	3.50	2.03	1.27	1.90	6.80	8.30	360	1510	1930	6.91	3.50	4.60	5.70	A++	A+++	4.50
		13	13	05	2.75	2.75	1.31	1.90	6.80	8.30	360	1440	1900	6.60	3.50	4.70	5.70	A++	A+++	4.72
		16	13	05	3.20	2.44	1.16	1.90	6.80	8.30	360	1410	1890	6.46	3.50	4.60	5.70	A++	A+++	4.82
		07	07	07	2.27	2.27	2.27	1.90	6.80	8.30	360	1520	1950	6.95	3.50	4.60	5.70	A++	A+++	4.47
		10	07	07	2.65	2.07	2.07	1.90	6.80	8.30	360	1520	1950	6.95	3.50	4.60	5.80	A++	A+++	4.47
		13	07	07	3.10	1.85	1.85	1.90	6.80	8.30	360	1460	1910	6.68	3.50	4.60	5.80	A++	A+++	4.66
		16	07	07	3.56	1.62	1.62	1.90	6.80	8.30	360	1440	1900	6.60	3.50	4.60	5.70	A++	A+++	4.72
		10	10	07	2.44	2.44	1.91	1.90	6.80	8.20	360	1520	1950	6.95	3.50	4.60	5.80	A++	A+++	4.47
		13	10	07	2.88	2.20	1.72	1.90	6.80	8.30	360	1460	1910	6.68	3.50	4.80	5.80	A++	A+++	4.66
		16	10	07	3.34	1.94	1.52	1.90	6.80	8.30	360	1440	1900	6.60	3.50	4.80	5.80	A++	A+++	4.72
		13	13	07	2.62	2.62	1.56	1.90	6.80	8.30	370	1370	1880	6.29	3.50	4.70	5.80	A++	A+++	4.96
		16	13	07	3.07	2.34	1.39	1.90	6.80	8.30	370	1370	1870	6.29	3.50	4.70	5.80	A++	A+++	4.96
		10	10	10	2.27	2.27	2.27	1.90	6.80	8.30	370	1520	1950	6.95	3.50	4.80	5.90	A++	A+++	4.47
		13	10	10	2.69	2.05	2.05	1.90	6.80	8.30	370	1460	1910	6.68	3.50	4.70	5.80	A++	A+++	4.66
		16	10	10	3.14	1.83	1.83	1.90	6.80	8.30	370	1450	1900	6.64	3.50	4.80	6.00	A++	A+++	4.69
		13	13	10	2.46	2.46	1.88	1.90	6.80	8.30	370	1370	1880	6.29	3.50	4.80	6.00	A++	A+++	4.96

RAS-3M26G3AVG-E - Performances in Cooling mode

	Operating Status	Combination			Unit cacacity (kW)			Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
		Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	1 unit operation	05	-	-	1.50	-	-	1.3	1.5	2.0	350	350	360	-	-	-	-	-
		07	-	-	2.00	-	-	1.4	2.0	2.9	350	480	610	-	-	-	-	-
		10	-	-	2.50	-	-	1.4	2.5	3.2	350	610	700	-	-	-	-	-
		13	-	-	3.50	-	-	1.6	3.5	4.1	350	860	950	-	-	-	-	-
		16	-	-	4.60	-	-	1.7	4.6	5.3	350	1140	1280	-	-	-	-	-
		18	-	-	5.00	-	-	1.8	5.0	6.0	350	1250	1470	-	-	-	-	-
		22	-	-	6.10	-	-	1.9	6.1	6.7	350	1530	1670	-	-	-	-	-
		24	-	-	7.00	-	-	2.0	7.0	7.7	350	1750	1940	-	-	-	-	-
	2 units operation	05	05	-	1.50	1.50	-	1.5	3.0	4.0	350	740	920	3.46	3.0	6.90	A++	4.05
		07	05	-	2.00	1.50	-	1.6	3.5	4.9	350	860	1170	4.00	3.5	7.20	A++	4.07
		10	05	-	2.50	1.50	-	1.6	4.0	5.2	350	990	1250	4.59	4.0	7.40	A++	4.04
		13	05	-	3.50	1.50	-	1.8	5.0	6.1	350	1250	1500	5.75	5.0	7.80	A++	4.00
		16	05	-	4.60	1.50	-	1.9	6.1	7.3	350	1530	1830	6.99	6.1	8.30	A++	3.99
		18	05	-	5.00	1.50	-	1.9	6.5	8.0	350	1630	2030	7.44	6.5	8.40	A++	3.99
		22	05	-	5.62	1.38	-	2.0	7.0	8.7	350	1750	2220	7.97	7.0	8.60	A+++	4.00
		24	05	-	5.76	1.24	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		07	07	-	2.00	2.00	-	1.6	4.0	5.8	350	990	1420	4.59	4.0	7.40	A++	4.04
		10	07	-	2.50	2.00	-	1.7	4.5	6.1	350	1120	1500	5.17	4.5	7.50	A++	4.02
		13	07	-	3.50	2.00	-	1.8	5.5	7.0	350	1370	1750	6.29	5.5	8.00	A++	4.01
		16	07	-	4.60	2.00	-	2.0	6.6	8.2	350	1650	2080	7.53	6.6	8.50	A+++	4.00
		18	07	-	5.00	2.00	-	2.0	7.0	8.9	350	1750	2280	7.97	7.0	8.60	A+++	4.00
		22	07	-	5.27	1.73	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		24	07	-	5.44	1.56	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		10	10	-	2.50	2.50	-	1.8	5.0	6.4	350	1250	1580	5.75	5.0	7.80	A++	4.00
		13	10	-	3.50	2.50	-	1.9	6.0	7.3	350	1500	1830	6.86	6.0	8.20	A++	4.00
		16	10	-	4.54	2.46	-	2.0	7.0	8.5	350	1750	2170	7.97	7.0	8.60	A+++	4.00
		18	10	-	4.67	2.33	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		22	10	-	4.97	2.03	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		24	10	-	5.16	1.84	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		13	13	-	3.50	3.50	-	2.0	7.0	8.2	350	1750	2080	7.97	7.0	8.60	A+++	4.00
		16	13	-	3.98	3.02	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		18	13	-	4.12	2.88	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		22	13	-	4.45	2.55	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		24	13	-	4.67	2.33	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		16	16	-	3.50	3.50	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		18	16	-	3.65	3.35	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		22	16	-	3.99	3.01	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		24	16	-	4.22	2.78	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		18	18	-	3.50	3.50	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		22	18	-	3.85	3.15	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00
		24	18	-	4.08	2.92	-	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.60	A+++	4.00

(*) The energy efficiency class range of this product category is D→A+++

RAS-3M26G3AVG-E - Performances in Cooling mode

Operating Status	Combination			Unit capacity (kW)			Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	05	05	05	1.50	1.50	1.50	1.7	4.5	6.0	350	1120	1470	5.17	4.5	7.40	A++	4.02
	07	05	05	2.00	1.50	1.50	1.8	5.0	6.9	350	1250	1720	5.75	5.0	7.60	A++	4.00
	10	05	05	2.50	1.50	1.50	1.8	5.5	7.2	350	1370	1810	6.29	5.5	7.80	A++	4.01
	13	05	05	3.50	1.50	1.50	1.9	6.5	8.1	350	1630	2060	7.44	6.5	8.30	A++	3.99
	16	05	05	4.24	1.38	1.38	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	05	05	4.38	1.31	1.31	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	05	05	4.69	1.15	1.15	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	05	05	4.90	1.05	1.05	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	07	07	05	2.00	2.00	1.50	1.8	5.5	7.8	350	1370	1970	6.29	5.5	7.80	A++	4.01
	10	07	05	2.50	2.00	1.50	1.9	6.0	8.1	350	1500	2060	6.86	6.0	8.10	A++	4.00
	13	07	05	3.50	2.00	1.50	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	07	05	3.98	1.73	1.30	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	07	05	4.12	1.65	1.24	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	07	05	4.45	1.46	1.09	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	07	05	4.67	1.33	1.00	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	10	10	05	2.50	2.50	1.50	1.9	6.5	8.4	350	1630	2140	7.44	6.5	8.30	A++	3.99
	13	10	05	3.27	2.33	1.40	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	10	05	3.74	2.03	1.22	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	10	05	3.89	1.94	1.17	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	10	05	4.23	1.73	1.04	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	10	05	4.45	1.59	0.95	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	13	13	05	2.88	2.88	1.24	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	13	05	3.35	2.55	1.09	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	13	05	3.50	2.45	1.05	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	13	05	3.85	2.21	0.95	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	13	05	4.08	2.04	0.88	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	16	05	3.01	3.01	0.98	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	16	05	3.15	2.90	0.95	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	16	05	3.50	2.64	0.86	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	16	05	3.74	2.46	0.80	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	07	07	07	2.00	2.00	2.00	1.9	6.0	8.7	350	1500	2220	6.86	6.0	8.10	A++	4.00
	10	07	07	2.50	2.00	2.00	1.9	6.5	9.0	350	1630	2300	7.44	6.5	8.30	A++	3.99
	13	07	07	3.27	1.87	1.87	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	07	07	3.74	1.63	1.63	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	07	07	3.89	1.56	1.56	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	07	07	4.23	1.39	1.39	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	07	07	4.45	1.27	1.27	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	10	10	07	2.50	2.50	2.00	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	13	10	07	3.06	2.19	1.75	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
3 units operation	16	10	07	3.54	1.92	1.54	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	10	07	3.68	1.84	1.47	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	10	07	4.03	1.65	1.32	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	10	07	4.26	1.52	1.22	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	13	13	07	2.72	2.72	1.56	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	13	07	3.19	2.43	1.39	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	13	07	3.33	2.33	1.33	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	13	07	3.68	2.11	1.21	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	13	07	3.92	1.96	1.12	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	16	07	2.88	2.88	1.25	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	16	07	3.02	2.78	1.21	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	16	07	3.36	2.54	1.10	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	16	07	3.60	2.37	1.03	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	10	10	10	2.33	2.33	2.33	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	13	10	10	2.88	2.06	2.06	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	10	10	3.35	1.82	1.82	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	10	10	3.50	1.75	1.75	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	10	10	3.85	1.58	1.58	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	10	10	4.08	1.46	1.46	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	13	13	10	2.58	2.58	1.84	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	13	10	3.04	2.31	1.65	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	13	10	3.18	2.23	1.59	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	13	10	3.53	2.02	1.45	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	13	10	3.77	1.88	1.35	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	16	10	2.75	2.75	1.50	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	16	10	2.89	2.66	1.45	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	16	10	3.23	2.44	1.33	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	16	10	3.48	2.28	1.24	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	13	13	13	2.33	2.33	2.33	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	13	13	2.78	2.11	2.11	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	13	13	2.92	2.04	2.04	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	13	13	3.26	1.87	1.87	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	13	13	3.50	1.75	1.75	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	16	13	2.54	2.54	1.93	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	16	13	2.67	2.46	1.87	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	16	13	3.01	2.27	1.73	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	24	16	13	3.25	2.13	1.62	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	16	16	16	2.33	2.33	2.33	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	18	16	16	2.46	2.27	2.27	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00
	22	16	16	2.79	2.10	2.10	2.0	7.0	9.0	350	1750	2300	7.97	7.0	8.50	A+++	4.00

(*) The energy efficiency class range of this product category is D→A+++

RAS-3M26G3AVG-E - Performances in Heating mode

	Operating Status	Combination			Unit cacacity (kW)			Heating capacity (kW)			Power input (W)			Operating current (A)		Lot.10		Label*		COP
		Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	1 unit operation	05	-	-	2.00	-	-	1.2	2.0	2.5	300	560	750	-	-	-	-	-	-	-
		07	-	-	2.50	-	-	1.3	2.5	3.6	310	670	1020	-	-	-	-	-	-	-
		10	-	-	3.20	-	-	1.4	3.2	4.8	320	820	1300	-	-	-	-	-	-	-
		13	-	-	4.20	-	-	1.5	4.2	5.3	320	1040	1420	-	-	-	-	-	-	-
		16	-	-	5.50	-	-	1.6	5.5	6.5	340	1320	1710	-	-	-	-	-	-	-
		18	-	-	6.00	-	-	1.7	6.0	6.5	340	1420	1710	-	-	-	-	-	-	-
		22	-	-	7.00	-	-	1.8	7.0	7.5	350	1640	1950	-	-	-	-	-	-	-
		24	-	-	8.00	-	-	1.9	8.0	8.8	360	1850	2260	-	-	-	-	-	-	-
	2 units operations	05	05	-	2.00	2.00	-	1.4	4.0	5.0	320	990	1350	4.59	2.4	4.10	5.50	A+	A+++	4.04
		07	05	-	2.50	2.00	-	1.5	4.5	6.1	330	1100	1610	5.08	2.7	4.20	5.50	A+	A+++	4.09
		10	05	-	3.20	2.00	-	1.6	5.2	7.3	330	1250	1900	5.75	3.1	4.30	5.60	A+	A+++	4.16
		13	05	-	4.20	2.00	-	1.7	6.2	7.8	340	1470	2020	6.73	3.7	4.30	5.40	A+	A+++	4.22
		16	05	-	5.50	2.00	-	1.9	7.5	9.0	350	1750	2310	7.97	4.5	4.40	5.40	A+	A+++	4.29
		18	05	-	6.00	2.00	-	1.9	8.0	9.0	360	1850	2310	8.41	4.8	4.50	5.50	A+	A+++	4.32
		22	05	-	6.77	1.93	-	2.0	8.7	10.0	360	2000	2550	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	05	-	6.96	1.74	-	2.0	8.7	11.3	360	2000	2860	9.07	5.2	4.60	5.60	A++	A+++	4.35
		07	07	-	2.50	2.50	-	1.6	5.0	7.2	330	1210	1880	5.57	3.0	4.30	5.50	A+	A+++	4.13
		10	07	-	3.20	2.50	-	1.7	5.7	8.4	340	1360	2160	6.24	3.4	4.30	5.50	A+	A+++	4.19
		13	07	-	4.20	2.50	-	1.8	6.7	8.9	350	1580	2280	7.22	4.0	4.40	5.40	A+	A+++	4.24
		16	07	-	5.50	2.50	-	1.9	8.0	10.1	360	1850	2570	8.41	4.8	4.50	5.50	A+	A+++	4.32
		18	07	-	6.00	2.50	-	2.0	8.5	10.1	360	1960	2570	8.90	5.1	4.50	5.60	A+	A+++	4.34
		22	07	-	6.41	2.29	-	2.0	8.7	11.1	360	2000	2810	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	07	-	6.63	2.07	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		10	10	-	3.20	3.20	-	1.7	6.4	9.6	340	1510	2450	6.91	3.8	4.40	5.40	A+	A+++	4.24
		13	10	-	4.20	3.20	-	1.9	7.4	10.1	350	1730	2570	7.88	4.4	4.40	5.40	A+	A+++	4.28
		16	10	-	5.50	3.20	-	2.0	8.7	11.3	360	2000	2860	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	10	-	5.67	3.03	-	2.0	8.7	11.3	360	2000	2860	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	10	-	5.97	2.73	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	10	-	6.21	2.49	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		13	13	-	4.20	4.20	-	2.0	8.4	10.6	360	1940	2690	8.81	5.0	4.50	5.60	A+	A+++	4.33
		16	13	-	4.93	3.77	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	13	-	5.12	3.58	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	13	-	5.44	3.26	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	13	-	5.70	3.00	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	16	-	4.35	4.35	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	16	-	4.54	4.16	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	16	-	4.87	3.83	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	16	-	5.16	3.54	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	18	-	4.35	4.35	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	18	-	4.68	4.02	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	18	-	4.97	3.73	-	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	3 units operations	05	05	05	2.00	2.00	2.00	1.7	6.0	7.5	340	1420	1950	6.51	3.6	4.50	5.50	A+	A+++	4.23
		07	05	05	2.50	2.00	2.00	1.7	6.5	8.6	350	1530	2210	6.99	3.9	4.50	5.50	A+	A+++	4.25
		10	05	05	3.20	2.00	2.00	1.8	7.2	9.8	350	1680	2500	7.66	4.3	4.50	5.50	A+	A+++	4.29
		13	05	05	4.20	2.00	2.00	2.0	8.2	10.3	360	1900	2620	8.63	4.9	4.50	5.50	A+	A+++	4.32
		16	05	05	5.04	1.83	1.83	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	05	05	5.22	1.74	1.74	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	05	05	5.54	1.58	1.58	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	05	05	5.80	1.45	1.45	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		07	07	05	2.50	2.50	2.00	1.8	7.0	9.7	350	1640	2470	7.48	4.2	4.50	5.50	A+	A+++	4.27
		10	07	05	3.20	2.50	2.00	1.9	7.7	10.9	360	1790	2760	8.14	4.6	4.50	5.40	A+	A+++	4.30
		13	07	05	4.20	2.50	2.00	2.0	8.7	11.4	360	2000	2880	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	07	05	4.79	2.18	1.74	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	07	05	4.97	2.07	1.66	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	07	05	5.30	1.89	1.51	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	07	05	5.57	1.74	1.39	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		10	10	05	3.20	3.20	2.00	2.0	8.4	11.5	360	1940	2900	8.81	5.0	4.50	5.50	A+	A+++	4.33
		13	10	05	3.89	2.96	1.85	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	10	05	4.47	2.60	1.63	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	10	05	4.66	2.49	1.55	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	10	05	4.99	2.28	1.43	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	10	05	5.27	2.11	1.32	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		13	13	05	3.51	3.51	1.67	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	13	05	4.09	3.12	1.49	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	13	05	4.28	3.00	1.43	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	13	05	4.61	2.77	1.32	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	13	05	4.90	2.57	1.23	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	16	05	3.68	3.68	1.34	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	16	05	3.87	3.54	1.29	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	16	05	4.20	3.30	1.20	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	16	05	4.49	3.09	1.12	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		07	07	07	2.50	2.50	2.50	1.9	7.5	10.8	350	1750	2740	7.97	4.5	4.50	5.50	A+	A+++	4.29
		10	07	07	3.20	2.50	2.50	2.0	8.2	11.5	360	1900	2900	8.63	4.9	4.50	5.50	A+	A+++	4.32
		13	07	07	3.97	2.36	2.36	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	07	07	4.56	2.07	2.07	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	07	07	4.75	1.98	1.98	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	07	07	5.08	1.81	1.81	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	07	07	5.35	1.67	1.67	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		10	10	07	3.13	3.13	2.44	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		13	10	07	3.69	2.81	2.20	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	10	07	4.27	2.49	1.94	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	10	07	4.46	2.38	1.86	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	10	07	4.80	2.19	1.71	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	10	07	5.08	2.03	1.59	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		13	13	07	3.35	3.35	2.00	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	13	07	3.92	3.00	1.78	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	13	07	4.11	2.88	1.71	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	13	07	4.45	2.67	1.59	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	13	07	4.73	2.49	1.48	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	16	07	3.54	3.54	1.61	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	16	07	3.73	3.42	1.55	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	16	07	4.06	3.19	1.45	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	16	07	4.35	2.99	1.36	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		10	10	10	2.90	2.90	2.90	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		13	10	10	3.45	2.63	2.63	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		16	10	10	4.02	2.34	2.34	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		18	10	10	4.21	2.25	2.25	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		22	10	10	4.54	2.08	2.08	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
		24	10	10	4.83	1.93	1.93	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35

(*) The energy efficiency class range of this product category is D→A+++

RAS-3M26G3AVG-E - Performances in Heating mode

Heating, 230 V

Operating Status	Combination			Unit cacacity (kW)			Heating capacity (kW)			Power input (W)			Operating current (A)		Lot.10		Label*		COP
	Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
3 units operations	13	13	10	3.15	3.15	2.40	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	16	13	10	3.71	2.83	2.16	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	18	13	10	3.90	2.73	2.08	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	22	13	10	4.23	2.54	1.93	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	24	13	10	4.52	2.37	1.81	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	16	16	10	3.37	3.37	1.96	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	18	16	10	3.55	3.26	1.89	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	22	16	10	3.88	3.05	1.77	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	24	16	10	4.17	2.87	1.67	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	13	13	13	2.90	2.90	2.90	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	16	13	13	3.44	2.63	2.63	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	18	13	13	3.63	2.54	2.54	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	22	13	13	3.95	2.37	2.37	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	24	13	13	4.24	2.23	2.23	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	16	16	13	3.15	3.15	2.40	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	18	16	13	3.32	3.05	2.33	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	22	16	13	3.65	2.87	2.19	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	24	16	13	3.93	2.70	2.06	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	16	16	16	2.90	2.90	2.90	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	18	16	16	3.07	2.81	2.81	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35
	22	16	16	3.38	2.66	2.66	2.0	8.7	11.5	360	2000	2900	9.07	5.2	4.60	5.60	A++	A+++	4.35

RAS-4M27G3AVG-E - Performances in Cooling mode

Cooling, 230 V

Operating Status	Combination				Unit capacity (kW)				Cooling capacity (kW)			Power input (W)			Operating current (A)	Lot.10			EER
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
1 unit operation	05	-	-	-	1.50	-	-	-	1.4	1.5	2.0	350	350	360	-	-	-	-	-
	07	-	-	-	2.00	-	-	-	1.5	2.0	2.9	350	470	650	-	-	-	-	-
	10	-	-	-	2.50	-	-	-	1.5	2.5	3.2	350	590	750	-	-	-	-	-
	13	-	-	-	3.50	-	-	-	1.6	3.5	4.1	350	830	1030	-	-	-	-	-
	16	-	-	-	4.60	-	-	-	1.7	4.6	5.3	350	1090	1410	-	-	-	-	-
	18	-	-	-	5.00	-	-	-	1.7	5.0	6.0	350	1190	1630	-	-	-	-	-
	22	-	-	-	6.10	-	-	-	1.8	6.1	6.7	350	1450	1860	-	-	-	-	-
	24	-	-	-	7.00	-	-	-	1.9	7.0	7.7	350	1670	2170	-	-	-	-	-
2 units operations	05	05	-	-	1.50	1.50	-	-	1.5	3.0	4.0	350	710	1000	3.42	3.0	6.80	A++	4.23
	07	05	-	-	2.00	1.50	-	-	1.6	3.5	4.9	350	830	1290	3.87	3.5	7.00	A++	4.22
	10	05	-	-	2.50	1.50	-	-	1.6	4.0	5.2	350	950	1380	4.41	4.0	7.20	A++	4.21
	13	05	-	-	3.50	1.50	-	-	1.7	5.0	6.1	350	1190	1670	5.48	5.0	7.50	A++	4.20
	16	05	-	-	4.60	1.50	-	-	1.8	6.1	7.3	350	1450	2050	6.64	6.1	7.90	A++	4.21
	18	05	-	-	5.00	1.50	-	-	1.9	6.5	8.0	350	1550	2270	7.08	6.5	8.00	A++	4.19
	22	05	-	-	6.10	1.50	-	-	2.0	7.6	8.7	350	1810	2490	8.23	7.6	8.40	A++	4.20
	24	05	-	-	6.59	1.41	-	-	2.0	8.0	9.7	350	1900	2810	8.63	8.0	8.50	A+++	4.21
	07	07	-	-	2.00	2.00	-	-	1.6	4.0	5.8	350	950	1570	4.41	4.0	7.20	A++	4.21
	10	07	-	-	2.50	2.00	-	-	1.7	4.5	6.1	350	1070	1670	4.95	4.5	7.40	A++	4.21
	13	07	-	-	3.50	2.00	-	-	1.8	5.5	7.0	350	1310	1950	6.02	5.5	7.70	A++	4.20
	16	07	-	-	4.60	2.00	-	-	1.9	6.6	8.2	350	1570	2330	7.17	6.6	8.10	A++	4.20
	18	07	-	-	5.00	2.00	-	-	1.9	7.0	8.9	350	1670	2560	7.61	7.0	8.20	A++	4.19
	22	07	-	-	6.02	1.98	-	-	2.0	8.0	9.6	350	1900	2780	8.63	8.0	8.50	A+++	4.21
	24	07	-	-	6.22	1.78	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	10	10	-	-	2.50	2.50	-	-	1.7	5.0	6.4	350	1190	1760	5.48	5.0	7.50	A++	4.20
	13	10	-	-	3.50	2.50	-	-	1.8	6.0	7.3	350	1430	2050	6.55	6.0	7.90	A++	4.20
	16	10	-	-	4.60	2.50	-	-	1.9	7.1	8.5	350	1690	2430	7.70	7.1	8.30	A++	4.20
	18	10	-	-	5.00	2.50	-	-	2.0	7.5	9.2	350	1790	2650	8.14	7.5	8.40	A++	4.19
	22	10	-	-	5.67	2.33	-	-	2.0	8.0	9.9	350	1900	2870	8.63	8.0	8.50	A+++	4.21
	24	10	-	-	5.89	2.11	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	13	13	-	-	3.50	3.50	-	-	1.9	7.0	8.2	350	1670	2330	7.61	7.0	8.20	A++	4.19
	16	13	-	-	4.54	3.46	-	-	2.0	8.0	9.4	350	1900	2710	8.63	8.0	8.50	A+++	4.21
	18	13	-	-	4.71	3.29	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	22	13	-	-	5.08	2.92	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	24	13	-	-	5.33	2.67	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	16	16	-	-	4.00	4.00	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	18	16	-	-	4.17	3.83	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	22	16	-	-	4.56	3.44	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	24	16	-	-	4.83	3.17	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	18	18	-	-	4.00	4.00	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	22	18	-	-	4.40	3.60	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
	24	18	-	-	4.67	3.33	-	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.50	A+++	4.21
3 units operations	05	05	05	-	1.50	1.50	1.50	-	1.7	4.5	6.0	350	1070	1630	4.95	4.5	7.20	A++	4.21
	07	05	05	-	2.00	1.50	1.50	-	1.7	5.0	6.9	350	1190	1920	5.48	5.0	7.40	A++	4.20
	10	05	05	-	2.50	1.50	1.50	-	1.8	5.5	7.2	350	1310	2020	6.02	5.5	7.50	A++	4.20
	13	05	05	-	3.50	1.50	1.50	-	1.9	6.5	8.1	350	1550	2300	7.08	6.5	7.90	A++	4.19
	16	05	05	-	4.60	1.50	1.50	-	2.0	7.6	9.3	350	1810	2680	8.23	7.6	8.30	A++	4.20
	18	05	05	-	5.00	1.50	1.50	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	05	05	-	5.36	1.32	1.32	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	05	05	-	5.60	1.20	1.20	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	07	07	05	-	2.00	2.00	1.50	-	1.8	5.5	7.8	350	1310	2210	6.02	5.5	7.60	A++	4.20
	10	07	05	-	2.50	2.00	1.50	-	1.8	6.0	8.1	350	1430	2300	6.55	6.0	7.70	A++	4.20
	13	07	05	-	3.50	2.00	1.50	-	1.9	7.0	9.0	350	1670	2590	7.61	7.0	8.10	A++	4.19
	16	07	05	-	4.54	1.98	1.48	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	07	05	-	4.71	1.88	1.41	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	07	05	-	5.08	1.67	1.25	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	07	05	-	5.33	1.52	1.14	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	10	10	05	-	2.50	2.50	1.50	-	1.9	6.5	8.4	350	1550	2400	7.08	6.5	7.90	A++	4.19
	13	10	05	-	3.50	2.50	1.50	-	2.0	7.5	9.3	350	1790	2680	8.14	7.5	8.30	A++	4.19
	16	10	05	-	4.28	2.33	1.40	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	10	05	-	4.44	2.22	1.33	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	10	05	-	4.79	2.00	1.20	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	10	05	-	5.09	1.82	1.09	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	13	13	05	-	3.29	3.29	1.41	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	13	05	-	3.83	2.92	1.25	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	13	05	-	4.00	2.80	1.20	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	13	05	-	4.40	2.52	1.08	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	13	05	-	4.67	2.33	1.00	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	16	05	-	3.44	3.44	1.12	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	16	05	-	3.60	3.32	1.08	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	16	05	-	4.00	3.02	0.98	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	16	05	-	4.27	2.81	0.92	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21

(*) The energy efficiency class range of this product category is D→A+++

RAS-4M27G3AVG-E - Performances in Cooling mode

Operating Status	Combination				Unit capacity (kW)				Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V – 3 units operations	18	18	05	-	3.48	3.48	1.04	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	18	05	-	3.87	3.17	0.95	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	18	05	-	4.15	2.96	0.89	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	07	07	07	-	2.00	2.00	2.00	-	1.8	6.0	8.7	350	1430	2490	6.55	6.0	7.70	A++	4.20
	10	07	07	-	2.50	2.00	2.00	-	1.9	6.5	9.0	350	1550	2590	7.08	6.5	7.90	A++	4.19
	13	07	07	-	3.50	2.00	2.00	-	2.0	7.5	9.9	350	1790	2870	8.14	7.5	8.30	A++	4.19
	16	07	07	-	4.28	1.86	1.86	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	07	07	-	4.44	1.78	1.78	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	07	07	-	4.83	1.58	1.58	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	07	07	-	5.09	1.45	1.45	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	10	10	07	-	2.50	2.50	2.00	-	1.9	7.0	9.3	350	1670	2680	7.61	7.0	8.10	A++	4.19
	13	10	07	-	3.50	2.50	2.00	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	10	07	-	4.04	2.20	1.76	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	10	07	-	4.21	2.11	1.68	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	10	07	-	4.60	1.89	1.51	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	10	07	-	4.87	1.74	1.39	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	13	13	07	-	3.11	3.11	1.78	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	13	07	-	3.64	2.77	1.58	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	13	07	-	3.81	2.67	1.52	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	13	07	-	4.21	2.41	1.38	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	13	07	-	4.48	2.24	1.28	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	16	07	-	3.29	3.29	1.43	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	16	07	-	3.45	3.17	1.38	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	16	07	-	3.84	2.90	1.26	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	16	07	-	4.12	2.71	1.18	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	18	07	-	3.33	3.33	1.33	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	18	07	-	3.73	3.05	1.22	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	18	07	-	4.00	2.86	1.14	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	10	10	10	-	2.50	2.50	2.50	-	2.0	7.5	9.6	350	1790	2780	8.14	7.5	8.30	A++	4.19
	13	10	10	-	3.29	2.35	2.35	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	10	10	-	3.83	2.08	2.08	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	10	10	-	4.00	2.00	2.00	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	10	10	-	4.40	1.80	1.80	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	10	10	-	4.67	1.67	1.67	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	13	13	10	-	2.95	2.95	2.11	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	13	10	-	3.47	2.64	1.89	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	13	10	-	3.64	2.55	1.82	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	13	10	-	4.03	2.31	1.65	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	13	10	-	4.31	2.15	1.54	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	16	10	-	3.15	3.15	1.71	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	16	10	-	3.31	3.04	1.65	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	16	10	-	3.70	2.79	1.52	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	16	10	-	3.97	2.61	1.42	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	18	10	-	3.20	3.20	1.60	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	18	10	-	3.59	2.94	1.47	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	18	10	-	3.86	2.76	1.38	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	13	13	13	-	2.67	2.67	2.67	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	13	13	-	3.17	2.41	2.41	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	13	13	-	3.33	2.33	2.33	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	13	13	-	3.73	2.14	2.14	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	13	13	-	4.00	2.00	2.00	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	16	13	-	2.90	2.90	2.20	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	16	13	-	3.05	2.81	2.14	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	16	13	-	3.44	2.59	1.97	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	24	16	13	-	3.71	2.44	1.85	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	18	13	-	2.96	2.96	2.07	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	18	13	-	3.34	2.74	1.92	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	16	16	16	-	2.67	2.67	2.67	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	18	16	16	-	2.82	2.59	2.59	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
	22	16	16	-	3.19	2.41	2.41	-	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.40	A++	4.21
Cooling, 230 V – 4 units operations	05	05	05	05	1.50	1.50	1.50	1.50	1.8	6.0	8.0	350	1430	2270	6.55	6.0	7.60	A++	4.20
	07	05	05	05	2.00	1.50	1.50	1.50	1.9	6.5	8.9	350	1550	2560	7.08	6.5	7.80	A++	4.19
	10	05	05	05	2.50	1.50	1.50	1.50	1.9	7.0	9.2	350	1670	2650	7.61	7.0	8.00	A++	4.19
	13	05	05	05	3.50	1.50	1.50	1.50	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	05	05	05	4.04	1.32	1.32	1.32	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	05	05	05	4.21	1.26	1.26	1.26	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	05	05	05	4.60	1.13	1.13	1.13	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	05	05	05	4.87	1.04	1.04	1.04	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	07	07	05	05	2.00	2.00	1.50	1.50	1.9	7.0	9.8	350	1670	2840	7.61	7.0	8.00	A++	4.19
	10	07	05	05	2.50	2.00	1.50	1.50	2.0	7.5	10.0	350	1790	2900	8.14	7.5	8.10	A++	4.19
	13	07	05	05	3.29	1.88	1.41	1.41	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	07	05	05	3.83	1.67	1.25	1.25	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	07	05	05	4.00	1.60	1.20	1.20	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	07	05	05	4.40	1.44	1.08	1.08	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	07	05	05	4.67	1.33	1.00	1.00	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	10	10	05	05	2.50	2.50	1.50	1.50	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	10	05	05	3.11	2.22	1.33	1.33	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	10	05	05	3.64	1.98	1.19	1.19	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	10	05	05	3.81	1.90	1.14	1.14	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	10	05	05	4.21	1.72	1.03	1.03	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	10	05	05	4.48	1.60	0.96	0.96	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	05	05	2.80	2.80	1.20	1.20	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	05	05	3.32	2.52	1.08	1.08	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	05	05	3.48	2.43	1.04	1.04	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	13	05	05	3.87	2.22	0.95	0.95	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	13	05	05	4.15	2.07	0.89	0.89	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	05	05	3.02	3.02	0.98	0.98	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	05	05	3.17	2.92	0.95	0.95	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	18	05	05	3.08	3.08	0.92	0.92	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	07	07	07	05	2.00	2.00	2.00	1.50	2.0	7.5	10.0	350	1790	2900	8.14	7.5	8.10	A++	4.19
	10	07	07	05	2.50	2.00	2.00	1.50	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	07	07	05	3.11	1.78	1.78	1.33	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	07	07	05	3.64	1.58	1.58	1.19	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	07	07	05	3.81	1.52	1.52	1.14	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	07	07	05	4.21	1.38	1.38	1.03	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	07	07	05	4.48	1.28	1.28	0.96	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	10	10	07	05	2.35	2.35	1.88	1.41	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	10	07	05	2.95	2.11	1.68	1.26	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	10	07	05	3.47	1.89	1.51	1.13	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21

(*) The energy efficiency class range of this product category is D→A+++

RAS-4M27G3AVG-E - Performances in Cooling mode

Operating Status	Combination				Unit capacity (kW)				Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	18	10	07	05	3.64	1.82	1.45	1.09	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	10	07	05	4.03	1.65	1.32	0.99	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	10	07	05	4.31	1.54	1.23	0.92	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	07	05	2.67	2.67	1.52	1.14	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	07	05	3.17	2.41	1.38	1.03	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	07	05	3.33	2.33	1.33	1.00	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	13	07	05	3.73	2.14	1.22	0.92	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	13	07	05	4.00	2.00	1.14	0.86	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	07	05	2.90	2.90	1.26	0.94	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	07	05	3.05	2.81	1.22	0.92	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	18	07	05	2.96	2.96	1.19	0.89	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	10	10	10	05	2.22	2.22	2.22	1.33	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	10	10	05	2.80	2.00	2.00	1.20	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	10	10	05	3.32	1.80	1.80	1.08	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	10	10	05	3.48	1.74	1.74	1.04	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	10	10	05	3.87	1.59	1.59	0.95	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	10	10	05	4.15	1.48	1.48	0.89	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	10	05	2.55	2.55	1.82	1.09	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	10	05	3.04	2.31	1.65	0.99	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	10	05	3.20	2.24	1.60	0.96	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	13	10	05	3.59	2.06	1.47	0.88	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	13	10	05	3.86	1.93	1.38	0.83	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	10	05	2.79	2.79	1.52	0.91	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	10	05	2.94	2.71	1.47	0.88	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	18	10	05	2.86	2.86	1.43	0.86	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	13	05	2.33	2.33	2.33	1.00	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	13	05	2.81	2.14	2.14	0.92	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	13	05	2.96	2.07	2.07	0.89	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	13	05	2.59	2.59	1.97	0.85	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	13	05	2.74	2.52	1.92	0.82	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	07	07	07	07	2.00	2.00	2.00	2.00	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	10	07	07	07	2.35	1.88	1.88	1.88	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	07	07	07	2.95	1.68	1.68	1.68	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	07	07	07	3.47	1.51	1.51	1.51	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	07	07	07	3.64	1.45	1.45	1.45	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	07	07	07	4.03	1.32	1.32	1.32	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	07	07	07	4.31	1.23	1.23	1.23	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	10	10	07	07	2.22	2.22	1.78	1.78	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	10	07	07	2.80	2.00	1.60	1.60	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	10	07	07	3.32	1.80	1.44	1.44	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	10	07	07	3.48	1.74	1.39	1.39	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
4 units operations	22	10	07	07	3.87	1.59	1.27	1.27	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	10	07	07	4.15	1.48	1.19	1.19	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	07	07	2.55	2.55	1.45	1.45	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	07	07	3.04	2.31	1.32	1.32	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	07	07	3.20	2.24	1.28	1.28	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	13	07	07	3.59	2.06	1.18	1.18	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	13	07	07	3.86	1.93	1.10	1.10	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	07	07	2.79	2.79	1.21	1.21	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	07	07	2.94	2.71	1.18	1.18	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	18	07	07	2.86	2.86	1.14	1.14	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	10	10	10	07	2.11	2.11	2.11	1.68	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	10	10	07	2.67	1.90	1.90	1.52	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	10	10	07	3.17	1.72	1.72	1.38	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	10	10	07	3.33	1.67	1.67	1.33	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	10	10	07	3.73	1.53	1.53	1.22	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	10	10	07	4.00	1.43	1.43	1.14	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	10	07	2.43	2.43	1.74	1.39	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	10	07	2.92	2.22	1.59	1.27	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	10	07	3.08	2.15	1.54	1.23	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	13	10	07	3.46	1.99	1.42	1.13	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	13	10	07	3.73	1.87	1.33	1.07	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	10	07	2.69	2.69	1.46	1.17	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	10	07	2.84	2.61	1.42	1.13	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	18	10	07	2.76	2.76	1.38	1.10	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	13	07	2.24	2.24	2.24	1.28	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	13	07	2.71	2.06	2.06	1.18	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	13	07	2.86	2.00	2.00	1.14	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	13	07	2.50	2.50	1.90	1.09	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	13	07	2.65	2.44	1.85	1.06	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	10	10	10	10	2.00	2.00	2.00	2.00	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	10	10	10	2.55	1.82	1.82	1.82	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	10	10	10	3.04	1.65	1.65	1.65	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	10	10	10	3.20	1.60	1.60	1.60	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	22	10	10	10	3.59	1.47	1.47	1.47	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	24	10	10	10	3.86	1.38	1.38	1.38	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	10	10	2.33	2.33	1.67	1.67	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	10	10	2.81	2.14	1.53	1.53	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	10	10	2.96	2.07	1.48	1.48	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	16	10	10	2.59	2.59	1.41	1.41	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	16	10	10	2.74	2.52	1.37	1.37	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	13	10	2.15	2.15	2.15	1.54	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	16	13	13	10	2.61	1.99	1.99	1.42	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	18	13	13	10	2.76	1.93	1.93	1.38	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21
	13	13	13	13	2.00	2.00	2.00	2.00	2.0	8.0	10.0	350	1900	2900	8.63	8.0	8.30	A++	4.21

(*) The energy efficiency class range of this product category is D→A+++

RAS-4M27G3AVG-E - Performances in Heating mode

Heating, 230 V

Operating Status	Combination				Unit capacity (kW)				Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10			Label*		COP
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
1 unit operation	05	-	-	-	2.00	-	-	-	1.3	2.0	2.5	300	550	750	-	-	-	-	-	-	-
	07	-	-	-	2.50	-	-	-	1.4	2.5	3.6	310	650	990	-	-	-	-	-	-	-
	10	-	-	-	3.20	-	-	-	1.4	3.2	4.8	320	790	1250	-	-	-	-	-	-	-
	13	-	-	-	4.20	-	-	-	1.5	4.2	5.3	330	980	1360	-	-	-	-	-	-	-
	16	-	-	-	5.50	-	-	-	1.7	5.5	6.5	350	1230	1620	-	-	-	-	-	-	-
	18	-	-	-	6.00	-	-	-	1.7	6.0	6.5	360	1330	1620	-	-	-	-	-	-	-
	22	-	-	-	7.00	-	-	-	1.8	7.0	7.5	370	1520	1830	-	-	-	-	-	-	-
	24	-	-	-	8.00	-	-	-	1.9	8.0	8.8	380	1710	2110	-	-	-	-	-	-	-
2 units operations	05	05	-	-	2.00	2.00	-	-	1.5	4.0	5.0	330	940	1290	4.36	2.3	4.10	5.90	A+	A+++	4.26
	07	05	-	-	2.50	2.00	-	-	1.6	4.5	6.1	340	1040	1530	4.81	2.6	4.20	6.00	A+	A+++	4.33
	10	05	-	-	3.20	2.00	-	-	1.6	5.2	7.3	350	1170	1790	5.39	3.0	4.30	6.00	A+	A+++	4.44
	13	05	-	-	4.20	2.00	-	-	1.7	6.2	7.8	360	1360	1900	6.24	3.6	4.30	5.90	A+	A+++	4.56
	16	05	-	-	5.50	2.00	-	-	1.9	7.5	9.0	380	1620	2160	7.39	4.3	4.30	5.50	A+	A+++	4.63
	18	05	-	-	6.00	2.00	-	-	1.9	8.0	9.0	380	1710	2160	7.79	4.6	4.30	5.50	A+	A+++	4.68
	22	05	-	-	7.00	2.00	-	-	2.0	9.0	10.0	390	1900	2370	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	05	-	-	7.20	1.80	-	-	2.0	9.0	11.3	390	1900	2650	8.63	5.2	4.50	5.70	A+	A+++	4.74
	07	07	-	-	2.50	2.50	-	-	1.6	5.0	7.2	340	1130	1770	5.22	2.9	4.30	6.00	A+	A+++	4.42
	10	07	-	-	3.20	2.50	-	-	1.7	5.7	8.4	350	1270	2030	5.84	3.3	4.30	6.00	A+	A+++	4.49
	13	07	-	-	4.20	2.50	-	-	1.8	6.7	8.9	370	1460	2140	6.68	3.9	4.30	5.90	A+	A+++	4.59
	16	07	-	-	5.50	2.50	-	-	1.9	8.0	10.1	380	1710	2390	7.79	4.6	4.30	5.60	A+	A+++	4.68
	18	07	-	-	6.00	2.50	-	-	2.0	8.5	10.1	390	1810	2390	8.23	4.9	4.40	5.60	A+	A+++	4.70
	22	07	-	-	6.63	2.37	-	-	2.0	9.0	11.1	390	1900	2610	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	07	-	-	6.86	2.14	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	10	10	-	-	3.20	3.20	-	-	1.7	6.4	9.6	360	1400	2290	6.42	3.7	4.30	5.90	A+	A+++	4.57
	13	10	-	-	4.20	3.20	-	-	1.8	7.4	10.1	370	1600	2390	7.30	4.3	4.30	5.60	A+	A+++	4.63
	16	10	-	-	5.50	3.20	-	-	2.0	8.7	11.3	390	1850	2650	8.41	5.0	4.40	5.70	A+	A+++	4.70
	18	10	-	-	5.87	3.13	-	-	2.0	9.0	11.3	390	1900	2650	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	10	-	-	6.18	2.82	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	10	-	-	6.43	2.57	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	13	13	-	-	4.20	4.20	-	-	1.9	8.4	10.6	390	1790	2500	8.14	4.9	4.40	5.60	A+	A+++	4.69
	16	13	-	-	5.10	3.90	-	-	2.0	9.0	11.8	390	1900	2760	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	13	-	-	5.29	3.71	-	-	2.0	9.0	11.8	390	1900	2760	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	13	-	-	5.63	3.38	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	13	-	-	5.90	3.10	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	16	-	-	4.50	4.50	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	16	-	-	4.70	4.30	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	16	-	-	5.04	3.96	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	16	-	-	5.33	3.67	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	18	-	-	4.50	4.50	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	18	-	-	4.85	4.15	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	18	-	-	5.14	3.86	-	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
3 units operations	05	05	05	-	2.00	2.00	2.00	-	1.7	6.0	7.5	360	1330	1830	6.11	3.5	4.50	6.10	A+	A+++	4.51
	07	05	05	-	2.50	2.00	2.00	-	1.8	6.5	8.6	360	1420	2070	6.51	3.8	4.50	5.90	A+	A+++	4.58
	10	05	05	-	3.20	2.00	2.00	-	1.8	7.2	9.8	370	1560	2330	7.13	4.2	4.50	5.80	A+	A+++	4.62
	13	05	05	-	4.20	2.00	2.00	-	1.9	8.2	10.3	380	1750	2440	7.97	4.7	4.50	5.70	A+	A+++	4.69
	16	05	05	-	5.21	1.89	1.89	-	2.0	9.0	11.5	390	1900	2700	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	05	05	-	5.40	1.80	1.80	-	2.0	9.0	11.5	390	1900	2700	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	05	05	-	5.73	1.64	1.64	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	05	05	-	6.00	1.50	1.50	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	07	07	05	-	2.50	2.50	2.00	-	1.8	7.0	9.7	370	1520	2310	6.95	4.0	4.50	5.90	A+	A+++	4.61
	10	07	05	-	3.20	2.50	2.00	-	1.9	7.7	10.9	380	1650	2570	7.53	4.4	4.50	5.80	A+	A+++	4.67
	13	07	05	-	4.20	2.50	2.00	-	2.0	8.7	11.4	390	1850	2680	8.41	5.0	4.50	5.70	A+	A+++	4.70
	16	07	05	-	4.95	2.25	1.80	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	07	05	-	5.14	2.14	1.71	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	07	05	-	5.48	1.96	1.57	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	07	05	-	5.76	1.80	1.44	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	10	10	05	-	3.20	3.20	2.00	-	1.9	8.4	12.0	390	1790	2800	8.14	4.9	4.50	5.70	A+	A+++	4.69
	13	10	05	-	4.02	3.06	1.91	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	10	05	-	4.63	2.69	1.68	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	10	05	-	4.82	2.57	1.61	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	10	05	-	5.16	2.36	1.48	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	10	05	-	5.45	2.18	1.36	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	13	13	05	-	3.63	3.63	1.73	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	13	05	-	4.23	3.23	1.54	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	13	05	-	4.43	3.10	1.48	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	13	05	-	4.77	2.86	1.36	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	13	05	-	5.07	2.66	1.27	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	16	05	-	3.81	3.81	1.38	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	16	05	-	4.00	3.67	1.33	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	16	05	-	4.34	3.41	1.24	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	16	05	-	4.65	3.19	1.16	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	18	05	-	3.86	3.86	1.29	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	18	05	-	4.20	3.60	1.20	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	18	05	-	4.50	3.38	1.13	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	07	07	07	-	2.50	2.50	2.50	-	1.9	7.5	10.8	380	1620	2550	7.39	4.3	4.50	5.80	A+	A+++	4.63
	10	07	07	-	3.20	2.50	2.50	-	1.9	8.2	12.0	380	1750	2800	7.97	4.7	4.50	5.70	A+	A+++	4.69
	13	07	07	-	4.11	2.45	2.45	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	07	07	-	4.71	2.14	2.14	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	07	07	-	4.91	2.05	2.05	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	07	07	-	5.25	1.88	1.88	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	07	07	-	5.54	1.73	1.73	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	10	10	07	-	3.20	3.20	2.50	-	2.0	8.9	12.0	390	1890	2800	8.59	5.1	4.50	5.70	A+	A+++	4.71
	13	10	07	-	3.82	2.91	2.27	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	10	07	-	4.42	2.57	2.01	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	10	07	-	4.62	2.46	1.92	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	10	07	-	4.96	2.27	1.77	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	10	07	-	5.26	2.10	1.64	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	13	13	07	-	3.47	3.47	2.06	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	13	07	-	4.06	3.10	1.84	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	13	07	-	4.25	2.98	1.77	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	13	07	-	4.60	2.76	1.64	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	13	07	-	4.90	2.57	1.53	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	16	07	-	3.67	3.67	1.67	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	16	07	-	3.86	3.54	1.61	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	16	07	-	4.20	3.30	1.50	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	16	07	-	4.50	3.09	1.41	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	18	07	-	3.72	3.72	1.55	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	18	07	-	4.06	3.48	1.45	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	18	07	-	4.36	3.27	1.36	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	10	10	10	-	3.00	3.00	3.00	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74

(*) The energy efficiency class range of this product category is D→A+++

RAS-4M27G3AVG-E - Performances in Heating mode

Operating Status	Combination				Unit capacity (kW)				Heating capacity (kW)			Power input (W)			Operating current (A)		Lot.10		Label*		COP
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V																					
3 units operations	13	10	10	-	3.57	2.72	2.72	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	10	10	-	4.16	2.42	2.42	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	10	10	-	4.35	2.32	2.32	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	10	10	-	4.70	2.15	2.15	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	10	10	-	5.00	2.00	2.00	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	13	13	10	-	3.26	3.26	2.48	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	13	10	-	3.84	2.93	2.23	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	13	10	-	4.03	2.82	2.15	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	13	10	-	4.38	2.63	2.00	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	13	10	-	4.68	2.45	1.87	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	16	10	-	3.49	3.49	2.03	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	16	10	-	3.67	3.37	1.96	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	16	10	-	4.01	3.15	1.83	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	16	10	-	4.31	2.96	1.72	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	18	10	-	3.55	3.55	1.89	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	18	10	-	3.89	3.33	1.78	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	18	10	-	4.19	3.14	1.67	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	13	13	13	-	3.00	3.00	3.00	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	13	13	-	3.56	2.72	2.72	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	13	13	-	3.75	2.63	2.63	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	13	13	-	4.09	2.45	2.45	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	13	13	-	4.39	2.30	2.30	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	16	13	-	3.26	3.26	2.49	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	16	13	-	3.44	3.15	2.41	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	16	13	-	3.77	2.96	2.26	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	24	16	13	-	4.07	2.80	2.14	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	18	13	-	3.33	3.33	2.33	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	18	13	-	3.66	3.14	2.20	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	16	16	16	-	3.00	3.00	3.00	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	18	16	16	-	3.18	2.91	2.91	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
	22	16	16	-	3.50	2.75	2.75	-	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.70	A+	A+++	4.74
4 units operations	05	05	05	05	2.00	2.00	2.00	2.00	1.9	8.0	10.0	380	1710	2370	7.79	4.6	4.30	5.40	A+	A+++	4.68
	07	05	05	05	2.50	2.00	2.00	2.00	2.0	8.5	11.1	390	1810	2610	8.23	4.9	4.40	5.50	A+	A+++	4.70
	10	05	05	05	3.13	1.96	1.96	1.96	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	05	05	05	3.71	1.76	1.76	1.76	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	05	05	05	4.30	1.57	1.57	1.57	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	05	05	05	4.50	1.50	1.50	1.50	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	05	05	05	4.85	1.38	1.38	1.38	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	05	05	05	5.14	1.29	1.29	1.29	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	07	07	05	05	2.50	2.50	2.00	2.00	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	07	05	05	2.97	2.32	1.86	1.86	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	07	05	05	3.53	2.10	1.68	1.68	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	07	05	05	4.13	1.88	1.50	1.50	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	07	05	05	4.32	1.80	1.44	1.44	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	07	05	05	4.67	1.67	1.33	1.33	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	07	05	05	4.97	1.55	1.24	1.24	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	10	05	05	2.77	2.77	1.73	1.73	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	10	05	05	3.32	2.53	1.58	1.58	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	10	05	05	3.90	2.27	1.42	1.42	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	10	05	05	4.09	2.18	1.36	1.36	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	10	05	05	4.44	2.03	1.27	1.27	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	10	05	05	4.74	1.89	1.18	1.18	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	05	05	3.05	3.05	1.45	1.45	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	05	05	3.61	2.76	1.31	1.31	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	05	05	3.80	2.66	1.27	1.27	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	13	05	05	4.14	2.49	1.18	1.18	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	13	05	05	4.44	2.33	1.11	1.11	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	05	05	3.30	3.30	1.20	1.20	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	05	05	3.48	3.19	1.16	1.16	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	18	05	05	3.38	3.38	1.13	1.13	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	07	07	07	05	2.37	2.37	2.37	1.89	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	07	07	05	2.82	2.21	2.21	1.76	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	07	07	05	3.38	2.01	2.01	1.61	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	07	07	05	3.96	1.80	1.80	1.44	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	07	07	05	4.15	1.73	1.73	1.38	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	07	07	05	4.50	1.61	1.61	1.29	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	07	07	05	4.80	1.50	1.50	1.20	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	10	07	05	2.64	2.64	2.06	1.65	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	10	07	05	3.18	2.42	1.89	1.51	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	10	07	05	3.75	2.18	1.70	1.36	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	10	07	05	3.94	2.10	1.64	1.31	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	10	07	05	4.29	1.96	1.53	1.22	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	10	07	05	4.59	1.83	1.43	1.15	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	07	05	2.93	2.93	1.74	1.40	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	07	05	3.49	2.66	1.58	1.27	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	07	05	3.67	2.57	1.53	1.22	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	13	07	05	4.01	2.41	1.43	1.15	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	13	07	05	4.31	2.26	1.35	1.08	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	07	05	3.19	3.19	1.45	1.16	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	07	05	3.38	3.09	1.41	1.13	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	18	07	05	3.27	3.27	1.36	1.09	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	10	10	05	2.48	2.48	2.48	1.55	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	10	10	05	3.00	2.29	2.29	1.43	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	10	10	05	3.56	2.07	2.07	1.29	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	10	10	05	3.75	2.00	2.00	1.25	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	10	10	05	4.09	1.87	1.87	1.17	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	10	10	05	4.39	1.76	1.76	1.10	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	10	05	2.78	2.78	2.12	1.32	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	10	05	3.32	2.54	1.93	1.21	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	10	05	3.51	2.45	1.87	1.17	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	13	10	05	3.84	2.30	1.76	1.10	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	13	10	05	4.14	2.17	1.66	1.03	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	10	05	3.06	3.06	1.78	1.11	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	10	05	3.23	2.96	1.72	1.08	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	18	10	05	3.14	3.14	1.67	1.05	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	13	05	2.59	2.59	2.59	1.23	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	13	05	3.11	2.38	2.38	1.13	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	13	05	3.29	2.30	2.30	1.10	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	13	05	2.88	2.88	2.20	1.05	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	13	05	3.05	2.80	2.14	1.02	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74

(*) The energy efficiency class range of this product category is D→A+++

RAS-4M27G3AVG-E - Performances in Heating mode

Operating Status	Combination				Unit capacity (kW)				Heating capacity (kW)			Power input (W)			Operating current (A)		Lot.10		Label*		COP
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	07	07	07	07	2.25	2.25	2.25	2.25	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	07	07	07	2.69	2.10	2.10	2.10	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	07	07	07	3.23	1.92	1.92	1.92	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	07	07	07	3.81	1.73	1.73	1.73	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	07	07	07	4.00	1.67	1.67	1.67	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	07	07	07	4.34	1.55	1.55	1.55	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	07	07	07	4.65	1.45	1.45	1.45	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	10	07	07	2.53	2.53	1.97	1.97	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	10	07	07	3.05	2.32	1.81	1.81	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	10	07	07	3.61	2.10	1.64	1.64	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	10	07	07	3.80	2.03	1.58	1.58	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	10	07	07	4.14	1.89	1.48	1.48	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	10	07	07	4.44	1.78	1.39	1.39	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	07	07	2.82	2.82	1.68	1.68	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	07	07	3.37	2.57	1.53	1.53	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	07	07	3.55	2.49	1.48	1.48	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	13	07	07	3.89	2.33	1.39	1.39	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	13	07	07	4.19	2.20	1.31	1.31	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	07	07	3.09	3.09	1.41	1.41	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	07	07	3.27	3.00	1.36	1.36	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	18	07	07	3.18	3.18	1.32	1.32	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	10	10	07	2.38	2.38	2.38	1.86	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	10	10	07	2.89	2.20	2.20	1.72	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	10	10	07	3.44	2.00	2.00	1.56	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	10	10	07	3.62	1.93	1.93	1.51	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	10	10	07	3.96	1.81	1.81	1.42	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	10	10	07	4.26	1.70	1.70	1.33	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
4 units operations	13	13	10	07	2.68	2.68	2.04	1.60	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	10	07	3.21	2.45	1.87	1.46	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	10	07	3.40	2.38	1.81	1.42	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	13	10	07	3.73	2.24	1.70	1.33	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	13	10	07	4.02	2.11	1.61	1.26	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	10	07	2.96	2.96	1.72	1.35	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	10	07	3.14	2.88	1.67	1.31	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	18	10	07	3.05	3.05	1.63	1.27	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	13	07	2.50	2.50	2.50	1.49	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	13	07	3.02	2.30	2.30	1.37	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	13	07	3.20	2.24	2.24	1.33	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	13	07	2.80	2.80	2.14	1.27	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	13	07	2.97	2.72	2.08	1.24	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	10	10	10	10	2.25	2.25	2.25	2.25	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	10	10	10	2.74	2.09	2.09	2.09	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	10	10	10	3.28	1.91	1.91	1.91	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	10	10	10	3.46	1.85	1.85	1.85	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	22	10	10	10	3.80	1.73	1.73	1.73	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	24	10	10	10	4.09	1.64	1.64	1.64	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	10	10	2.55	2.55	1.95	1.95	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	10	10	3.07	2.35	1.79	1.79	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	10	10	3.25	2.28	1.73	1.73	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	16	10	10	2.84	2.84	1.66	1.66	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	16	10	10	3.02	2.77	1.61	1.61	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	13	10	2.39	2.39	2.39	1.82	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	16	13	13	10	2.89	2.21	2.21	1.68	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	18	13	13	10	3.07	2.15	2.15	1.64	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74
	13	13	13	13	2.25	2.25	2.25	2.25	2.0	9.0	12.0	390	1900	2800	8.63	5.2	4.50	5.60	A+	A+++	4.74

RAS-5M34G3AVG-E - Performances in Cooling mode

Operating status	Combination					Unit capacity (kW)					Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	05	-	-	-	-	1.50	-	-	-	-	1.4	1.5	2.0	630	640	650	-	-	-	-	-
	07	-	-	-	-	2.00	-	-	-	-	1.5	2.0	2.9	640	650	700	-	-	-	-	-
	10	-	-	-	-	2.50	-	-	-	-	1.5	2.5	3.2	640	750	950	-	-	-	-	-
1 unit operation	13	-	-	-	-	3.50	-	-	-	-	1.7	3.5	4.1	640	1200	1520	-	-	-	-	-
	16	-	-	-	-	4.60	-	-	-	-	1.8	4.6	5.3	640	1650	2000	-	-	-	-	-
	18	-	-	-	-	5.00	-	-	-	-	1.9	5.0	6.0	640	1950	2100	-	-	-	-	-
	22	-	-	-	-	6.10	-	-	-	-	2.0	6.1	6.7	660	2020	2500	-	-	-	-	-
	24	-	-	-	-	7.00	-	-	-	-	2.1	7.0	7.7	660	2390	2960	-	-	-	-	-
	05	05	-	-	-	1.50	1.50	-	-	-	1.6	3.0	4.0	640	1210	1480	3.96	3.0	5.40	A	3.53
	07	05	-	-	-	2.00	1.50	-	-	-	1.7	3.5	4.9	640	1310	1625	4.54	3.5	5.60	A+	3.57
	10	05	-	-	-	2.50	1.50	-	-	-	1.7	4.0	5.2	640	1440	1810	5.08	4.0	5.80	A+	3.64
	13	05	-	-	-	3.50	1.50	-	-	-	1.9	5.0	6.1	640	1620	1980	6.20	5.0	6.20	A++	3.70
	16	05	-	-	-	4.60	1.50	-	-	-	2.0	6.1	7.3	640	1810	2160	7.44	6.1	6.50	A++	3.74
	18	05	-	-	-	5.00	1.50	-	-	-	2.1	6.5	8.0	640	1810	2220	7.88	6.5	6.60	A++	3.76
	22	05	-	-	-	6.10	1.50	-	-	-	2.2	7.6	8.7	640	2040	2400	9.07	7.6	6.90	A++	3.80
	24	05	-	-	-	7.00	1.50	-	-	-	2.3	8.5	9.7	640	2040	2400	10.10	8.5	7.10	A++	3.81
	07	07	-	-	-	2.00	2.00	-	-	-	1.7	4.0	5.8	640	1400	1770	5.08	4.0	5.80	A+	3.64
	10	07	-	-	-	2.50	2.00	-	-	-	1.8	4.5	6.1	640	1530	1910	5.66	4.5	6.00	A+	3.66
	13	07	-	-	-	3.50	2.00	-	-	-	1.9	5.5	7.0	660	1810	2130	6.77	5.5	6.30	A++	3.72
	16	07	-	-	-	4.60	2.00	-	-	-	2.1	6.6	8.2	660	1810	2220	7.97	6.6	6.60	A++	3.77
	18	07	-	-	-	5.00	2.00	-	-	-	2.1	7.0	8.9	670	2040	2400	8.41	7.0	6.70	A++	3.78
	22	07	-	-	-	6.10	2.00	-	-	-	2.3	8.1	9.6	670	2040	2400	9.65	8.1	7.00	A++	3.80
2 units operations	24	07	-	-	-	7.00	2.00	-	-	-	2.4	9.0	10.6	690	2320	2570	10.63	9.0	7.20	A++	3.83
	10	10	-	-	-	2.50	2.50	-	-	-	1.9	5.0	6.4	640	1530	2040	6.20	5.0	6.20	A++	3.70
	13	10	-	-	-	3.50	2.50	-	-	-	2.0	6.0	7.3	660	1810	2220	7.30	6.0	6.40	A++	3.75
	16	10	-	-	-	4.60	2.50	-	-	-	2.1	7.1	8.5	670	2040	2400	8.54	7.1	6.80	A++	3.78
	18	10	-	-	-	5.00	2.50	-	-	-	2.2	7.5	9.2	670	2040	2400	8.99	7.5	6.90	A++	3.79
	22	10	-	-	-	6.10	2.50	-	-	-	2.3	8.6	9.9	690	2320	2570	10.18	8.6	7.10	A++	3.82
	24	10	-	-	-	7.00	2.50	-	-	-	2.4	9.5	10.9	700	2550	2750	11.21	9.5	7.30	A++	3.83
	13	13	-	-	-	3.50	3.50	-	-	-	2.1	7.0	8.2	670	2040	2400	8.41	7.0	6.70	A++	3.78
	16	13	-	-	-	4.60	3.50	-	-	-	2.3	8.1	9.4	690	2320	2570	9.65	8.1	7.00	A++	3.80
	18	13	-	-	-	5.00	3.50	-	-	-	2.3	8.5	10.1	690	2320	2570	10.10	8.5	7.10	A++	3.81
	22	13	-	-	-	6.10	3.50	-	-	-	2.5	9.6	10.8	700	2550	2750	11.30	9.6	7.30	A++	3.84
	24	13	-	-	-	6.67	3.33	-	-	-	2.5	10.0	11.5	700	2550	2750	11.75	10.0	7.40	A++	3.85
	16	16	-	-	-	4.60	4.60	-	-	-	2.4	9.2	10.6	700	2550	2750	10.85	9.2	7.30	A++	3.83
	18	16	-	-	-	5.00	4.60	-	-	-	2.5	9.6	11.3	700	2550	2750	11.30	9.6	7.30	A++	3.84
	22	16	-	-	-	5.70	4.30	-	-	-	2.5	10.0	11.5	700	2550	2750	11.75	10.0	7.40	A++	3.85
	24	16	-	-	-	6.03	3.97	-	-	-	2.5	10.0	11.5	700	2550	2750	11.75	10.0	7.40	A++	3.85

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG- - Performances in Cooling mode

Operating status	Combination					Unit capacity (kW)					Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
2 units operations	18	18	-	-	-	5.00	5.00	-	-	-	2.5	10.0	11.5	700	2550	2750	11.75	10.0	7.40	A++	3.85
	22	18	-	-	-	5.50	4.50	-	-	-	2.5	10.0	11.5	700	2550	2750	11.75	10.0	7.40	A++	3.85
	24	18	-	-	-	5.83	4.17	-	-	-	2.5	10.0	11.5	700	2550	2750	11.75	10.0	7.40	A++	3.85
	22	22	-	-	-	5.00	5.00	-	-	-	2.5	10.0	11.5	700	2570	2770	11.75	10.0	7.40	A++	3.85
	24	22	-	-	-	5.34	4.66	-	-	-	2.5	10.0	11.5	700	2570	2770	11.75	10.0	7.40	A++	3.85
	24	24	-	-	-	5.00	5.00	-	-	-	2.5	10.0	11.5	700	2600	2800	11.75	10.0	7.40	A++	3.85
3 units operations	05	05	05	-	-	1.50	1.50	1.50	-	-	1.8	4.5	6.0	950	1840	1910	5.66	4.5	5.90	A+	3.66
	07	05	05	-	-	2.00	1.50	1.50	-	-	1.9	5.0	6.9	950	1930	2060	6.20	5.0	6.00	A+	3.70
	10	05	05	-	-	2.50	1.50	1.50	-	-	1.9	5.5	7.2	950	2040	2210	6.77	5.5	6.20	A++	3.72
	13	05	05	-	-	3.50	1.50	1.50	-	-	2.1	6.5	8.1	950	2300	2410	7.88	6.5	6.50	A++	3.76
	16	05	05	-	-	4.60	1.50	1.50	-	-	2.2	7.6	9.3	950	2400	2660	9.07	7.6	6.80	A++	3.80
	18	05	05	-	-	5.00	1.50	1.50	-	-	2.3	8.0	10.0	950	2410	2690	9.52	8.0	6.90	A++	3.81
	22	05	05	-	-	6.10	1.50	1.50	-	-	2.4	9.1	10.7	950	2410	2720	10.76	9.1	7.10	A++	3.82
	24	05	05	-	-	7.00	1.50	1.50	-	-	2.5	10.0	11.5	950	2410	2720	11.75	10.0	7.30	A++	3.85
	07	07	05	-	-	2.00	2.00	1.50	-	-	1.9	5.5	7.8	950	2010	2170	6.77	5.5	6.20	A++	3.72
	10	07	05	-	-	2.50	2.00	1.50	-	-	2.0	6.0	8.1	950	2120	2330	7.30	6.0	6.30	A++	3.75
	13	07	05	-	-	3.50	2.00	1.50	-	-	2.1	7.0	9.0	950	2400	2230	8.41	7.0	6.60	A++	3.78
	16	07	05	-	-	4.60	2.00	1.50	-	-	2.3	8.1	10.2	950	2410	2690	9.65	8.1	6.90	A++	3.80
	18	07	05	-	-	5.00	2.00	1.50	-	-	2.3	8.5	10.9	950	2410	2720	10.10	8.5	7.00	A++	3.81
	22	07	05	-	-	6.10	2.00	1.50	-	-	2.5	9.6	11.5	950	2410	2720	11.30	9.6	7.20	A++	3.84
	24	07	05	-	-	6.67	1.90	1.43	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	10	10	05	-	-	2.50	2.50	1.50	-	-	2.1	6.5	8.4	950	2400	2230	7.88	6.5	6.50	A++	3.76
	13	10	05	-	-	3.50	2.50	1.50	-	-	2.2	7.5	9.3	950	2410	2690	8.99	7.5	6.80	A++	3.79
	16	10	05	-	-	4.60	2.50	1.50	-	-	2.3	8.6	10.5	950	2410	2720	10.18	8.6	7.00	A++	3.82
	18	10	05	-	-	5.00	2.50	1.50	-	-	2.4	9.0	11.2	950	2410	2720	10.63	9.0	7.10	A++	3.83
	22	10	05	-	-	6.00	2.50	1.50	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	24	10	05	-	-	6.36	2.27	1.36	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	13	13	05	-	-	3.50	3.50	1.50	-	-	2.3	8.5	10.2	950	2410	2720	10.10	8.5	7.00	A++	3.81
	16	13	05	-	-	4.60	3.50	1.50	-	-	2.5	9.6	11.4	950	2410	2720	11.30	9.6	7.30	A++	3.84
	18	13	05	-	-	5.00	3.50	1.50	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	22	13	05	-	-	5.50	3.15	1.35	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	24	13	05	-	-	5.83	2.92	1.25	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	16	16	05	-	-	4.30	4.30	1.40	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	18	16	05	-	-	4.50	4.14	1.35	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	22	16	05	-	-	5.00	3.77	1.23	-	-	2.5	10.0	11.5	950	2440	2780	11.75	10.0	7.30	A++	3.85
	24	16	05	-	-	5.34	3.51	1.15	-	-	2.5	10.0	11.5	950	2440	2780	11.75	10.0	7.30	A++	3.85
	18	18	05	-	-	4.35	4.35	1.30	-	-	2.5	10.0	11.5	950	2430	2760	11.75	10.0	7.30	A++	3.85
	22	18	05	-	-	4.84	3.97	1.19	-	-	2.5	10.0	11.5	950	2440	2780	11.75	10.0	7.30	A++	3.85
	24	18	05	-	-	5.19	3.70	1.11	-	-	2.5	10.0	11.5	950	2440	2780	11.75	10.0	7.30	A++	3.85
	22	22	05	-	-	4.45	4.45	1.09	-	-	2.5	10.0	11.5	950	2440	2780	11.75	10.0	7.30	A++	3.85
	24	22	05	-	-	4.79	4.18	1.03	-	-	2.5	10.0	11.5	950	2450	2810	11.75	10.0	7.30	A++	3.85
	24	24	05	-	-	4.52	4.52	0.97	-	-	2.5	10.0	11.5	950	2450	2830	11.75	10.0	7.30	A++	3.85
	07	07	07	-	-	2.00	2.00	2.00	-	-	2.0	6.0	8.7	950	2100	2500	7.30	6.0	6.30	A++	3.75
	10	07	07	-	-	2.50	2.00	2.00	-	-	2.1	6.5	9.0	950	2400	2660	7.88	6.5	6.50	A++	3.76
	13	07	07	-	-	3.50	2.00	2.00	-	-	2.2	7.5	9.9	960	2410	2690	8.99	7.5	6.80	A++	3.79
	16	07	07	-	-	4.60	2.00	2.00	-	-	2.3	8.6	11.1	960	2410	2720	10.18	8.6	7.00	A++	3.82
	18	07	07	-	-	5.00	2.00	2.00	-	-	2.4	9.0	11.5	960	2410	2720	10.63	9.0	7.10	A++	3.83
	22	07	07	-	-	6.04	1.98	1.98	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	24	07	07	-	-	6.36	1.82	1.82	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	10	10	07	-	-	2.50	2.50	2.00	-	-	2.1	7.0	9.3	950	2400	2660	8.41	7.0	6.60	A++	3.78
	13	10	07	-	-	3.50	2.50	2.00	-	-	2.3	8.0	10.2	960	2410	2690	9.52	8.0	6.90	A++	3.81
	16	10	07	-	-	4.60	2.50	2.00	-	-	2.4	9.1	11.4	960	2410	2720	10.76	9.1	7.10	A++	3.82
	18	10	07	-	-	5.00	2.50	2.00	-	-	2.4	9.5	11.5	960	2410	2720	11.21	9.5	7.20	A++	3.83
	22	10	07	-	-	5.75	2.36	1.89	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	24	10	07	-	-	6.09	2.17	1.74	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	13	13	07	-	-	3.50	3.50	2.00	-	-	2.4	9.0	11.1	960	2410	2720	10.63	9.0	7.10	A++	3.83
	16	13	07	-	-	4.55	3.47	1.98	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	18	13	07	-	-	4.76	3.33	1.90	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	22	13	07	-	-	5.26	3.02	1.72	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	24	13	07	-	-	5.60	2.80	1.60	-	-	2.5	10.0	11.5	970	2440	2780	11.75	10.0	7.30	A++	3.85
	16	16	07	-	-	4.11	4.11	1.79	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	18	16	07	-	-	4.31	3.97	1.72	-	-	2.5	10.0	11.5	970	2430	2760	11.75	10.0	7.30	A++	3.85
	22	16	07	-	-	4.80	3.62	1.57	-	-	2.5	10.0	11.5	970	2440	2780	11.75	10.0	7.30	A++	3.85
	24	16	07	-	-	5.15	3.38	1.47	-	-	2.5	10.0	11.5	970	2440	2780	11.75	10.0	7.30	A++	3.85
	18	18	07	-	-	4.17	4.17	1.67	-	-	2.5	10.0	11.5	970	2440	2780	11.75	10.0	7.30	A++	3.85
	22	18	07	-	-	4.66	3.82	1.53	-	-	2.5	10.0	11.5	970	2440	2780	11.75	10.0	7.30	A++	3.85
	24	18	07	-	-	5.00	3.57	1.43	-	-	2.5	10.0	11.5	970	2440	2780	11.75	10.0	7.30	A++	3.85
	22	22	07	-	-	4.30	4.30	1.41	-	-	2.5	10.0	11.5	970	2440	2810	11.75	10.0	7.30	A++	3.85
	24	22	07	-	-	4.64	4.04	1.32	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	24	24	07	-	-	4.38	4.38	1.25	-	-	2.5	10.0	11.5	970	2470	2860	11.75	10.0	7.30	A++	3.85
	10	10	10	-	-	2.50	2.50	2.50	-	-	2.2	7.5	9.6	950	2400	2720	8.99	7.5	6.80	A++	3.79
	13	10	10	-	-	3.50	2.50	2.50	-	-	2.3	8.5	10.5	960	2410	2740	10.10	8.5	7.00	A++	3.81
	16	10	10	-	-	4.60	2.50	2.50	-	-	2.5	9.6	11.5	960	2410	2790	11.30	9.6	7.30	A++	3.84
	18	10	10	-	-	5.00	2.50	2.50	-	-	2.5	10.0	11.5	960	2410	2790	11.75	10.0	7.30	A++	3.85
	22	10	10	-	-	5.50	2.25	2.25	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	24	10	10	-	-	5.83	2.08	2.08	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	13	13	10	-	-	3.50	3.50	2.50	-	-	2.4	9.5	11.4	960	2410	2790	11.21	9.5	7.20	A++	3.83
	16	13	10	-	-	4.34	3.30	2.36	-	-	2.5	10.0	11.5	970	2430	2810	11.75	10.0	7.30	A++	3.85
	18	13	10	-	-	4.55	3.18	2.27	-	-	2.5	10.0	11.5	970	2430	2810	11.75	10.0	7.30	A++	3.85
	22	13	10	-	-	5.04	2.89	2.07	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	24	13	10	-	-	5.38	2.69	1.92	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	16	16	10	-	-	3.93	3.93	2.14	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	18	16	10	-	-	4.13	3.80	2.07	-	-	2.5	10.0	11.5	970	2430	2810	11.75	10.0	7.30	A++	3.85
	22	16	10	-	-	4.62	3.48	1.89	-	-	2.5	10.0	11.5	980	2450	2900	11.75	10.0	7.30	A++	3.85
	24	16	10	-	-	4.96	3.26	1.77	-	-	2.5	10.0	11.5	980	2450	2900	11.75	10.0	7.30	A++	3.85
	18	18	10	-	-	4.00	4.00	2.00	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	22	18	10	-	-	4.49	3.68	1.84	-	-	2.5	10.0	11.5	970	2415	2900	11.75	10.0	7.30	A++	3.85
	24	18	10	-	-	4.83	3.45	1.72	-	-	2.5	10.0	11.5	970	2440	2900	11.75	10.0	7.30	A++	3.85
	22	22	10	-	-	4.15	4.15	1.70	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	24	22	10	-	-	4.49	3.91	1.60	-	-	2.5	10.0	11.5	970	2465	2855	11.75	10.0	7.30	A++	3.85
	24	24	10	-	-	4.24	4.24	1.52	-	-	2.5	10.0	11.5	970	2465	2855	11.75	10.0	7.30	A++	3.85
	13	13	13	-	-	3.33	3.33	3.33	-	-	2.5	10.0	11.5	970	2430	2810	11.75	10.0	7.30	A++	3.85
	16	13	13	-	-	3.97	3.02	3.02	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	18	13	13	-	-	4.17	2.92	2.92	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	22	13	13	-	-	4.66	2.67	2.67	-	-	2.5	10.0	11.5	980	2450	2900	11.75	10.0	7.30	A++	3.85
	24	13	13	-	-	5.00	2.50	2.50	-	-	2.5	10.0	11.5	980	2450	2900	11.75	10.0	7.30	A++	3.85
	16	16	13	-	-	3.62	3.62	2.76	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	18	16	13	-	-	3.82	3.51	2.67	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	22	16	13	-	-	4.30	3.24	2.46	-	-	2.5	10.0	11.5	980	2450	2900	11.75	10.0	7.30	A++	3.85
	24	16	13	-	-	4.64	3.05	2.32	-	-	2.5	10.0	11.5	980	2450	2900	11.75	10.0	7.30	A++	3.85

Cooling, 230 V

RESIDENTIAL AIR-TO-AIR

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E - Performances in Cooling mode

Operating status	Combination					Unit capacity (kW)					Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V — 3 units operations	18	18	13	-	-	3.70	3.70	2.59	-	-	2.5	10.0	11.5	970	2440	2830	11.75	10.0	7.30	A++	3.85
	22	18	13	-	-	4.18	3.42	2.40	-	-	2.5	10.0	11.5	970	2440	2900	11.75	10.0	7.30	A++	3.85
	24	18	13	-	-	4.52	3.23	2.26	-	-	2.5	10.0	11.5	970	2440	2900	11.75	10.0	7.30	A++	3.85
	16	16	16	-	-	3.33	3.33	3.33	-	-	2.5	10.0	11.5	980	2450	2900	11.75	10.0	7.30	A++	3.85
4 units operations	05	05	05	05	-	1.50	1.50	1.50	1.50	-	2.0	6.0	8.0	930	1840	2270	7.30	6.0	6.20	A++	3.75
	07	05	05	05	-	2.00	1.50	1.50	1.50	-	2.1	6.5	8.9	930	2020	2400	7.88	6.5	6.40	A++	3.76
	10	05	05	05	-	2.50	1.50	1.50	1.50	-	2.1	7.0	9.2	930	2250	2580	8.41	7.0	6.60	A++	3.78
	13	05	05	05	-	3.50	1.50	1.50	1.50	-	2.3	8.0	10.1	930	2500	2800	9.52	8.0	6.80	A++	3.81
	16	05	05	05	-	4.60	1.50	1.50	1.50	-	2.4	9.1	11.3	930	2710	2820	10.76	9.1	7.10	A++	3.82
	18	05	05	05	-	5.00	1.50	1.50	1.50	-	2.4	9.5	11.5	930	2720	2840	11.21	9.5	7.10	A++	3.83
	22	05	05	05	-	5.75	1.42	1.42	1.42	-	2.5	10.0	11.5	930	2720	2850	11.75	10.0	7.20	A++	3.85
	24	05	05	05	-	6.09	1.30	1.30	1.30	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.20	A++	3.85
	07	07	05	05	-	2.00	2.00	1.50	1.50	-	2.1	7.0	9.8	930	2200	2540	8.41	7.0	6.60	A++	3.78
	10	07	05	05	-	2.50	2.00	1.50	1.50	-	2.2	7.5	10.1	930	2460	2730	8.99	7.5	6.70	A++	3.79
	13	07	05	05	-	3.50	2.00	1.50	1.50	-	2.3	8.5	11.0	930	2660	2810	10.10	8.5	6.90	A++	3.81
	16	07	05	05	-	4.60	2.00	1.50	1.50	-	2.5	9.6	11.5	930	2720	2840	11.30	9.6	7.20	A++	3.84
	18	07	05	05	-	5.00	2.00	1.50	1.50	-	2.5	10.0	11.5	930	2720	2850	11.75	10.0	7.20	A++	3.85
	22	07	05	05	-	5.50	1.80	1.35	1.35	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.20	A++	3.85
	24	07	05	05	-	5.83	1.67	1.25	1.25	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.20	A++	3.85
	10	10	05	05	-	2.50	2.50	1.50	1.50	-	2.3	8.0	10.4	930	2660	2810	9.52	8.0	6.80	A++	3.81
	13	10	05	05	-	3.50	2.50	1.50	1.50	-	2.4	9.0	11.3	930	2720	2840	10.63	9.0	7.10	A++	3.83
	16	10	05	05	-	4.55	2.48	1.49	1.49	-	2.5	10.0	11.5	930	2720	2850	11.75	10.0	7.30	A++	3.85
	18	10	05	05	-	4.76	2.38	1.43	1.43	-	2.5	10.0	11.5	930	2730	2870	11.75	10.0	7.20	A++	3.85
	22	10	05	05	-	5.26	2.16	1.29	1.29	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.20	A++	3.85
	24	10	05	05	-	5.60	2.00	1.20	1.20	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	05	05	-	3.50	3.50	1.50	1.50	-	2.5	10.0	11.5	930	2720	2850	11.75	10.0	7.30	A++	3.85
	16	13	05	05	-	4.14	3.15	1.35	1.35	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.30	A++	3.85
	18	13	05	05	-	4.35	3.04	1.30	1.30	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.20	A++	3.85
	22	13	05	05	-	4.84	2.78	1.19	1.19	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	05	05	-	5.19	2.59	1.11	1.11	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	05	05	-	3.77	3.77	1.23	1.23	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.30	A++	3.85
	18	16	05	05	-	3.97	3.65	1.19	1.19	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	05	05	-	4.45	3.36	1.09	1.09	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	24	16	05	05	-	4.79	3.15	1.03	1.03	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	05	05	-	3.85	3.85	1.15	1.15	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	05	05	-	4.33	3.55	1.06	1.06	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	24	18	05	05	-	4.67	3.33	1.00	1.00	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	22	05	05	-	4.01	4.01	0.99	0.99	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	07	07	07	05	-	2.00	2.00	2.00	1.50	-	2.2	7.5	10.7	930	2370	2670	8.99	7.5	6.70	A++	3.79
	10	07	07	05	-	2.50	2.00	2.00	1.50	-	2.3	8.0	11.0	930	2600	2810	9.52	8.0	6.80	A++	3.81
	13	07	07	05	-	3.50	2.00	2.00	1.50	-	2.4	9.0	11.5	930	2710	2830	10.63	9.0	7.10	A++	3.83
	16	07	07	05	-	4.55	1.98	1.98	1.49	-	2.5	10.0	11.5	930	2720	2850	11.75	10.0	7.30	A++	3.85
	18	07	07	05	-	4.76	1.90	1.90	1.43	-	2.5	10.0	11.5	930	2720	2850	11.75	10.0	7.20	A++	3.85
	22	07	07	05	-	5.26	1.72	1.72	1.29	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.20	A++	3.85
	24	07	07	05	-	5.60	1.60	1.60	1.20	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	10	10	07	05	-	2.50	2.50	2.00	1.50	-	2.3	8.5	11.3	930	2710	2830	10.10	8.5	6.90	A++	3.81
	13	10	07	05	-	3.50	2.50	2.00	1.50	-	2.4	9.5	11.5	930	2720	2850	11.21	9.5	7.20	A++	3.83
	16	10	07	05	-	4.34	2.36	1.89	1.42	-	2.5	10.0	11.5	930	2730	2870	11.75	10.0	7.30	A++	3.85
	18	10	07	05	-	4.55	2.27	1.82	1.36	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.20	A++	3.85
	22	10	07	05	-	5.04	2.07	1.65	1.24	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	24	10	07	05	-	5.38	1.92	1.54	1.15	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	07	05	-	3.33	3.33	1.90	1.43	-	2.5	10.0	11.5	930	2730	2870	11.75	10.0	7.30	A++	3.85
	16	13	07	05	-	3.97	3.02	1.72	1.29	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.30	A++	3.85
	18	13	07	05	-	4.17	2.92	1.67	1.25	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	07	05	-	4.66	2.67	1.53	1.15	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	07	05	-	5.00	2.50	1.43	1.07	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	07	05	-	3.62	3.62	1.57	1.18	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	07	05	-	3.82	3.51	1.53	1.15	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	07	05	-	4.30	3.24	1.41	1.06	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	07	05	-	3.70	3.70	1.48	1.11	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	07	05	-	4.18	3.42	1.37	1.03	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	10	10	10	05	-	2.50	2.50	2.50	1.50	-	2.4	9.0	11.5	930	2720	2850	10.63	9.0	7.10	A++	3.83
	13	10	10	05	-	3.50	2.50	2.50	1.50	-	2.5	10.0	11.5	930	2730	2870	11.75	10.0	7.30	A++	3.85
	16	10	10	05	-	4.14	2.25	2.25	1.35	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.30	A++	3.85
	18	10	10	05	-	4.35	2.17	2.17	1.30	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	10	10	05	-	4.84	1.98	1.98	1.19	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	24	10	10	05	-	5.19	1.85	1.85	1.11	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	10	05	-	3.18	3.18	2.27	1.36	-	2.5	10.0	11.5	930	2730	2880	11.75	10.0	7.30	A++	3.85
	16	13	10	05	-	3.80	2.89	2.07	1.24	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	10	05	-	4.00	2.80	2.00	1.20	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	10	05	-	4.49	2.57	1.84	1.10	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	10	05	-	3.48	3.48	1.89	1.14	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	10	05	-	3.68	3.38	1.84	1.10	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	10	05	-	3.57	3.57	1.79	1.07	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	13	05	-	2.92	2.92	2.92	1.25	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.30	A++	3.85
	16	13	13	05	-	3.51	2.67	2.67	1.15	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	13	05	-	3.70	2.59	2.59	1.11	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	13	05	-	3.24	3.24	2.46	1.06	-	2.5	10.0	11.5	930	2740	2900	11.75	10.0	7.30	A++	3.85
	07	07	07	07	-	2.00	2.00	2.00	2.00	-	2.3	8.0	11.5	930	2550	2800	9.52	8.0	6.80	A++	3.81
	10	07	07	07	-	2.50	2.00	2.00	2.00	-	2.3	8.5	11.5	930	2710	2820	10.10	8.5	6.90	A++	3.81
	13	07	07	07	-	3.50	2.00	2.00	2.00	-	2.4	9.5	11.5	940	2720	2850	11.21	9.5	7.20	A++	3.83
	16	07	07	07	-	4.34	1.89	1.89	1.89	-	2.5	10.0	11.5	940	2720	2850	11.75	10.0	7.30	A++	3.85
	18	07	07	07	-	4.55	1.82	1.82	1.82	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.20	A++	3.85
	22	07	07	07	-	5.04	1.65	1.65	1.65	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.20	A++	3.85
	24	07	07	07	-	5.38	1.54	1.54	1.54	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	10	10	07	07	-	2.50	2.50	2.00	2.00	-	2.4	9.0	11.5	930	2710	2820	10.63	9.0	7.10	A++	3.83
	13	10	07	07	-	3.50	2.50	2.00	2.00	-	2.5	10.0	11.5	940	2720	2850	11.75	10.0	7.30	A++	3.85
	16	10	07	07	-	4.14	2.25	1.80	1.80	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.30	A++	3.85
	18	10	07	07	-	4.35	2.17	1.74	1.74	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.20	A++	3.85
	22	10	07	07	-	4.84	1.98	1.59	1.59	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	10	07	07	-	5.19	1.85	1.48	1.48	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	07	07	-	3.18	3.18	1.82	1.82	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.30	A++	3.85
	16	13	07	07	-	3.80	2.89	1.65	1.65	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	07	07	-	4.00	2.80	1.60	1.60	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	07	07	-	4.49	2.57	1.47	1.47	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	07	07	-	4.83	2.41	1.38	1.38	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	07	07	-	3.48	3.48	1.52	1.52	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	07	07	-	3.68	3.38	1.47	1.47	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	07	07	-	4.15	3.13	1.36	1.36	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E - Performances in Cooling mode

Operating status	Combination					Unit capacity (kW)					Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V / 4 units operations	24	16	07	07	-	4.49	2.95	1.28	1.28	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	07	07	-	3.57	3.57	1.43	1.43	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	07	07	-	4.04	3.31	1.32	1.32	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	18	07	07	-	4.38	3.13	1.25	1.25	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	10	10	10	07	-	2.50	2.50	2.50	2.00	-	2.4	9.5	11.5	940	2720	2850	11.21	9.5	7.20	A++	3.83
	13	10	10	07	-	3.33	2.38	2.38	1.90	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.30	A++	3.85
	16	10	10	07	-	3.97	2.16	2.16	1.72	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.30	A++	3.85
	18	10	10	07	-	4.17	2.08	2.08	1.67	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	10	10	07	-	4.66	1.91	1.91	1.53	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	10	10	07	-	5.00	1.79	1.79	1.43	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	10	07	-	3.04	3.04	2.17	1.74	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	16	13	10	07	-	3.65	2.78	1.98	1.59	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	10	07	-	3.85	2.69	1.92	1.54	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	10	07	-	4.33	2.48	1.77	1.42	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	10	07	-	4.67	2.33	1.67	1.33	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	10	07	-	3.36	3.36	1.82	1.46	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	10	07	-	3.55	3.26	1.77	1.42	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	10	07	-	4.01	3.03	1.64	1.32	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	16	10	07	-	4.35	2.86	1.55	1.24	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	10	07	-	3.45	3.45	1.72	1.38	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	10	07	-	3.91	3.21	1.60	1.28	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	18	10	07	-	4.24	3.03	1.52	1.21	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	13	07	-	2.80	2.80	2.80	1.60	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	16	13	13	07	-	3.38	2.57	2.57	1.47	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	13	07	-	3.57	2.50	2.50	1.43	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	13	07	-	4.04	2.32	2.32	1.32	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	13	07	-	4.38	2.19	2.19	1.25	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	13	07	-	3.13	3.13	2.38	1.36	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	13	07	-	3.31	3.05	2.32	1.32	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	13	07	-	3.77	2.84	2.16	1.23	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	16	13	07	-	4.09	2.69	2.05	1.17	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	13	07	-	3.23	3.23	2.26	1.29	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	13	07	-	3.67	3.01	2.11	1.20	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	18	13	07	-	4.00	2.86	2.00	1.14	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	10	10	10	10	-	2.50	2.50	2.50	2.50	-	2.5	10.0	11.5	940	2720	2850	11.75	10.0	7.30	A++	3.85
	13	10	10	10	-	3.18	2.27	2.27	2.27	-	2.5	10.0	11.5	940	2730	2880	11.75	10.0	7.30	A++	3.85
	16	10	10	10	-	3.80	2.07	2.07	2.07	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	10	10	10	-	4.00	2.00	2.00	2.00	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	10	10	10	-	4.49	1.84	1.84	1.84	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	10	10	10	-	4.83	1.72	1.72	1.72	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	10	10	-	2.92	2.92	2.08	2.08	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	16	13	10	10	-	3.51	2.67	1.91	1.91	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	10	10	-	3.70	2.59	1.85	1.85	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	10	10	-	4.18	2.40	1.71	1.71	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	10	10	-	4.52	2.26	1.61	1.61	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	10	10	-	3.24	3.24	1.76	1.76	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	10	10	-	3.42	3.15	1.71	1.71	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	10	10	-	3.89	2.93	1.59	1.59	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	16	10	10	-	4.22	2.77	1.51	1.51	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	10	10	-	3.33	3.33	1.67	1.67	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	10	10	-	3.79	3.11	1.55	1.55	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	18	10	10	-	4.12	2.94	1.47	1.47	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	13	10	-	2.69	2.69	2.69	1.92	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	16	13	13	10	-	3.26	2.48	2.48	1.77	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	13	10	-	3.45	2.41	2.41	1.72	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	13	10	-	3.91	2.24	2.24	1.60	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	13	10	-	4.24	2.12	2.12	1.52	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	13	10	-	3.03	3.03	2.30	1.64	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	13	10	-	3.21	2.95	2.24	1.60	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	13	10	-	3.65	2.75	2.10	1.50	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	16	13	10	-	3.98	2.61	1.99	1.42	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	13	10	-	3.13	3.13	2.19	1.56	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	13	10	-	3.57	2.92	2.05	1.46	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	18	13	10	-	3.89	2.78	1.94	1.39	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	13	13	13	13	-	2.50	2.50	2.50	2.50	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	16	13	13	13	-	3.05	2.32	2.32	2.32	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	13	13	13	-	3.23	2.26	2.26	2.26	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	13	13	13	-	3.67	2.11	2.11	2.11	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	13	13	13	-	4.00	2.00	2.00	2.00	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	16	16	13	13	-	2.84	2.84	2.16	2.16	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.30	A++	3.85
	18	16	13	13	-	3.01	2.77	2.11	2.11	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	16	13	13	-	3.45	2.60	1.98	1.98	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	16	13	13	-	3.76	2.47	1.88	1.88	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	18	18	13	13	-	2.94	2.94	2.06	2.06	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	22	18	13	13	-	3.37	2.76	1.93	1.93	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
	24	18	13	13	-	3.68	2.63	1.84	1.84	-	2.5	10.0	11.5	950	2740	2900	11.75	10.0	7.20	A++	3.85
Cooling, 230 V / 5 units operations	05	05	05	05	05	1.50	1.50	1.50	1.50	1.50	2.2	7.5	10.0	950	2300	2510	8.99	7.5	6.60	A++	3.79
	07	05	05	05	05	2.00	1.50	1.50	1.50	1.50	2.3	8.0	10.9	950	2400	2580	9.52	8.0	6.70	A++	3.81
	10	05	05	05	05	2.50	1.50	1.50	1.50	1.50	2.3	8.5	11.2	950	2600	2740	10.10	8.5	6.90	A++	3.81
	13	05	05	05	05	3.50	1.50	1.50	1.50	1.50	2.4	9.5	11.5	950	2850	3380	11.21	9.5	7.10	A++	3.83
	16	05	05	05	05	4.34	1.42	1.42	1.42	1.42	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	05	05	05	05	4.55	1.36	1.36	1.36	1.36	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	07	07	05	05	05	2.00	2.00	1.50	1.50	1.50	2.3	8.5	11.5	950	2600	2890	10.10	8.5	6.90	A++	3.81
	10	07	05	05	05	2.50	2.00	1.50	1.50	1.50	2.4	9.0	11.5	950	2800	3170	10.63	9.0	7.00	A++	3.83
	13	07	05	05	05	3.50	2.00	1.50	1.50	1.50	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	07	05	05	05	4.14	1.80	1.35	1.35	1.35	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	07	05	05	05	4.35	1.74	1.30	1.30	1.30	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	05	05	05	2.50	2.50	1.50	1.50	1.50	2.4	9.5	11.5	950	2946	3470	11.21	9.5	7.10	A++	3.83
	13	10	05	05	05	3.33	2.38	1.43	1.43	1.43	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	05	05	05	3.97	2.16	1.29	1.29	1.29	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	10	05	05	05	4.17	2.08	1.25	1.25	1.25	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	05	05	05	3.04	3.04	1.30	1.30	1.30	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	05	05	05	3.65	2.78	1.19	1.19	1.19	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	05	05	05	3.85	2.69	1.15	1.15	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	05	05	05	3.36	3.36	1.09	1.09	1.09	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	16	05	05	05	3.55	3.26	1.06	1.06	1.06	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	18	05	05	05	3.45	3.45	1.03	1.03	1.03	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	07	07	07	05	05	2.00	2.00	2.00	1.50	1.50	2.4	9.0	11.5	950	2750	3090	10.63	9.0	7.00	A++	3.83
	10	07	07	05	05	2.50	2.00	2.00	1.50	1.50	2.4	9.5	11.5	950	2850	3380	11.21	9.5	7.10	A++	3.83

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E - Performances in Cooling mode

Operating status	Combination					Unit capacity (kW)					Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	13	07	07	05	05	3.33	1.90	1.90	1.43	1.43	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	07	07	05	05	3.97	1.72	1.72	1.29	1.29	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	07	07	05	05	4.17	1.67	1.67	1.25	1.25	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	07	05	05	2.50	2.50	2.00	1.50	1.50	2.5	10.0	11.5	950	2946	2800	11.75	10.0	7.20	A++	3.85
	13	10	07	05	05	3.18	2.27	1.82	1.36	1.36	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	07	05	05	3.80	2.07	1.65	1.24	1.24	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	10	07	05	05	4.00	2.00	1.60	1.20	1.20	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	07	05	05	2.92	2.92	1.67	1.25	1.25	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	07	05	05	3.51	2.67	1.53	1.15	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	07	05	05	3.70	2.59	1.48	1.11	1.11	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	07	05	05	3.24	3.24	1.41	1.06	1.06	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	16	07	05	05	3.42	3.15	1.37	1.03	1.03	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	10	05	05	2.38	2.38	2.38	1.43	1.43	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	10	10	05	05	3.04	2.17	2.17	1.30	1.30	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	10	05	05	3.65	1.98	1.98	1.19	1.19	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	10	10	05	05	3.85	1.92	1.92	1.15	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	10	05	05	2.80	2.80	2.00	1.20	1.20	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	07	07	07	07	05	2.00	2.00	2.00	2.00	1.50	2.4	9.5	11.5	950	2800	3300	11.21	9.5	7.10	A++	3.83
	10	07	07	07	05	2.50	2.00	2.00	2.00	1.50	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	07	07	07	05	3.18	1.82	1.82	1.82	1.36	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	07	07	07	05	3.80	1.65	1.65	1.65	1.24	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	07	07	07	05	4.00	1.60	1.60	1.60	1.20	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	07	07	05	2.38	2.38	1.90	1.90	1.43	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	10	07	07	05	3.04	2.17	1.74	1.74	1.30	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	07	07	05	3.65	1.98	1.59	1.59	1.19	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	10	07	07	05	3.85	1.92	1.54	1.54	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	07	07	05	2.80	2.80	1.60	1.60	1.20	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	07	07	05	3.38	2.57	1.47	1.47	1.10	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	10	07	05	2.27	2.27	2.27	1.82	1.36	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	10	10	07	05	2.92	2.08	2.08	1.67	1.25	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	10	07	05	3.51	1.91	1.91	1.53	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	10	10	05	2.17	2.17	2.17	2.17	1.30	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	07	07	07	07	07	2.00	2.00	2.00	2.00	2.00	2.5	10.0	11.5	950	2917	3630	11.75	10.0	7.20	A++	3.85
	10	07	07	07	07	2.38	1.90	1.90	1.90	1.90	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	07	07	07	07	3.04	1.74	1.74	1.74	1.74	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	07	07	07	07	3.65	1.59	1.59	1.59	1.59	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	07	07	07	07	3.85	1.54	1.54	1.54	1.54	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	07	07	07	2.27	2.27	1.82	1.82	1.82	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	10	07	07	07	2.92	2.08	1.67	1.67	1.67	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	07	07	07	3.51	1.91	1.53	1.53	1.53	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	10	07	07	07	3.70	1.85	1.48	1.48	1.48	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	07	07	07	2.69	2.69	1.54	1.54	1.54	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	07	07	07	3.26	2.48	1.42	1.42	1.42	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	07	07	07	3.45	2.41	1.38	1.38	1.38	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	07	07	07	3.03	3.03	1.32	1.32	1.32	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	16	07	07	07	3.21	2.95	1.28	1.28	1.28	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	10	07	07	2.17	2.17	2.17	1.74	1.74	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	10	10	07	07	2.80	2.00	2.00	1.60	1.60	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	10	07	07	3.38	1.84	1.84	1.47	1.47	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
5 units operations	18	10	10	07	07	3.57	1.79	1.79	1.43	1.43	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	10	07	07	2.59	2.59	1.85	1.48	1.48	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	10	07	07	3.15	2.40	1.71	1.37	1.37	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	10	07	07	3.33	2.33	1.67	1.33	1.33	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	10	07	07	2.93	2.93	1.59	1.27	1.27	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	16	10	07	07	3.11	2.86	1.55	1.24	1.24	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	07	07	07	2.41	2.41	2.41	1.38	1.38	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	13	07	07	2.95	2.24	2.24	1.28	1.28	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	13	07	07	3.13	2.19	2.19	1.25	1.25	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	13	07	07	2.75	2.75	2.10	1.20	1.20	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	16	13	07	07	2.92	2.69	2.05	1.17	1.17	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	10	10	07	2.08	2.08	2.08	2.08	1.67	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	10	10	10	07	2.69	1.92	1.92	1.92	1.54	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	10	10	07	3.26	1.77	1.77	1.77	1.42	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	10	10	10	07	3.45	1.72	1.72	1.72	1.38	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	10	10	07	2.50	2.50	1.79	1.79	1.43	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	10	10	07	3.05	2.32	1.66	1.66	1.32	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	10	10	07	3.23	2.26	1.61	1.61	1.29	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	10	10	07	2.84	2.84	1.54	1.54	1.23	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	13	10	07	2.33	2.33	2.33	1.67	1.33	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	13	10	07	2.86	2.17	2.17	1.55	1.24	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	13	10	07	3.03	2.12	2.12	1.52	1.21	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	13	10	07	2.67	2.67	2.03	1.45	1.16	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	13	13	07	2.19	2.19	2.19	2.19	1.25	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	13	13	07	2.69	2.05	2.05	2.05	1.17	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	13	13	07	2.86	2.00	2.00	2.00	1.14	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	13	13	07	2.53	2.53	1.92	1.92	1.10	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	10	10	10	10	10	2.00	2.00	2.00	2.00	2.00	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	10	10	10	10	2.59	1.85	1.85	1.85	1.85	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	10	10	10	10	3.15	1.71	1.71	1.71	1.71	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	10	10	10	10	3.33	1.67	1.67	1.67	1.67	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	10	10	10	2.41	2.41	1.72	1.72	1.72	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	10	10	10	2.95	2.24	1.60	1.60	1.60	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	10	10	10	3.13	2.19	1.56	1.56	1.56	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	10	10	10	2.75	2.75	1.50	1.50	1.50	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	13	13	13	10	10	2.26	2.26	2.26	1.61	1.61	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	13	10	10	2.77	2.11	2.11	1.51	1.51	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	18	13	13	10	10	2.94	2.06	2.06	1.47	1.47	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	16	13	10	10	2.60	2.60	1.98	1.41	1.41	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
	13	13	13	13	10	2.12	2.12	2.12	2.12	1.52	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	16	13	13	13	10	2.61	1.99	1.99	1.99	1.42	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
	18	13	13	13	10	2.78	1.94	1.94	1.94	1.39	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
	16	16	13	13	10	2.46	2.46	1.87	1.87	1.34	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
	13	13	13	13	13	2.00	2.00	2.00	2.00	2.00	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
	16	13	13	13	13	2.47	1.88	1.88	1.88	1.88	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
	22	05	05	05	05	5.04	1.24	1.24	1.24	1.24	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	24	05	05	05	05	5.38	1.15	1.15	1.15	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	22	07	05	05	05	4.84	1.59	1.19	1.19	1.19	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	24	07	05	05	05	5.19	1.48	1.11	1.11	1.11	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
	22	10	05	05	05	4.66	1.91	1.15	1.15	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E - Performances in Cooling mode

	Operating status	Combination					Unit capacity (kW)					Cooling capacity (kW)			Power input (W)			Operating current (A)		Lot.10		EER
		Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdc	SEER	Class*	Nom.
Cooling, 230 V	5 units operations	24	10	05	05	05	5.00	1.79	1.07	1.07	1.07	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	05	05	05	4.33	2.48	1.06	1.06	1.06	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	05	05	05	4.67	2.33	1.00	1.00	1.00	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	07	07	05	05	4.66	1.53	1.53	1.15	1.15	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	07	07	05	05	5.00	1.43	1.43	1.07	1.07	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	10	07	05	05	4.49	1.84	1.47	1.10	1.10	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	10	07	05	05	4.83	1.72	1.38	1.03	1.03	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	07	05	05	4.18	2.40	1.37	1.03	1.03	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	07	05	05	4.52	2.26	1.29	0.97	0.97	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	10	10	05	05	4.33	1.77	1.77	1.06	1.06	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	10	10	05	05	4.67	1.67	1.67	1.00	1.00	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	10	05	05	4.04	2.32	1.66	0.99	0.99	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	10	05	05	4.38	2.19	1.56	0.94	0.94	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	13	05	05	3.79	2.17	2.17	0.93	0.93	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	13	05	05	4.12	2.06	2.06	0.88	0.88	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	07	07	07	05	4.49	1.47	1.47	1.47	1.10	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	07	07	07	05	4.83	1.38	1.38	1.38	1.03	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	10	07	07	05	4.33	1.77	1.42	1.42	1.06	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	10	07	07	05	4.67	1.67	1.33	1.33	1.00	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	07	07	05	4.04	2.32	1.32	1.32	0.99	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	07	07	05	4.38	2.19	1.25	1.25	0.94	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	10	10	07	05	4.18	1.71	1.71	1.37	1.03	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	10	10	07	05	4.52	1.61	1.61	1.29	0.97	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	10	07	05	3.91	2.24	1.60	1.28	0.96	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	10	07	05	4.24	2.12	1.52	1.21	0.91	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	13	07	05	3.67	2.11	2.11	1.20	0.90	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	13	07	05	4.00	2.00	2.00	1.14	0.86	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	10	10	10	05	4.04	1.66	1.66	1.66	0.99	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	10	10	10	05	4.38	1.56	1.56	1.56	0.94	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	10	10	05	3.79	2.17	1.55	1.55	0.93	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	10	10	05	4.12	2.06	1.47	1.47	0.88	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	13	10	05	3.57	2.05	2.05	1.46	0.88	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		24	13	13	10	05	3.89	1.94	1.94	1.39	0.83	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	13	13	13	05	3.37	1.93	1.93	1.93	0.83	2.5	10.0	11.5	950	2946	3670	11.75	10.0	7.20	A++	3.85
		22	07	07	07	07	4.33	1.42	1.42	1.42	1.42	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	07	07	07	07	4.67	1.33	1.33	1.33	1.33	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	10	07	07	07	4.18	1.71	1.37	1.37	1.37	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	10	07	07	07	4.52	1.61	1.29	1.29	1.29	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	13	07	07	07	3.91	2.24	1.28	1.28	1.28	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	13	07	07	07	4.24	2.12	1.21	1.21	1.21	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	10	10	07	07	4.04	1.66	1.66	1.32	1.32	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	10	10	07	07	4.38	1.56	1.56	1.25	1.25	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	13	10	07	07	3.79	2.17	1.55	1.24	1.24	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	13	10	07	07	4.12	2.06	1.47	1.18	1.18	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	13	13	07	07	3.57	2.05	2.05	1.17	1.17	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	13	13	07	07	3.89	1.94	1.94	1.11	1.11	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	10	10	10	07	3.91	1.60	1.60	1.60	1.28	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	10	10	10	07	4.24	1.52	1.52	1.52	1.21	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	13	10	10	07	3.67	2.11	1.51	1.51	1.20	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	13	10	10	07	4.00	2.00	1.43	1.43	1.14	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	13	13	10	07	3.47	1.99	1.99	1.42	1.14	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
		24	13	13	10	07	3.78	1.89	1.89	1.35	1.08	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
		22	13	13	13	07	3.28	1.88	1.88	1.88	1.08	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
		22	10	10	10	10	3.79	1.55	1.55	1.55	1.55	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		24	10	10	10	10	4.12	1.47	1.47	1.47	1.47	2.5	10.0	11.5	950	2946	3700	11.75	10.0	7.20	A++	3.85
		22	13	10	10	10	3.57	2.05	1.46	1.46	1.46	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
		24	13	10	10	10	3.89	1.94	1.39	1.39	1.39	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85
		22	13	13	10	10	3.37	1.93	1.93	1.38	1.38	2.5	10.0	11.5	950	2980	3700	11.75	10.0	7.20	A++	3.85

RAS-5M34G3AVG-E - Performances in Heating mode

	Operating status	Combination					Unit capacity (kW)					Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10			Label*		COP
		Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	1 unit operation	05	-	-	-	-	2.00	-	-	-	-	1.3	2.0	2.5	390	650	800	-	-	-	-	-	-	-
		07	-	-	-	-	2.50	-	-	-	-	1.4	2.5	3.6	390	760	1120	-	-	-	-	-	-	-
		10	-	-	-	-	3.20	-	-	-	-	1.4	3.2	4.8	390	910	1450	-	-	-	-	-	-	-
		13	-	-	-	-	4.20	-	-	-	-	1.5	4.2	5.3	390	1130	1590	-	-	-	-	-	-	-
		16	-	-	-	-	5.50	-	-	-	-	1.6	5.5	6.5	390	1410	1930	-	-	-	-	-	-	-
		18	-	-	-	-	6.00	-	-	-	-	1.7	6.0	6.5	390	1510	1930	-	-	-	-	-	-	-
		22	-	-	-	-	7.00	-	-	-	-	1.8	7.0	7.5	390	1730	2220	-	-	-	-	-	-	-
		24	-	-	-	-	8.00	-	-	-	-	1.8	8.0	8.8	390	1940	2580	-	-	-	-	-	-	-
	2 units operations	05	05	-	-	-	2.00	2.00	-	-	-	1.5	4.0	5.0	410	1080	1510	4.99	2.3	3.90	4.90	A	A++	3.70
		07	05	-	-	-	2.50	2.00	-	-	-	1.5	4.5	6.1	410	1190	1820	5.48	2.6	4.00	5.10	A+	A+++	3.78
		10	05	-	-	-	3.20	2.00	-	-	-	1.6	5.2	7.3	410	1340	2160	6.15	2.9	4.10	5.10	A+	A+++	3.88
		13	05	-	-	-	4.20	2.00	-	-	-	1.7	6.2	7.8	410	1560	2300	7.13	3.5	4.10	5.20	A+	A+++	3.97
		16	05	-	-	-	5.50	2.00	-	-	-	1.8	7.5	9.0	410	1840	2640	8.37	4.3	4.10	5.00	A+	A++	4.08
		18	05	-	-	-	6.00	2.00	-	-	-	1.8	8.0	9.0	430	1940	2640	8.81	4.5	4.10	4.90	A+	A++	4.12
		22	05	-	-	-	7.00	2.00	-	-	-	1.9	9.0	10.0	430	2160	2920	9.78	5.1	4.10	4.90	A+	A++	4.17
		24	05	-	-	-	8.00	2.00	-	-	-	2.0	10.0	11.3	430	2370	3290	10.72	5.7	4.10	5.00	A+	A++	4.22
		07	07	-	-	-	2.50	2.50	-	-	-	1.6	5.0	7.2	410	1300	2130	5.97	2.8	4.10	5.30	A+	A+++	3.85
		10	07	-	-	-	3.20	2.50	-	-	-	1.6	5.7	8.4	410	1450	2470	6.64	3.2	4.10	5.10	A+	A+++	3.93
		13	07	-	-	-	4.20	2.50	-	-	-	1.7	6.7	8.9	410	1670	2610	7.61	3.8	4.10	5.20	A+	A+++	4.01
		16	07	-	-	-	5.50	2.50	-	-	-	1.8	8.0	10.1	410	1940	2950	8.81	4.5	4.10	5.00	A+	A++	4.12
		18	07	-	-	-	6.00	2.50	-	-	-	1.9	8.5	10.1	430	2050	2950	9.30	4.8	4.10	4.90	A+	A++	4.15
		22	07	-	-	-	7.00	2.50	-	-	-	2.0	9.5	11.1	430	2270	3230	10.27	5.4	4.10	5.00	A+	A++	4.19
		24	07	-	-	-	8.00	2.50	-	-	-	2.1	10.5	12.4	430	2480	3600	11.21	6.0	4.10	5.10	A+	A+++	4.23
		10	10	-	-	-	3.20	3.20	-	-	-	1.7	6.4	9.6	410	1600	2810	7.30	3.6	4.10	5.20	A+	A+++	4.00
		13	10	-	-	-	4.20	3.20	-	-	-	1.8	7.4	10.1	410	1820	2950	8.28	4.2	4.10	5.00	A+	A++	4.07
		16	10	-	-	-	5.50	3.20	-	-	-	1.9	8.7	11.3	410	2100	3290	9.52	4.9	4.10	4.90	A+	A++	4.14
		18	10	-	-	-	6.00	3.20	-	-	-	2.0	9.2	11.3	430	2200	3290	9.96	5.2	4.10	4.90	A+	A++	4.18
		22	10	-	-	-	7.00	3.20	-	-	-	2.0	10.2	12.3	430	2420	3570	10.94	5.8	4.10	5.00	A+	A++	4.21
		24	10	-	-	-	8.00	3.20	-	-	-	2.1	11.2	13.6	430	2630	3940	11.89	6.3	4.20	5.20	A+	A+++	4.26
		13	13	-	-	-	4.20	4.20	-	-	-	1.9	8.4	10.6	410	2030	3090	9.21	4.8	4.10	4.90	A+	A++	4.14
		16	13	-	-	-	5.50	4.20	-	-	-	2.0	9.7	11.8	410	2310	3430	10.45	5.5	4.10	4.90	A+	A++	4.20
		18	13	-	-	-	6.00	4.20	-	-	-	2.0	10.2	11.8	430	2420	3430	10.94	5.8	4.10	5.00	A+	A++	4.21
		22	13	-	-	-	7.00	4.20	-	-	-	2.1	11.2	12.8	430	2630	3710	11.89	6.3	4.20	5.20	A+	A+++	4.26

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E / TR - Performances in Heating mode

Operating status	Combination					Unit capacity (kW)					Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10			Label*		COP
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V																							
2 units operations	24	13	-	-	-	7.87	4.13	-	-	-	2.2	12.0	14.1	430	2800	4080	12.66	6.8	4.30	5.40	A+	A+++	4.29
	16	16	-	-	-	5.50	5.50	-	-	-	2.1	11.0	13.0	410	2590	3770	11.71	6.2	4.20	5.20	A+	A+++	4.25
	18	16	-	-	-	6.00	5.50	-	-	-	2.2	11.5	13.0	430	2700	3770	12.20	6.5	4.20	5.30	A+	A+++	4.26
	22	16	-	-	-	6.72	5.28	-	-	-	2.2	12.0	14.0	430	2800	4050	12.66	6.8	4.30	5.40	A+	A+++	4.29
	24	16	-	-	-	7.11	4.89	-	-	-	2.2	12.0	14.2	430	2800	4100	12.66	6.8	4.30	5.40	A+	A+++	4.29
	18	18	-	-	-	6.00	6.00	-	-	-	2.2	12.0	13.0	430	2800	3770	12.66	6.8	4.30	5.40	A+	A+++	4.29
	22	18	-	-	-	6.46	5.54	-	-	-	2.2	12.0	14.0	440	2800	4050	12.66	6.8	4.30	5.40	A+	A+++	4.29
	24	18	-	-	-	6.86	5.14	-	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.40	A+	A+++	4.29
	22	22	-	-	-	6.00	6.00	-	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.40	A+	A+++	4.29
	24	22	-	-	-	6.40	5.60	-	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.40	A+	A+++	4.29
	24	24	-	-	-	6.00	6.00	-	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.40	A+	A+++	4.29
3 units operations	05	05	05	-	-	2.00	2.00	2.00	-	-	1.7	6.0	7.5	430	1510	2220	6.91	3.4	4.20	5.30	A+	A+++	3.97
	07	05	05	-	-	2.50	2.00	2.00	-	-	1.7	6.5	8.6	430	1620	2530	7.39	3.7	4.20	5.30	A+	A+++	4.01
	10	05	05	-	-	3.20	2.00	2.00	-	-	1.8	7.2	9.8	430	1770	2860	8.06	4.1	4.20	5.30	A+	A+++	4.07
	13	05	05	-	-	4.20	2.00	2.00	-	-	1.9	8.2	10.3	440	1990	3000	9.03	4.6	4.20	5.10	A+	A+++	4.12
	16	05	05	-	-	5.50	2.00	2.00	-	-	2.0	9.5	11.5	440	2270	3340	10.27	5.4	4.20	5.10	A+	A+++	4.19
	18	05	05	-	-	6.00	2.00	2.00	-	-	2.0	10.0	11.5	440	2370	3340	10.72	5.7	4.20	5.10	A+	A+++	4.22
	22	05	05	-	-	7.00	2.00	2.00	-	-	2.1	11.0	12.5	460	2590	3630	11.71	6.2	4.20	5.10	A+	A+++	4.25
	24	05	05	-	-	8.00	2.00	2.00	-	-	2.2	12.0	13.8	460	2800	3990	12.66	6.8	4.30	5.30	A+	A+++	4.29
	07	07	05	-	-	2.50	2.50	2.00	-	-	1.8	7.0	9.7	430	1730	2840	7.88	4.0	4.20	5.30	A+	A+++	4.05
	10	07	05	-	-	3.20	2.50	2.00	-	-	1.8	7.7	10.9	430	1880	3170	8.54	4.4	4.20	5.10	A+	A+++	4.10
	13	07	05	-	-	4.20	2.50	2.00	-	-	1.9	8.7	11.4	440	2100	3320	9.52	4.9	4.20	5.10	A+	A+++	4.14
	16	07	05	-	-	5.50	2.50	2.00	-	-	2.0	10.0	12.6	440	2370	3650	10.72	5.7	4.20	5.10	A+	A+++	4.22
	18	07	05	-	-	6.00	2.50	2.00	-	-	2.1	10.5	12.6	460	2480	3650	11.21	6.0	4.20	5.10	A+	A+++	4.23
	22	07	05	-	-	7.00	2.50	2.00	-	-	2.2	11.5	13.6	460	2700	3940	12.20	6.5	4.20	5.20	A+	A+++	4.26
	24	07	05	-	-	7.68	2.40	1.92	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	05	-	-	3.20	3.20	2.00	-	-	1.9	8.4	12.1	430	2030	3510	9.21	4.8	4.20	5.10	A+	A+++	4.14
	13	10	05	-	-	4.20	3.20	2.00	-	-	2.0	9.4	12.6	440	2250	3650	10.18	5.3	4.20	5.10	A+	A+++	4.18
	16	10	05	-	-	5.50	3.20	2.00	-	-	2.1	10.7	13.8	440	2530	3990	11.44	6.1	4.20	5.10	A+	A+++	4.23
	18	10	05	-	-	6.00	3.20	2.00	-	-	2.1	11.2	13.8	460	2630	3990	11.89	6.3	4.20	5.20	A+	A+++	4.26
	22	10	05	-	-	6.89	3.15	1.97	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	05	-	-	7.27	2.91	1.82	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	05	-	-	4.20	4.20	2.00	-	-	2.1	10.4	13.1	440	2460	3790	11.12	5.9	4.20	5.10	A+	A+++	4.23
	16	13	05	-	-	5.50	4.20	2.00	-	-	2.2	11.7	14.2	440	2740	4100	12.38	6.6	4.20	5.30	A+	A+++	4.27
	18	13	05	-	-	5.90	4.13	1.97	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	05	-	-	6.36	3.82	1.82	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	05	-	-	6.76	3.55	1.69	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	05	-	-	5.08	5.08	1.85	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	05	-	-	5.33	4.89	1.78	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	05	-	-	5.79	4.55	1.66	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	05	-	-	6.19	4.26	1.55	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	05	-	-	5.14	5.14	1.71	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	05	-	-	5.60	4.80	1.60	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	05	-	-	6.00	4.50	1.50	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	22	05	-	-	5.25	5.25	1.50	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	22	05	-	-	5.65	4.94	1.41	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	24	05	-	-	5.33	5.33	1.33	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	07	07	07	-	-	2.50	2.50	2.50	-	-	1.8	7.5	10.8	440	1840	3150	8.37	4.3	4.20	5.30	A+	A+++	4.08
	10	07	07	-	-	3.20	2.50	2.50	-	-	1.9	8.2	12.0	440	1990	3480	9.03	4.6	4.20	5.10	A+	A+++	4.12
	13	07	07	-	-	4.20	2.50	2.50	-	-	2.0	9.2	12.5	440	2200	3630	9.96	5.2	4.20	5.10	A+	A+++	4.18
	16	07	07	-	-	5.50	2.50	2.50	-	-	2.1	10.5	13.7	440	2480	3960	11.21	6.0	4.20	5.10	A+	A+++	4.23
	18	07	07	-	-	6.00	2.50	2.50	-	-	2.1	11.0	13.7	460	2590	3960	11.71	6.2	4.20	5.10	A+	A+++	4.25
	22	07	07	-	-	7.00	2.50	2.50	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	07	07	-	-	7.38	2.31	2.31	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	07	-	-	3.20	3.20	2.50	-	-	1.9	8.9	13.2	440	2140	3820	9.70	5.0	4.20	5.10	A+	A+++	4.16
	13	10	07	-	-	4.20	3.20	2.50	-	-	2.0	9.9	13.7	440	2350	3960	10.63	5.6	4.20	5.10	A+	A+++	4.21
	16	10	07	-	-	5.50	3.20	2.50	-	-	2.1	11.2	14.2	440	2630	4100	11.89	6.3	4.20	5.20	A+	A+++	4.26
	18	10	07	-	-	6.00	3.20	2.50	-	-	2.2	11.7	14.2	460	2740	4100	12.38	6.6	4.20	5.30	A+	A+++	4.27
	22	10	07	-	-	6.61	3.02	2.36	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	07	-	-	7.01	2.80	2.19	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	07	-	-	4.20	4.20	2.50	-	-	2.1	10.9	14.2	440	2570	4100	11.62	6.2	4.20	5.10	A+	A+++	4.24
	16	13	07	-	-	5.41	4.13	2.46	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	07	-	-	5.67	3.97	2.36	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	07	-	-	6.13	3.68	2.19	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	07	-	-	6.53	3.43	2.04	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	07	-	-	4.89	4.89	2.22	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	07	-	-	5.14	4.71	2.14	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	07	-	-	5.60	4.40	2.00	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	07	-	-	6.00	4.13	1.88	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	07	-	-	4.97	4.97	2.07	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	07	-	-	5.42	4.65	1.94	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	07	-	-	5.82	4.36	1.82	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	22	07	-	-	5.09	5.09	1.82	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	22	07	-	-	5.49	4.80	1.71	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	24	07	-	-	5.19	5.19	1.62	-	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	10	-	-	3.20	3.20	3.20	-	-	2.0	9.6	14.2	440	2290	4100	10.36	5.4	4.20	5.10	A+	A+++	4.19
	13	10	10	-	-	4.20	3.20	3.20	-	-	2.1	10.6	14.2	440	2500	4100	11.30	6.0	4.20	5.10	A+	A+++	4.24
	16	10	10	-	-	5.50	3.20	3.20	-	-	2.2	11.9	14.2	440	2780	4100	12.57	6.7	4.20	5.10	A+	A+++	4.28
	18	10	10	-	-	5.81	3.10	3.10	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	10	10	-	-	6.27	2.87	2.87	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	10	-	-	6.67	2.67	2.67	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	10	-	-	4.20	4.20	3.20	-	-	2.2	11.6	14.2	440	2720	4100	12.29	6.6	4.20	5.30	A+	A+++	4.26
	16	13	10	-	-	5.12	3.91	2.98	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	10	-	-	5.37	3.76	2.87	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	10	-	-	5.83	3.50	2.67	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	10	-	-	6.23	3.27	2.49	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	10	-	-	4.65	4.65	2.70	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	10	-	-	4.90	4.49	2.61	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	10	-	-	5.35	4.20	2.45	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	10	-	-	5.75	3.95	2.30	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	10	-	-	4.74	4.74	2.53	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	10	-	-	5.19	4.44	2.37	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	10	-	-	5.58	4.19	2.23	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	22	10	-	-	4.88	4.88	2.23	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	22	10	-	-	5.27	4.62	2.11	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	24	10	-	-	5.00	5.00	2.00	-	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	13	-	-	4.00	4.00	4.00	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	13	-	-	4.75	3.63	3.63	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	13	-	-	5.00	3.50	3.50	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E - Performances in Heating mode

Operating status	Combination					Unit capacity (kW)					Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10			Label*		COP
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V																							
3 units operations	22	13	13	-	-	5.45	3.27	3.27	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	13	-	-	5.85	3.07	3.07	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	13	-	-	4.34	4.34	3.32	-	-	2.2	12.0	14.2	440	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	13	-	-	4.59	4.20	3.21	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	13	-	-	5.03	3.95	3.02	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	13	-	-	5.42	3.73	2.85	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	13	-	-	4.44	4.44	3.11	-	-	2.2	12.0	14.2	480	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	13	-	-	4.88	4.19	2.93	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	13	-	-	5.27	3.96	2.77	-	-	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	16	-	-	4.00	4.00	4.00	-	-	2.2	12.0	14.2	460	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
4 units operations	05	05	05	05	-	2.00	2.00	2.00	2.00	-	1.8	8.0	10.0	490	1940	2920	8.81	4.5	4.20	5.10	A+	A+++	4.12
	07	05	05	05	-	2.50	2.00	2.00	2.00	-	1.9	8.5	11.1	490	2050	3230	9.30	4.8	4.20	5.10	A+	A+++	4.15
	10	05	05	05	-	3.20	2.00	2.00	2.00	-	2.0	9.2	12.3	490	2200	3570	9.96	5.2	4.20	5.10	A+	A+++	4.18
	13	05	05	05	-	4.20	2.00	2.00	2.00	-	2.0	10.2	12.8	490	2420	3710	10.94	5.8	4.20	5.10	A+	A+++	4.21
	16	05	05	05	-	5.50	2.00	2.00	2.00	-	2.2	11.5	14.0	510	2700	4050	12.20	6.5	4.20	5.20	A+	A+++	4.26
	18	05	05	05	-	6.00	2.00	2.00	2.00	-	2.2	12.0	14.0	530	2800	4050	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	05	05	05	-	6.46	1.85	1.85	1.85	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	05	05	05	-	6.86	1.71	1.71	1.71	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	07	07	05	05	-	2.50	2.50	2.00	2.00	-	1.9	9.0	12.2	490	2160	3540	9.78	5.1	4.20	5.10	A+	A+++	4.17
	10	07	05	05	-	3.20	2.50	2.00	2.00	-	2.0	9.7	13.4	490	2310	3880	10.45	5.5	4.20	5.10	A+	A+++	4.20
	13	07	05	05	-	4.20	2.50	2.00	2.00	-	2.1	10.7	13.9	510	2530	4020	11.44	6.1	4.20	5.10	A+	A+++	4.23
	16	07	05	05	-	5.50	2.50	2.00	2.00	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	07	05	05	-	5.76	2.40	1.92	1.92	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	07	05	05	-	6.22	2.22	1.78	1.78	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	07	05	05	-	6.62	2.07	1.66	1.66	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	05	05	-	3.20	3.20	2.00	2.00	-	2.1	10.4	14.2	490	2460	4100	11.12	5.9	4.20	5.10	A+	A+++	4.23
	13	10	05	05	-	4.20	3.20	2.00	2.00	-	2.2	11.4	14.2	510	2680	4100	12.11	6.5	4.20	5.20	A+	A+++	4.25
	16	10	05	05	-	5.20	3.02	1.89	1.89	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	10	05	05	-	5.45	2.91	1.82	1.82	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	10	05	05	-	5.92	2.70	1.69	1.69	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	05	05	-	6.32	2.53	1.58	1.58	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	05	05	-	4.06	4.06	1.94	1.94	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	05	05	-	4.82	3.68	1.75	1.75	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	05	05	-	5.07	3.55	1.69	1.69	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	05	05	-	5.53	3.32	1.58	1.58	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	05	05	-	5.93	3.11	1.48	1.48	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	05	05	-	4.40	4.40	1.60	1.60	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	05	05	-	4.65	4.26	1.55	1.55	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	05	05	-	5.09	4.00	1.45	1.45	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	05	05	-	5.49	3.77	1.37	1.37	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	05	05	-	4.50	4.50	1.50	1.50	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	05	05	-	4.94	4.24	1.41	1.41	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	05	05	-	5.33	4.00	1.33	1.33	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	22	05	05	-	4.67	4.67	1.33	1.33	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	07	07	07	05	-	2.50	2.50	2.50	2.00	-	2.0	9.5	13.3	510	2270	3850	10.27	5.4	4.20	5.10	A+	A+++	4.19
	10	07	07	05	-	3.20	2.50	2.50	2.00	-	2.0	10.2	14.2	510	2420	4100	10.94	5.8	4.20	5.10	A+	A+++	4.21
	13	07	07	05	-	4.20	2.50	2.50	2.00	-	2.1	11.2	14.2	510	2630	4100	11.89	6.3	4.20	5.10	A+	A+++	4.26
	16	07	07	05	-	5.28	2.40	2.40	1.92	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	07	07	05	-	5.54	2.31	2.31	1.85	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	07	07	05	-	6.00	2.14	2.14	1.71	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	07	07	05	-	6.40	2.00	2.00	1.60	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	07	05	-	3.20	3.20	2.50	2.00	-	2.1	10.9	14.2	510	2570	4100	11.62	6.2	4.20	5.10	A+	A+++	4.24
	13	10	07	05	-	4.20	3.20	2.50	2.00	-	2.2	11.9	14.2	510	2780	4100	12.57	6.7	4.30	5.30	A+	A+++	4.28
	16	10	07	05	-	5.00	2.91	2.27	1.82	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	10	07	05	-	5.26	2.80	2.19	1.75	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	10	07	05	-	5.71	2.61	2.04	1.63	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	07	05	-	6.11	2.45	1.91	1.53	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	07	05	-	3.91	3.91	2.33	1.86	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	07	05	-	4.65	3.55	2.11	1.69	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	07	05	-	4.90	3.43	2.04	1.63	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	07	05	-	5.35	3.21	1.91	1.53	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	07	05	-	5.75	3.02	1.80	1.44	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	07	05	-	4.26	4.26	1.94	1.55	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	07	05	-	4.50	4.13	1.88	1.50	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	07	05	-	4.94	3.88	1.76	1.41	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	07	05	-	4.36	4.36	1.82	1.45	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	07	05	-	4.80	4.11	1.71	1.37	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	10	05	-	3.20	3.20	3.20	2.00	-	2.2	11.6	14.2	510	2720	4100	12.29	6.6	4.20	5.20	A+	A+++	4.26
	13	10	10	05	-	4.00	3.05	3.05	1.90	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	10	10	05	-	4.75	2.76	2.76	1.73	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	10	10	05	-	5.00	2.67	2.67	1.67	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	10	10	05	-	5.45	2.49	2.49	1.56	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	10	05	-	5.85	2.34	2.34	1.46	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	10	05	-	3.71	3.71	2.82	1.76	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	10	05	-	4.43	3.38	2.58	1.61	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	10	05	-	4.68	3.27	2.49	1.56	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	10	05	-	5.12	3.07	2.34	1.46	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	10	05	-	4.07	4.07	2.37	1.48	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	10	05	-	4.31	3.95	2.30	1.44	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	10	05	-	4.19	4.19	2.23	1.40	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	13	05	-	3.45	3.45	3.45	1.64	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	13	05	-	4.15	3.17	3.17	1.51	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	13	05	-	4.39	3.07	3.07	1.46	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	13	05	-	3.84	3.84	2.93	1.40	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	07	07	07	07	-	2.50	2.50	2.50	2.50	-	2.0	10.0	14.2	510	2370	4100	10.72	5.7	4.20	5.10	A+	A+++	4.22
	10	07	07	07	-	3.20	2.50	2.50	2.50	-	2.1	10.7	14.2	510	2530	4100	11.44	6.1	4.20	5.10	A+	A+++	4.23
	13	07	07	07	-	4.20	2.50	2.50	2.50	-	2.2	11.7	14.2	510	2740	4100	12.38	6.6	4.20	5.20	A+	A+++	4.27
	16	07	07	07	-	5.08	2.31	2.31	2.31	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	07	07	07	-	5.33	2.22	2.22	2.22	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	07	07	07	-	5.79	2.07	2.07	2.07	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	07	07	07	-	6.19	1.94	1.94	1.94	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	07	07	-	3.20	3.20	2.50	2.50	-	2.2	11.4	14.2	510	2680	4100	12.11	6.5	4.20	5.20	A+	A+++	4.25
	13	10	07	07	-	4.06	3.10	2.42	2.42	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	10	07	07	-	4.82	2.80	2.19	2.19	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	10	07	07	-	5.07	2.70	2.11	2.11	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	10	07	07	-	5.53	2.53	1.97	1.97	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	07	07	-	5.93	2.37	1.85	1.85	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	07	07	-	3.76	3.76	2.24	2.24	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	07	07	-	4.49	3.43	2.04	2.04	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E - Performances in Heating mode

Operating status	Combination					Unit capacity (kW)					Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10			Label*		COP
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V																							
4 units operations	18	13	07	07	-	4.74	3.32	1.97	1.97	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	07	07	-	5.19	3.11	1.85	1.85	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	07	07	-	5.58	2.93	1.74	1.74	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	07	07	-	4.13	4.13	1.88	1.88	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	07	07	-	4.36	4.00	1.82	1.82	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	07	07	-	4.80	3.77	1.71	1.71	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	07	07	-	5.19	3.57	1.62	1.62	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	07	07	-	4.24	4.24	1.76	1.76	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	07	07	-	4.67	4.00	1.67	1.67	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	07	07	-	5.05	3.79	1.58	1.58	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	10	07	-	3.17	3.17	3.17	2.48	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	10	10	07	-	3.85	2.93	2.93	2.29	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	10	10	07	-	4.58	2.67	2.67	2.08	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	10	10	07	-	4.83	2.58	2.58	2.01	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	10	10	07	-	5.28	2.42	2.42	1.89	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	10	07	-	5.68	2.27	2.27	1.78	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	10	07	-	3.57	3.57	2.72	2.13	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	10	07	-	4.29	3.27	2.49	1.95	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	10	07	-	4.53	3.17	2.42	1.89	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	10	07	-	4.97	2.98	2.27	1.78	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	10	07	-	5.36	2.82	2.15	1.68	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	10	07	-	3.95	3.95	2.30	1.80	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	10	07	-	4.19	3.84	2.23	1.74	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	10	07	-	4.62	3.63	2.11	1.65	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	10	07	-	5.00	3.44	2.00	1.56	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	10	07	-	4.07	4.07	2.17	1.69	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	10	07	-	4.49	3.85	2.05	1.60	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	10	07	-	4.87	3.65	1.95	1.52	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	13	07	-	3.34	3.34	3.34	1.99	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	13	07	-	4.02	3.07	3.07	1.83	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	13	07	-	4.26	2.98	2.98	1.78	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	13	07	-	4.69	2.82	2.82	1.68	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	13	07	-	5.08	2.67	2.67	1.59	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	13	07	-	3.73	3.73	2.85	1.69	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	13	07	-	3.96	3.63	2.77	1.65	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	13	07	-	4.38	3.44	2.63	1.56	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	13	07	-	4.75	3.27	2.50	1.49	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	13	07	-	3.85	3.85	2.70	1.60	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	13	07	-	4.26	3.65	2.56	1.52	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	13	07	-	4.64	3.48	2.43	1.45	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	10	10	-	3.00	3.00	3.00	3.00	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	10	10	10	-	3.65	2.78	2.78	2.78	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	10	10	10	-	4.37	2.54	2.54	2.54	-	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	10	10	10	-	4.62	2.46	2.46	2.46	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	10	10	10	-	5.06	2.31	2.31	2.31	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	10	10	10	-	5.45	2.18	2.18	2.18	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	10	10	-	3.41	3.41	2.59	2.59	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	10	10	-	4.10	3.13	2.39	2.39	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	10	10	-	4.34	3.04	2.31	2.31	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	10	10	-	4.77	2.86	2.18	2.18	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	10	10	-	5.16	2.71	2.06	2.06	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	10	10	-	3.79	3.79	2.21	2.21	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	10	10	-	4.02	3.69	2.15	2.15	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	10	10	-	4.44	3.49	2.03	2.03	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	10	10	-	4.82	3.32	1.93	1.93	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	10	10	-	3.91	3.91	2.09	2.09	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	10	10	-	4.33	3.71	1.98	1.98	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	10	10	-	4.71	3.53	1.88	1.88	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	13	10	-	3.19	3.19	3.19	2.43	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	13	10	-	3.86	2.95	2.95	2.25	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	13	10	-	4.09	2.86	2.86	2.18	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	13	10	-	4.52	2.71	2.71	2.06	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	13	10	-	4.90	2.57	2.57	1.96	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	13	10	-	3.59	3.59	2.74	2.09	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	13	10	-	3.81	3.49	2.67	2.03	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	13	10	-	4.22	3.32	2.53	1.93	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	13	10	-	4.59	3.16	2.41	1.84	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	13	10	-	3.71	3.71	2.60	1.98	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	13	10	-	4.12	3.53	2.47	1.88	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	13	10	-	4.49	3.36	2.36	1.79	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	13	13	-	3.00	3.00	3.00	3.00	-	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	13	13	-	3.65	2.78	2.78	2.78	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	13	13	13	-	3.87	2.71	2.71	2.71	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	13	13	13	-	4.29	2.57	2.57	2.57	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	13	13	13	-	4.66	2.45	2.45	2.45	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	16	13	13	-	3.40	3.40	2.60	2.60	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	16	13	13	-	3.62	3.32	2.53	2.53	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	16	13	13	-	4.02	3.16	2.41	2.41	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	16	13	13	-	4.38	3.01	2.30	2.30	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	18	13	13	-	3.53	3.53	2.47	2.47	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	22	18	13	13	-	3.93	3.36	2.36	2.36	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	24	18	13	13	-	4.29	3.21	2.25	2.25	-	2.2	12.0	14.2	540	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
5 units operations	05	05	05	05	05	2.00	2.00	2.00	2.00	2.00	2.0	10.0	12.5	490	2370	3630	10.72	5.7	4.10	4.90	A+	A++	4.22
	07	05	05	05	05	2.50	2.00	2.00	2.00	2.00	2.1	10.5	13.6	490	2480	3940	11.21	6.0	4.10	5.00	A+	A++	4.23
	10	05	05	05	05	3.20	2.00	2.00	2.00	2.00	2.1	11.2	14.2	490	2630	4100	11.89	6.3	4.20	5.10	A+	A+++	4.26
	13	05	05	05	05	4.13	1.97	1.97	1.97	1.97	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	05	05	05	05	4.89	1.78	1.78	1.78	1.78	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	05	05	05	05	5.14	1.71	1.71	1.71	1.71	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	07	07	05	05	05	2.50	2.50	2.00	2.00	2.00	2.1	11.0	14.2	490	2590	4100	11.71	6.2	4.20	5.10	A+	A+++	4.25
	10	07	05	05	05	3.20	2.50	2.00	2.00	2.00	2.2	11.7	14.2	490	2740	4100	12.38	6.6	4.20	5.20	A+	A+++	4.27
	13	07	05	05	05	3.97	2.36	1.89	1.89	1.89	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	07	05	05	05	4.71	2.14	1.71	1.71	1.71	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	07	05	05	05	4.97	2.07	1.66	1.66	1.66	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	10	10	05	05	05	3.10	3.10	1.94	1.94	1.94	2.2	12.0	14.2	490	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	10	05	05	05	3.76	2.87	1.79	1.79	1.79	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	10	05	05	05	4.49	2.61	1.63	1.63	1.63	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	18	10	05	05	05	4.74	2.53	1.58	1.58	1.58	2.2	12.0	14.2	530	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	13	13	05	05	05	3.50	3.50	1.67	1.67	1.67	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29
	16	13	05	05	05	4.20	3.21	1.53	1.53	1.53	2.2	12.0	14.2	510	2800	4100	12.66	6.8	4.30	5.30	A+	A+++	4.29

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34G3AVG-E - Performances in Heating mode

Operating status	Combination					Unit capacity (kW)					Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10			Label*		COP
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	18	13	05	05	05	4,44	3,11	1,48	1,48	1,48	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	05	05	05	3,88	3,88	1,41	1,41	1,41	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	16	05	05	05	4,11	3,77	1,37	1,37	1,37	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	18	05	05	05	4,00	4,00	1,33	1,33	1,33	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	07	07	07	05	05	2,50	2,50	2,50	2,00	2,00	2,2	11,5	14,2	490	2700	4100	12,20	6,5	4,20	5,20	A+	A+++	4,26
	10	07	07	05	05	3,15	2,46	2,46	1,97	1,97	2,2	12,0	14,2	490	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	07	07	05	05	3,82	2,27	2,27	1,82	1,82	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	07	07	05	05	4,55	2,07	2,07	1,66	1,66	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	07	07	05	05	4,80	2,00	2,00	1,60	1,60	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	07	05	05	2,98	2,98	2,33	1,86	1,86	2,2	12,0	14,2	490	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	07	05	05	3,63	2,76	2,16	1,73	1,73	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	07	05	05	4,34	2,53	1,97	1,58	1,58	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	10	07	05	05	4,59	2,45	1,91	1,53	1,53	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	07	05	05	3,38	3,38	2,01	1,61	1,61	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	07	05	05	4,07	3,11	1,85	1,48	1,48	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	07	05	05	4,31	3,02	1,80	1,44	1,44	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	07	05	05	3,77	3,77	1,71	1,37	1,37	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	16	07	05	05	4,00	3,67	1,67	1,33	1,33	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	10	05	05	2,82	2,82	2,82	1,76	1,76	2,2	12,0	14,2	490	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	10	05	05	3,45	2,63	2,63	1,64	1,64	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	10	05	05	4,15	2,42	2,42	1,51	1,51	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	10	10	05	05	4,39	2,34	2,34	1,46	1,46	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	10	05	05	3,23	3,23	2,46	1,54	1,54	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	07	07	07	07	05	2,50	2,50	2,50	2,50	2,00	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	07	07	07	05	3,02	2,36	2,36	2,36	1,89	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	07	07	07	05	3,68	2,19	2,19	2,19	1,75	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	07	07	07	05	4,40	2,00	2,00	2,00	1,60	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	07	07	07	05	4,65	1,94	1,94	1,94	1,55	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	07	07	05	2,87	2,87	2,24	2,24	1,79	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	07	07	05	3,50	2,67	2,08	2,08	1,67	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	07	07	05	4,20	2,45	1,91	1,91	1,53	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	10	07	07	05	4,44	2,37	1,85	1,85	1,48	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	07	07	05	3,27	3,27	1,95	1,95	1,56	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	07	07	05	3,95	3,02	1,80	1,80	1,44	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	10	07	05	2,72	2,72	2,72	2,13	1,70	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	10	07	05	3,34	2,54	2,54	1,99	1,59	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	10	07	05	4,02	2,34	2,34	1,83	1,46	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	10	10	05	2,59	2,59	2,59	2,59	1,62	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	07	07	07	07	07	2,40	2,40	2,40	2,40	2,40	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	07	07	07	07	2,91	2,27	2,27	2,27	2,27	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	07	07	07	07	3,55	2,11	2,11	2,11	2,11	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	07	07	07	07	4,26	1,94	1,94	1,94	1,94	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	07	07	07	07	4,50	1,88	1,88	1,88	1,88	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	07	07	07	2,76	2,76	2,16	2,16	2,16	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	07	07	07	3,38	2,58	2,01	2,01	2,01	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	07	07	07	4,07	2,37	1,85	1,85	1,85	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	10	07	07	07	4,31	2,30	1,80	1,80	1,80	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	07	07	07	3,17	3,17	1,89	1,89	1,89	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
5 units operations	16	13	07	07	07	3,84	2,93	1,74	1,74	1,74	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	07	07	07	4,07	2,85	1,69	1,69	1,69	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	07	07	07	3,57	3,57	1,62	1,62	1,62	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	16	07	07	07	3,79	3,47	1,58	1,58	1,58	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	10	07	07	2,63	2,63	2,63	2,05	2,05	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	10	07	07	3,23	2,46	2,46	1,92	1,92	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	10	07	07	3,91	2,27	2,27	1,78	1,78	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	10	10	07	07	4,14	2,21	2,21	1,72	1,72	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	10	07	07	3,04	3,04	2,31	1,81	1,81	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	10	07	07	3,69	2,82	2,15	1,68	1,68	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	10	07	07	3,91	2,74	2,09	1,63	1,63	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	10	07	07	3,44	3,44	2,00	1,56	1,56	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	16	10	07	07	3,65	3,35	1,95	1,52	1,52	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	13	07	07	2,86	2,86	2,86	1,70	1,70	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	13	07	07	3,49	2,67	2,67	1,59	1,59	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	13	07	07	3,71	2,60	2,60	1,55	1,55	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	13	07	07	3,27	3,27	2,50	1,49	1,49	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	16	13	07	07	3,48	3,19	2,43	1,45	1,45	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	10	10	07	2,51	2,51	2,51	2,51	1,96	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	10	10	07	3,09	2,36	2,36	2,36	1,84	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	10	10	07	3,75	2,18	2,18	2,18	1,70	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	10	10	10	07	3,98	2,12	2,12	2,12	1,66	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	10	10	07	2,91	2,91	2,22	2,22	1,73	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	10	10	07	3,55	2,71	2,06	2,06	1,61	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	10	10	07	3,77	2,64	2,01	2,01	1,57	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	10	10	07	3,32	3,32	1,93	1,93	1,51	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	13	10	07	2,75	2,75	2,75	2,10	1,64	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	13	10	07	3,37	2,57	2,57	1,96	1,53	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	13	10	07	3,58	2,51	2,51	1,91	1,49	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	13	10	07	3,16	3,16	2,41	1,84	1,44	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	13	13	07	2,61	2,61	2,61	2,61	1,55	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	13	13	07	3,20	2,45	2,45	2,45	1,46	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	13	13	07	3,41	2,39	2,39	2,39	1,42	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	13	13	07	3,01	3,01	2,30	2,30	1,37	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	10	10	10	10	10	2,40	2,40	2,40	2,40	2,40	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	10	10	10	10	2,96	2,26	2,26	2,26	2,26	2,2	12,0	14,2	510	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	10	10	10	10	3,61	2,10	2,10	2,10	2,10	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	10	10	10	10	3,83	2,04	2,04	2,04	2,04	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	10	10	10	2,80	2,80	2,13	2,13	2,13	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	10	10	10	3,42	2,61	1,99	1,99	1,99	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	10	10	10	3,64	2,55	1,94	1,94	1,94	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	10	10	10	3,20	3,20	1,86	1,86	1,86	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	13	10	10	2,65	2,65	2,65	2,02	2,02	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	13	10	10	3,25	2,48	2,48	1,89	1,89	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	13	10	10	3,46	2,42	2,42	1,85	1,85	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	13	10	10	3,06	3,06	2,33	1,78	1,78	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	13	13	10	2,52	2,52	2,52	2,52	1,92	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	13	13	13	10	3,10	2,37	2,37	2,37	1,80	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	18	13	13	13	10	3,30	2,31	2,31	2,31	1,76	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	16	16	13	13	10	2,92	2,92	2,23	2,23	1,70	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
	13	13	13	13	13	2,40	2,40	2,40	2,40	2,40	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29

(*) The energy efficiency class range of this product category is D→A+++

RAS-5M34U2AVG-E - Performances in Heating mode

	Operating status	Combination					Unit capacity (kW)					Heating capacity (kW)			Power input (W)			Operating current (A)	Lot.10			Label*		COP
		Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Nom.	Max.	Min.	Nom.	Max.	Nom.	Pdh	SCOP	SCOP Warm climate	Average climate	Warm climate	Nom.
Heating, 230 V	5 units operations	16	13	13	13	13	2,96	2,26	2,26	2,26	2,26	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	05	05	05	05	5,60	1,60	1,60	1,60	1,60	2,2	12,0	14,2	530	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	05	05	05	05	6,00	1,50	1,50	1,50	1,50	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	07	05	05	05	5,42	1,94	1,55	1,55	1,55	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	07	05	05	05	5,82	1,82	1,45	1,45	1,45	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	05	05	05	5,19	2,37	1,48	1,48	1,48	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	05	05	05	5,58	2,23	1,40	1,40	1,40	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	05	05	05	4,88	2,93	1,40	1,40	1,40	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	05	05	05	5,27	2,77	1,32	1,32	1,32	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	07	07	05	05	5,25	1,88	1,88	1,50	1,50	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	07	07	05	05	5,65	1,76	1,76	1,41	1,41	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	07	05	05	5,03	2,30	1,80	1,44	1,44	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	07	05	05	5,42	2,17	1,69	1,36	1,36	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	07	05	05	4,75	2,85	1,69	1,36	1,36	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	07	05	05	5,13	2,70	1,60	1,28	1,28	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	10	05	05	4,83	2,21	2,21	1,38	1,38	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	10	05	05	5,22	2,09	2,09	1,30	1,30	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	10	05	05	4,57	2,74	2,09	1,30	1,30	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	10	05	05	4,95	2,60	1,98	1,24	1,24	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	05	05	4,33	2,60	2,60	1,24	1,24	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	13	05	05	4,71	2,47	2,47	1,18	1,18	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	07	07	07	05	5,09	1,82	1,82	1,82	1,45	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	07	07	07	05	5,49	1,71	1,71	1,71	1,37	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	07	07	05	4,88	2,23	1,74	1,74	1,40	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	07	07	05	5,27	2,11	1,65	1,65	1,32	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	07	07	05	4,62	2,77	1,65	1,65	1,32	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	07	07	05	5,00	2,63	1,56	1,56	1,25	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	10	07	05	4,69	2,15	2,15	1,68	1,34	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	10	07	05	5,08	2,03	2,03	1,59	1,27	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	10	07	05	4,44	2,67	2,03	1,59	1,27	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	10	07	05	4,82	2,53	1,93	1,51	1,21	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	07	05	4,22	2,53	2,53	1,51	1,21	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	13	07	05	4,59	2,41	2,41	1,44	1,15	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	10	10	05	4,52	2,06	2,06	2,06	1,29	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	10	10	05	4,90	1,96	1,96	1,96	1,22	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	10	10	05	4,29	2,57	1,96	1,96	1,22	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	10	10	05	4,66	2,45	1,86	1,86	1,17	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	10	05	4,08	2,45	2,45	1,86	1,17	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	13	10	05	4,44	2,33	2,33	1,78	1,11	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	13	05	3,89	2,33	2,33	2,33	1,11	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	07	07	07	07	4,94	1,76	1,76	1,76	1,76	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	07	07	07	07	5,33	1,67	1,67	1,67	1,67	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	07	07	07	4,75	2,17	1,69	1,69	1,69	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	07	07	07	5,13	2,05	1,60	1,60	1,60	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	07	07	07	4,49	2,70	1,60	1,60	1,60	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	07	07	07	4,87	2,56	1,52	1,52	1,52	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	10	07	07	4,57	2,09	2,09	1,63	1,63	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	10	07	07	4,95	1,98	1,98	1,55	1,55	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	10	07	07	4,33	2,60	1,98	1,55	1,55	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	10	07	07	4,71	2,47	1,88	1,47	1,47	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	07	07	4,12	2,47	2,47	1,47	1,47	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	13	07	07	4,49	2,36	2,36	1,40	1,40	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	10	10	07	4,40	2,01	2,01	2,01	1,57	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	10	10	07	4,78	1,91	1,91	1,91	1,49	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	10	10	07	4,18	2,51	1,91	1,91	1,49	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	10	10	07	4,55	2,39	1,82	1,82	1,42	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	10	07	3,98	2,39	2,39	1,82	1,42	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	13	10	07	4,34	2,28	2,28	1,74	1,36	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	13	07	3,80	2,28	2,28	2,28	1,36	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	10	10	10	10	4,24	1,94	1,94	1,94	1,94	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	10	10	10	10	4,62	1,85	1,85	1,85	1,85	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	10	10	10	4,04	2,42	1,85	1,85	1,85	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		24	13	10	10	10	4,40	2,31	1,76	1,76	1,76	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29
		22	13	13	10	10	3,85	2,31	2,31	1,76	1,76	2,2	12,0	14,2	540	2800	4100	12,66	6,8	4,30	5,30	A+	A+++	4,29

(*) The energy efficiency class range of this product category is D➞A+++

RESIDENTIAL LIGHT COMMERCIAL BUSINESS RESIDENTIAL

Solutions for professionals, by professionals

Toshiba Air Conditioning offers three ranges: Digital Inverter Classic, Digital Inverter and Super Digital Inverter systems that provide outstanding operating savings and extremely compact units. With state-of-the-art technologies, flexible controls and improved installation, they ensure comfort and convenience for all business installations.

A complete range of indoor units to suit all commercial applications: ceiling, cassette, ducted, suspended and high-wall. The range has been expanded with maximum cooling capacities of up to 27kW to benefit additional commercial applications with larger volumes.

LIGHT COMMERCIAL

INVERTER SYSTEMS

WHEN THE INVERTER BECOMES DIGITAL

Toshiba Air Conditioning technologies recreate from power supply signal the ideal wave at the right frequency to efficiently drive the compressor.

ALLIANCE OF HIGH PERFORMANCES AND LOW POWER COMSUMPTION

Digital Inverter Classic, Digital Inverter and Super Digital Inverter are able to satisfy any application requirements. They provide strong capacity, low power consumption, best comfort and reduced energy waste.

EXTREMELY FLEXIBLE

Featuring the most compact chassis, Digital and Super Digital Inverter use advanced technologies such as DC hybrid control & Twin rotary compressor to operate smoothly from -27 to 52°C no matter the ambiance.

Created by Toshiba – Inverter technology

- SEER up to **9.4**
- SCOP up to **5.5**
- 10 sizes covering 2.5 to 22.5kW (Cooling) 3.4 to 27kW (Heating)
- Silent operation — CDU down to **38 dB(A)**
- Available in 1Ph and 3Ph

EUROVENT CERTIFIED PERFORMANCE

R32 REFRIGERANT

CHOOSE YOUR ADAPTED SYSTEM SOLUTION CHOOSE A SYSTEM SOLUTION THAT SUITS YOUR NEEDS

				CAPACITY IN HP										
				1	1,5	2	3	3,5	4	5	6	8	10	Split
				1Ph					1Ph & 3Ph			3Ph		
R32 Outdoor units	Super Digital Inverter	RAV-GP***1AT(8)(W)-E				✔	✔		✔	✔	✔ (3Ph only)			Twin, Triple
	Digital Inverter and Big Digital Inverter	RAV-GM****AT(8)(P/W)-E*		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Twin, Triple, Double Twin
	Digital Inverter classic	RAV-GV***1AT(8)(P)-E				✔	✔		✔	✔	✔			
R32 indoor units	Smart 4-way Cassette	RAV-HM***1UT-E				✔	✔		✔ (1Ph only)	✔ (1Ph only)				
	Standard 4-way Cassette	RAV-HM***1UTP-E				✔	✔	✔	✔	✔	✔			
	Compact 4-way cassette NEW	RAV-HM***1MUTP-E		✔	✔	✔								
	Compact 1-way Cassette	RAV-HM***1U1TP-E		✔	✔									
	Standard duct	RAV-HM***1BTP-E				✔	✔	✔	✔	✔	✔			
	Super Slim duct	RAV-HM***1SDTY-E		✔	✔	✔	✔							
	High-Static duct NEW	RAV-RM***1DTP-E*										✔	✔	
	High-Static duct	RAV-HM***1CTP-E			✔	✔	✔	✔	✔	✔	✔			
	High Wall	RAV-HM***1KRTP-E		✔	✔	✔	✔	✔						
	High-Wall IT Room NEW	RAV-HM**1KRSP-E				✔	✔	✔						
	Floor standing	RAV-HM***1FT-E				✔	✔		✔	✔	✔			
	DX Coil NEW	TCB-IFDLR01UP-E		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	

TOSHIBA

RAV SUPER DIGITAL INVERTER

Super Digital Inverter will maximize your energy savings and keep operating costs to a minimum thanks to Toshiba's legendary Twin Rotary compressors and Vector Controlled Inverter.

Benefit also from all the connectivity and flexibility you have ever dreamt of for guaranteed comfort and exceptional efficiency. Choosing Toshiba's light commercial advanced solutions is the right option for low environmental impact and outstanding durable investments

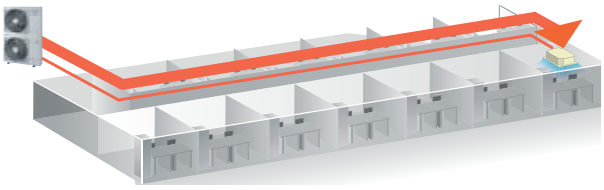
MAXIMUM EFFICIENCY

Very efficient energy consumption, keeps down operating costs : SEER of 9,40 and SCOP of 5,51 achived by Toshiba's unrivalled Super Digital Inverter tehcnologies and newly developped components.

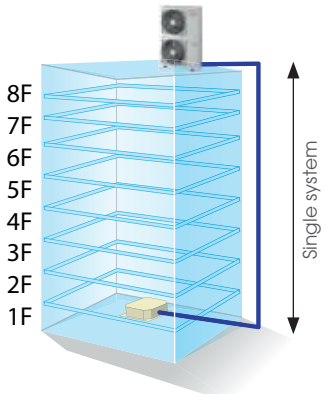
- Top class seasonnal efficiency
- Lower stand-by power
- Energy monitoring
- Wider operating range

PIPING FLEXIBILITY

Super Digital Inverter leads the industry with support for height differences of up to 30 meters on a single system. That is enough height to cover an 8-storey building. Enable the outdoor unit to be installed out of sight increases installation flexibility (only 4 & 5HP).



Farthest equivalent length 75m



Height beetween indoor units 30m

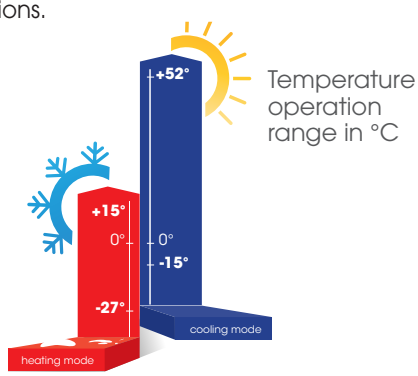
Calculated at 3.5 metres per floor

IDEAL COUPLE: DC TWIN ROTARY COMPRESSOR & VECTOR-CONTROLLED INVERTER

The benefits of inverter technology are further optimised in combination with Toshiba twin-rotary compressors. These allows excellent speed control in the capacity range from 20 to 100% capacity: this is an exclusive Toshiba benefit!

OPERATING TEMPERATURE RANGE

Heater operation is possible starting from an outdoor temperature of -27°C creates a comfortable space even during cold winters, while cooling operation is possible up to 52°C outdoor temperature. This enables wider applications and use of the system in colder regions.



Temperature operation range in °C

RAV
DIGITAL INVERTER

MADE IN EUROPE

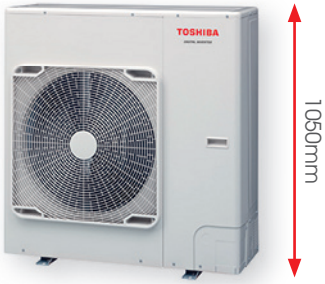
Digital Inverter combines compact chassis outdoor units, unrivalled capacity range and large indoor unit line-up for perfect adaptation to any situation. This is the ultimate high efficiency solution for light commercial applications in terms of product reliability and quality.

SMALL AND LIGHT CHASSIS

Using 1-fan chassis for all sizes, the Digital inverter is extremely compact and can be installed in very small places.

1 HP to 2 HP

3 & 3.5 HP

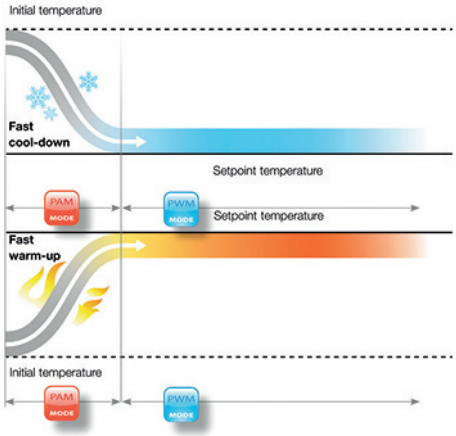


4 HP to 6HP

SMART INVERTER

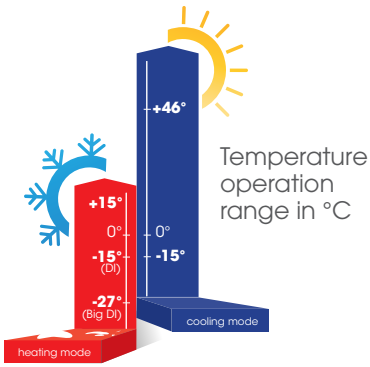
Hybrid inverter control combines two intelligent controls mechanisms to reach the setpoint temperature as quickly as possible with maximum efficiency:
- the PAM mode, quickly achieves high capacity and desired comfort.
- the PWM mode minimises power input to maximise efficiency.

The result: high efficiency level.



OPERATING TEMPERATURE RANGE

Heater operation is possible starting from an outdoor temperature of -15°C (-27°C for Big DI), while cooling operation is possible at -15°C and up to 46°C outdoor temperature.
This enables wider applications and usage of the system everywhere.



WIDE CAPACITY RANGE

9 sizes from 1 HP to 10HP with 1Ph or 3Ph electrical connections to cover every type of projects from the 15m² room to the 200m² shop in both new construction and refurbishment.

		1HP	1.5HP	2HP	3HP	3.5HP	4HP	5HP	6HP	8HP	10HP
R32 REFRIGERANT	1Ph	✔	✔	✔	✔	✔	✔	✔	✔		
	3Ph						✔	✔	✔	✔	✔

TOSHIBA

RAV DIGITAL INVERTER CLASSIC

Digital Inverter Classic offers all of Toshiba Air Conditioning expertise at an affordable cost for a wide range of light commercial applications.

COMPACT CHASSIS

With a width of less than 900mm, the Digital Inverter Classic is extremely compact and can be installed in small places.

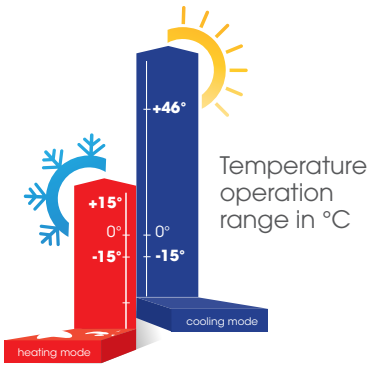
2 & 3HP | 4HP 1ph | 4HP 3ph & 5HP | 6HP

TOSHIBA AIR CONDITIONING EXPERTISE

Twin rotary compressor, heat exchanger or hybrid inverter demonstrate the innovative technology Toshiba has been developing since the 80's making the Digital Inverter Classic a **brilliant** solution.

OPERATING TEMPERATURE RANGE

Heater operation is possible starting from an outdoor temperature of -15°C, while cooling operation is possible at -15°C and up to 46°C outdoor temperature.
This enables wider applications and usage of the system everywhere.



CLASSIC LINEUP

Most light commercial applications are covered thanks to a comprehensive lineup from 2 to 6HP and 1-phase or 3-phase electrical connections.

Capacity	2HP	3HP	4HP	5HP	6HP	Compatible with
Digital Inverter Classic	✔ (1Ph only)	✔ (1Ph only)	✔ (1Ph & 3Ph)	✔ (1Ph & 3Ph)	✔ (1Ph & 3Ph)	4-way cassette, standard duct and high wall.

GP_AT(8)
SUPER DIGITAL INVERTER

Super Digital inverter can provide strong capacity, low power consumption, high comfort and reduced energy waste for commercial projects and large residential applications.

SCOP MAX	CAPACITY	OPERATION
5.51	5kW > 16kW	-27°C > +52°C

Top class efficiency
- High efficiency SCOP of up to 5.51, thanks to Toshiba inverter technology.

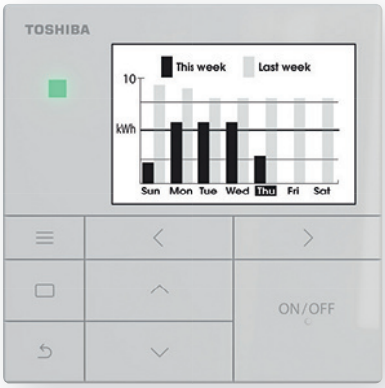
Wide adaptability
- Operating temperature limits from -27°C (Heating) to +52°C (Cooling) allow the system to operate across a wide temperature range.
- Quiet operation.

Flexible
- Can be utilised for single, twin or triple indoor applications.

Easy to maintain
- Removable corner panels for easy access.
- Self-diagnosis function.

> Power consumption analysis embedded when super digital inverter (1Ph only) is combined with the RBC-AMSU52-E

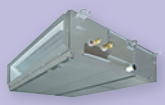
Power consumption (Week)



R32 REFRIGERANT · CE · UKCA · EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

CASSETTE

RAV-HM_UT-E
RAV-HM_UTP-E
RAV-HM_MUTP-E



DUCTED

RAV-HM_BTP-E
RAV-HM_SDTY-E

CEILING

RAV-HM_CTP-E

HIGH-WALL

RAV-HM_KRTP-E
RAV-HM_KRSP-E

FLOOR STANDING

RAV-HM_FT-E

OUTDOOR UNITS

RAV-GP561ATW-E
RAV-GP801ATW-E
RAV-GP1101AT(8)-E
RAV-GP1401AT(8)-E
RAV-GP1601AT8-E

SUPER DIGITAL INVERTER Physical data outdoor - Single phase

Outdoor unit			RAV-GP561ATW-E	RAV-GP801ATW-E	RAV-GP1101AT-E	RAV-GP1401AT-E1
		HP	2	3	4	5
Air flow	m³/h - l/s		2250	3180	6960	6960
Sound pressure level	dB(A)	C	46	46	49	50
Sound power level	dB(A)	C	63	63	66	67
Operating range	°C	C	-15 / 52	-15 / 52	-15 / 52	-15 / 52
Sound pressure level	dB(A)	H	48	48	50	51
Sound power level	dB(A)	H	65	66	67	68
Operating range	°C	H	-27 / 15	-27 / 15	-27 / 15	-27 / 15
Dimensions (HxWxD)	mm		630 x 799 x 299	1050 x 1010 x 370	1550 x 1010 x 370	1550 x 1010 x 370
Weight	kg		45	74	104	104
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections						
Gas	in		1/2	5/8	5/8	5/8
Liquid	in		1/4	3/8	3/8	3/8
Minimum pipe length	m		3	3	3	3
Maximum pipe length	m		50	50	75	75
Maximum height difference	m		30	30	30	30
Chargeless pipe length	m		20	30	30	30
R32 Refrigerant	kg/TCO_2eq		1.35/0.91	1.9/1.28	3.1/2.09	3.1/2.09
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

SUPER DIGITAL INVERTER Physical data outdoor - Three Phase

Outdoor unit			RAV-GP1101AT8-E	RAV-GP1401AT8-E	RAV-GP1601AT8-E
		HP	4	5	6
Air Flow	m³/h - l/s		6060 - 1683	6180 - 1717	6180 - 1717
Sound pressure level	dB(A)	C	49	51	51
Sound power level	dB(A)	C	66	68	68
Operating range	°C	C	-15 / 46	-15 / 46	-15 / 46
Sound pressure level	dB(A)	H	50	52	53
Sound power level	dB(A)	H	67	69	70
Operating range	°C	H	-20 / 15	-20 / 15	-20 / 15
Dimensions (HxWxD)	mm		1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg		95	95	95
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections					
Gas	in		5/8	5/8	5/8
Liquid	in		3/8	3/8	3/8
Minimum pipe length	m		3	3	3
Maximum pipe length	m		75	75	75
Maximum height difference	m		30	30	30
Chargeless pipe length	m		30	30	30
R32 Refrigerant	kg/TCO_2eq		2.6/1.75	2.6/1.75	2.6/1.75
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50	380/415-3N-50

C: cooling mode
H: heating mode

RAV-GP561ATJ-E	Heavy Corrosion Protection
RAV-GP801ATJ-E	Heavy Corrosion Protection
RAV-GP1101ATJ-E	Heavy Corrosion Protection
RAV-GP1401ATJ-E	Heavy Corrosion Protection
RAV-GP1401ATJ-E1	Heavy Corrosion Protection
RAV-GP1101AT8J-E/TR	Heavy Corrosion Protection
RAV-GP1401AT8J-E/TR	Heavy Corrosion Protection
RAV-GP1601AT8J-E/TR	Heavy Corrosion Protection

GM_AT(8)W/P
DIGITAL INVERTER

MADE IN EUROPE

Digital Inverter brings state-of-the-art inverter technology to the commercial sector and offers considerable advantages in terms of capacity, energy savings, optimised control, and lower refrigerant charge. Unique features are also proposed to installers to save time at the installation, commissioning, and maintenance steps.

SCOP MAX	CAPACITY	OPERATION
4.73 A++	2.5kW > 16kW	-15°C > +46°C

Compact
• One-fan compact chassis easy to handle and install.

Wide adaptability
• Compatible with 8 types of indoor units: 4-way cassette, standard duct, high wall, ceiling & floor standing.
• Available in both 1-phase and 3-phase versions connectable to any power supply.
• Up to 50m piping length and 30m height difference for maximized project coverage.

Efficiency & environmental sustainability
• A++ energy efficiency level with Twin Rotary compressor
• Less than 2.4kg of R32 refrigerant pre-charge to help optimize carbon footprint.

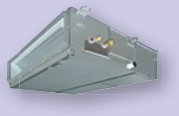
Enjoy new forward-thinking functionalities to keep full control on systems.

- 3-step night mode
- Defrost shift
- Fan stop
- Pressure estimation
- Refrigerant leak check

R32 REFRIGERANT · CE · UKCA · EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

CASSETTE

RAV-HM_UTP-E
RAV-HM_MUTP-E
RAV-HM_U1TP-E



DUCTED

RAV-HM_BTP-E
RAV-HM_SDTY-E

CEILING

RAV-HM_CTP-E

HIGH WALL

RAV-HM_KRTP-E

FLOOR STANDING

RAV-HM_FT-E

OUTDOOR UNITS

RAV-GM302ATP-E
RAV-GM402ATP-E
RAV-GM562ATP-E

RAV-GM802ATW-E
RAV-GM902ATW-E

RAV-GM1102AT(8)W-E
RAV-GM1402AT(8)W-E
RAV-GM1602AT(8)W-E

DIGITAL INVERTER Physical data outdoor - Single phase

Outdoor unit	RAV-		GM302ATP-E	GM402ATP-E	GM562ATP-E	GM802ATW-E	GM902ATW-E	GM1102ATW-E	GM1402ATW-E	GM1602ATW-E
	HP		1	1.5	2	3	3.5	4	5	6
Air Flow	m³/h - l/s		1800 - 500	2200 - 611	2400 - 667	2808 - 780	2808 - 780	4950 -1375	4950 -1375	4950 -1375
Sound pressure level	dB(A)	C	46	49	46	50	52	53	56	57
Sound power level	dB(A)	C	61	64	63	68	68	70	73	74
Operating range	°C	C	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46
Sound pressure level	dB(A)	H	47	50	48	52	55	56	56	56
Sound power level	dB(A)	H	62	65	65	71	71	73	74	74
Operating range	°C	H	-15 / 15	-15 / 15	-15 / 15	-15 / 15	-15 / 15	-15 / 15	-15 / 15	-15 / 15
Dimensions (HxWxD)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	630 x 799 x 299	630 x 799 x 299	1050 x 1010 x 370	1050 x 1010 x 370	1050 x 1010 x 370
Weight	kg		29	34	40	47	47	85	85	88
Compressor type			DC Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections										
Gas	in		3/8	1/2	1/2	5/8	5/8	5/8	5/8	5/8
Liquid	in		1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8
Minimum pipe length	m		2	2	5	5	5	5	5	5
Maximum pipe length	m		20	20	30	50	50	50	50	50
Maximum height difference	m		10	10	30	30	30	30	30	30
Chargeless pipe length	m		15	15	20	20	20	30	30	30
Refrigerant	Type/kg/ TeqCO2		R32 / 0.6 / 0.4	R32 / 0.9 / 0.6	R32 / 0.9 / 0.6	R32 / 1.9 / 1.28	R32 / 1.9 / 1.28	R32 / 2.4 / 1.62	R32 / 2.4 / 1.62	R32 / 2.4 / 1.62
Power supply	V-ph-Hz		220/240-1-50, 220-1-60	220/240-1-50, 220-1-60	220/240-1-50, 220-1-60	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

DIGITAL INVERTER Physical data outdoor - Three phase

Outdoor Unit			RAV-GM1102AT8W-E	RAV-GM1402AT8W-E	RAV-GM1602AT8W-E
	HP		4	5	6
Air Flow	m³/h - l/s		4950 -1375	4950 -1375	4950 -1375
Sound pressure level	dB(A)	C	53	56	57
Sound power level	dB(A)	C	70	73	74
Operating range	°C	C	-15 / 46	-15 / 46	-15 / 46
Sound pressure level	dB(A)	H	56	56	56
Sound power level	dB(A)	H	73	74	74
Operating range	°C	H	-15 / 15	-15 / 15	-15 / 15
Dimensions (HxWxD)	mm		1050 x 1010 x 370	1050 x 1010 x 370	1050 x 1010 x 370
Weight	kg		85	85	85
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections					
Gas	in		5/8	5/8	5/8
Liquid	in		3/8	3/8	3/8
Minimum pipe length	m		5	5	5
Maximum pipe length	m		50	50	50
Maximum height difference	m		30	30	30
Chargeless pipe length	m		30	30	30
Refrigerant	Type/kg/ TeqCO2		R32 / 2.4 / 1.62	R32 / 2.4 / 1.62	R32 / 2.4 / 1.62
Power supply	V-ph-Hz		380/415-3-50	380/415-3-50	380/415-3-50

C: cooling mode
H: heating mode

GM_AT8
BIG DIGITAL INVERTER

Big Digital Inverter combines small footprint and all of Toshiba Air Conditioning's expertise in terms of efficiency, reliability and connectivity to offer energy savings as well as comfort all year round.

SCOP MAX	CAPACITY	OPERATION
3.51	**19**kW > **27**kW	**-27**°C > **+46**°C

High efficiency and energy savings

- Top class SEER/SCOP thanks to exclusive Toshiba's inverter twin-rotary compressor.
- Wide modulating capacity down to 4.6kW to ensure continuous operation whatever the conditions and maximize efficiency.
- Compliance with ERP directive Lot21.

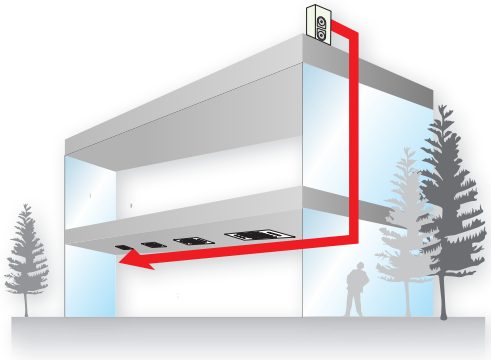
Wide adaptability

- Allows the connection of up to four indoor units (same type, same capacity) to the same oudoor unit.
- Compatible with a large choice of indoor units: 4-way cassette, 4-way compact cassette, slim duct, standard duct, high-wall & ceiling.

Safe and reliable

- Built-in leak detection system.

The installation can reach up to 100 m total piping length and 30 m in elevation.



INDOOR UNITS

RAV-RM-DTP-E2

OUTDOOR UNITS

RAV-GM2241AT8-E1
RAV-GM2801AT8-E1

BIG DIGITAL INVERTER Physical data outdoor - Three Phase

Outdoor unit			RAV-GM2241AT8-E1	RAV-GM2801AT8-E1
		HP	8	10
Air Flow	m³/h - l/s		9150 - 2542	10890 - 3025
Sound pressure level	dB(A)	C	58	61
Sound power level	dB(A)	C	76	78
Operating range	°C	C	-15 / 46	-15 / 46
Sound pressure level	dB(A)	H	60	63
Sound power level	dB(A)	H	76	80
Operating range	°C	H	-27 / 15	-27 / 15
Dimensions (HxWxD)	mm		1550 x 1010 x 370	1550 x 1010 x 370
Weight	kg		142	142
Compressor type			DC Twin Rotary	DC Twin Rotary
Flare connections				
Gas	in		1 1/8	1 1/8
Liquid	in		1/2	1/2
Minimum pipe length	m		5	5
Maximum pipe length	m		100	100
Maximum height difference	m		30	30
Chargeless pipe length	m		30	30
Refrigerant	Type/kg/ TeqCO2		R32 / 5.0 / 7.40	R32 / 5.0 / 7.40
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50

C: cooling mode
H: heating mode

RAV-GM2241AT8J-E1/TR1	Heavy Corrosion Protection
RAV-GM2801AT8J-E1/TR1	Heavy Corrosion Protection

GV_AT(8)P
DIGITAL INVERTER CLASSIC

Digital Inverter Classic offers all of Toshiba Air Conditioning's expertise to provide efficient cooling and heating solutions to the commercial sector. Benefit from numerous advantages in terms of energy savings, optimised control, lower refrigerant charge, and reduced footprint.

Compact
- Full one-fan outdoor unit line-up for strong product positioning flexibility.

Wide adaptability
- Compatible with 3 types of indoor units: 4-way cassette, standard duct, and high wall.
- The complete range is available in 1Ph version and also in 3Ph version from 4HP model and up.

Efficient & environmental oriented
- Toshiba compressor and Toshiba Inverter for high operating efficiency.
- Optimized for R32 refrigerant.

SCOP MAX	CAPACITY	OPERATION
4.20 **A++**	**5.3** kW > **16**kW	**-15**°C > **+46**°C

State-of-the-art compressor featuring a powerful magnetic rotor with a great surface area for increased efficiency and reduced operation noise.

> Efficiency
> Reliability
> 100% Toshiba Air Conditioning

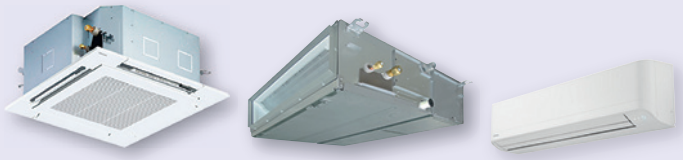
OUTDOOR UNITS

RAV-GV561ATP-E
RAV-GV801ATP-E

RAV-GV1101ATP-E

RAV-GV1101AT8P-E
RAV-GV1401AT(8)P-E

RAV-GV1601AT(8)P-E



CASSETTE

RAV-HM_UTP-E

DUCTED

RAV-HM_BTP-E

HIGH WALL

RAV-HM_KRTP-E

DIGITAL INVERTER CLASSIC Physical data outdoor - Single phase

Outdoor unit			RAV-GV561ATP-E	RAV-GV801ATP-E	RAV-GV1101ATP-E	RAV-GV1401ATP-E	RAV-GV1601ATP-E
		HP	2	3	4	5	6
Air flow	m³/h - l/s		2350 - 653	2700 - 750	2900 - 800	3500 - 972	5000 - 1389
Sound pressure level	dB(A)	C	46	48	51	53	57
Sound power level	dB(A)	C	63	65	68	70	74
Operating range	°C	C	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46
Sound pressure level	dB(A)	H	48	52	53	60	59
Sound power level	dB(A)	H	65	69	70	77	76
Operating range	°C	H	-15 / 15	-15 / 15	-15 / 15	-15 / 15	-15 / 15
Dimensions (HxWxD)	mm		550 x 780 x 290	550 x 780 x 290	630 x 800 x 300	710 x 900 x 320	890 x 900 x 320
Weight	kg		36	39	45	57	64
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections							
Gas	in		1/2	5/8	5/8	5/8	5/8
Liquid	in		1/4	3/8	3/8	3/8	3/8
Minimum pipe length	m		5	5	5	5	5
Maximum pipe length	m		30	30	30	30	30
Maximum height difference	m		20	20	30	30	30
Chargeless pipe length	m		20	20	30	30	30
Refrigerant	Type/kg/TeqCO2		R32 / 0.9 / 0.6	R32 / 1.4 / 0.9	R32 / 1.9 / 1.3	R32 / 1.9 / 1.3	R32 / 2.2 / 1.5
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

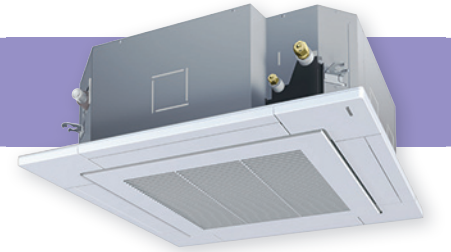
DIGITAL INVERTER CLASSIC Physical data outdoor - Three phase

Outdoor unit			RAV-GV1101AT8P-E	RAV-GV1401AT8P-E	RAV-GV1601AT8P-E
		HP	4	5	6
Air flow	m³/h - l/s		3500 - 972	4200 - 1167	5000 - 1389
Sound pressure level	dB(A)	C	52	56	58
Sound power level	dB(A)	C	69	73	75
Operating range	°C	C	-15 / 46	-15 / 46	-15 / 46
Sound pressure level	dB(A)	H	58	60	60
Sound power level	dB(A)	H	75	77	77
Operating range	°C	H	-15 / 15	-15 / 15	-15 / 15
Dimensions (HxWxD)	mm		710 x 900 x 320	710 x 900 x 320	890 x 900 x 320
Weight	kg		60	60	63
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections					
Gas	in		5/8	5/8	5/8
Liquid	in		3/8	3/8	3/8
Minimum pipe length	m		5	5	5
Maximum pipe length	m		30	30	30
Maximum height difference	m		30	30	30
Chargeless pipe length	m		30	30	30
Refrigerant	Type/kg/TeqCO2		R32 / 1.9 / 1.3	R32 / 1.9 / 1.3	R32 / 2.1 / 1.4
Power supply	V-ph-Hz		380/415-3-50	380/415-3-50	380/415-3-50

C: cooling mode
H: heating mode

HM_UT

SMART 4-WAY CASSETTE



Dedicated for commercial application, the Toshiba Smart Cassette is the perfect mix between comfort, elegance and efficiency.

Efficiency

• Top class SEER and SCOP, thanks to long slit heat exchanger with magic coil treatment, high efficiency fan motor and large opening air conditioning ventilation.
• Energy saving with the occupancy sensor which will automatically switch off the unit if nobody is in the room (TCB-SIR41U-E needed).

Comfort

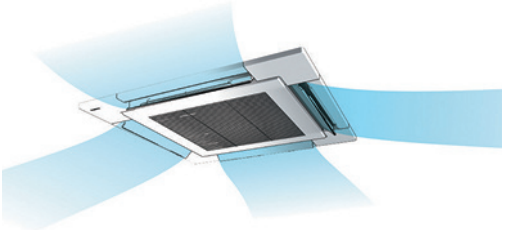
• Unique flap design for optimal air distribution.
• Individual setting of louver position: 3 different swing modes: standard, diagonally, opposite or turn around.
• 5 fan steps to precisely control the air flow.

Design

• Simple & elegant design fits various rooms.

SCOP MAX	CAPACITY	OPERATION
5.51	5kW > 14kW	-27°C > +52°C

Louver position automatically adjusts to prevent cold draught being felt by users



R32 REFRIGERANT · CE · UKCA · EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

INDOOR UNITS

RAV-HM561UT-E
RAV-HM801UT-E
RAV-HM1101UT-E
RAV-HM1401UT-E

SDI

OUTDOOR UNITS

RAV-GP561ATW-E RAV-GP801ATW-E RAV-GP1101AT-E1
RAV-GP1401AT-E

REMOTE CONTROLS

RBC-AX41U-E
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

SMART 4-WAY CASSETTE Performance data with Super Digital Inverter Series 1

Outdoor unit Indoor unit (Cassette)			RAV-GP561ATW-E RAV-HM561UT-E	RAV-GP801ATW-E RAV-HM801UT-E	RAV-GP1101AT-E RAV-HM1101UT-E	RAV-GP1401AT-E1 RAV-HM1401UT-E
Cooling capacity	**kW**		**5.0**	**7.1**	**10.0**	**12.5**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9 - 8.0	3.1 - 12.0	3.1 - 14.0
Power input (min. - rated - max.)	kW	C	0.19 - 1.2 - 2.03	0.26 - 1.37 - 2.94	0.56 - 1.90 - 2.80	0.56 - 2.91 - 3.40
EER			4.17	5.18	5.26	4.30
SEER			8.17	9.72	9.25	8.87
Energy efficiency class D→A+++*		C	A++	A+++	A+++	-
Seasonal electricity consumption	kWh/a	C	214	256	378	845
Heating capacity	**kW**		**5.6**	**8.0**	**11.2**	**14.0**
Heating range (min. - max.)	kW		0.9 - 8.1	1.3 - 11.3	2.6 - 13.0	2.6 - 16.5
Power input (min. - rated - max.)	kW	H	0.16 - 1.29 - 2.75	0.20 - 1.45 - 3.15	0.41 - 2.18- 2.98	0.41 - 3.04 - 4.18
COP	W/W		4.34	5.52	5.14	4.61
SCOP			5.02	5.54	5.03	5.00
Energy efficiency class D→A+++*		H	A++	A+++	A++	-
Seasonal electricity consumption	kWh/a	H	1058	1287	2557	2685

SMART 4-WAY CASSETTE Physical data indoor

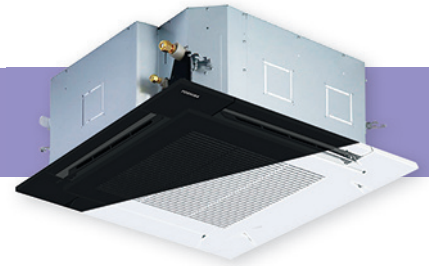
Indoor unit		RAV-HM561UT-E	RAV-HM801UT-E	RAV-HM1101UT-E	RAV-HM1401UT-E
Air flow (h/l)	m^3/h - l/s	1050/750 - 291/208	1920/810 - 533/225	2250/1050 - 625/292	2250/1170 - 625/325
Sound pressure level (h-m-l)	dB(A)	32-29-26	42-35-27	48-40-31	48-41-33
Sound power level (h-m-l)	dB(A)	48-45-43	56-49-43	61-54-46	61-55-48
Dimensions (HxWxD)	mm	256 × 840 × 840	319 × 840 × 840	319 × 840 × 840	319 × 840 × 840
Weight	kg	20	25	25	25
Panel		RBC-U41PG(W)-E			
Panel dimensions (HxWxD)	mm	30×950×950	30×950×950	30×950×950	30×950×950
Panel weight	kg	5	5	5	5

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

HM_UTP

STANDARD 4-WAY CASSETTE



> BLACK PANEL COLOR

Standard 4-way Cassette is designed to provide uniform air distribution and total comfort; it is the ideal solution for small commercial application.

SCOP MAX	CAPACITY	OPERATION
5.24 A+++	5kW > 16kW	-27°C > +52°C

Comfort

- Two louver shape option: straight flow louver and wide flow louver; optimum air distribution.
- Individual setting of louver position: 3 different swing modes: standard, diagonally, opposite, turn around.
- Wide air flow in all directions.
- Optionnal ePM2.5 filters and air purifiers.

Reliability

- Self-cleaning function for anti-mould in drain cap.
- Built-in high-lift drain pump.

Easy to install

- Compact chassis with only 256mm height (sizes 5 and 8).
- Leight-weight unit, for easy and quick installation.

Optionnal advanced air filtration solutions using ionizer tehcnology to help create healthy working spaces

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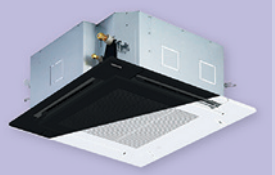


INDOOR UNITS

RAV-HM561UTP-E
RAV-HM801UTP-E
RAV-HM901UTP-E
RAV-HM1101UTP-E
RAV-HM1401UTP-E
RAV-HM1601UTP-E

SDI

OUTDOOR UNITS

RAV-GP561ATW-E
RAV-GP801ATW-E
RAV-GP1101AT(8)-E
RAV-GP1401AT(8)-E(1)
RAV-GP1601AT8-E

DI

RAV-GM562ATP-E
RAV-GM802ATW-E
RAV-GM902ATW-E
RAV-GM1102ATW(8)PE
RAV-GM1402ATW(8)P-E
RAV-GM1602ATW(8)P-E

DIc

RAV-GV561ATP-E
RAV-GV801ATP-E
RAV-GV1101AT(8)P-E
RAV-GV1401AT(8)P-E
RAV-GV1601AT(8)P-E

REMOTE CONTROLS

RBC-AXU33UP-E (white)
RBC-AXU33UPB-E (black)
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

STANDARD 4-WAY CASSETTE Performance data with Super Digital Inverter Series 1 1Ph & 3h

Outdoor unit Indoor unit	RAV- RAV-		GP561ATW-E HM561UTP-E	GP801ATW-E HM801UTP-E	GP1101AT-E HM1101UTP-E	GP1101AT8-E HM1101UTP-E	GP1401AT-E1 HM1401UTP-E	GP1401AT8-E HM1401UTP-E	GP1601AT8-E HM1601UTP-E
Cooling capacity	**kW**		**5.0**	**7.1**	**10**	**10**	**12.5**	**12.5**	**14.0**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9-8.0	3.1-12.0	2.6-12.0	3.1-14.0	2.6-14.0	2.6-16.0
Power input (min. - rated - max.)	kW	C	0.19 - 1.22 - 1.97	0.26 -1.58-3.15	0.56 - 2.13 - 2.80	0.66 - 2.32 -3.60	0.53 - 3.16-3.55	0.66 - 3.42-4.40	0.66 - 4.34-5.70
EER	W/W		4.10	4.49	4.69	4.31	3.96	3.65	3.23
SEER			7.73	8.96	9.00	7.32	8.59	7.35	6.99
Energy efficiency class D→A+++*		C	A++	A+++	A+++	A++	-	-	-
Seasonal electricity consumption	kWh/a	C	226	277	389	478	874	1021	1201
Heating capacity	**kW**		**5.6**	**8**	**11.2**	**11.2**	**14**	**14**	**16.0**
Heating range (min. - max.)	kW		0.9 - 8.1	1.3-11.3	2.6-13.0	2.4-15.6	2.6-16.5	2.4-18.0	2.4-19.0
Power input (min. - rated - max.)	kW	H	0.16 - 1.30 - 2.76	0.20 -1.77-3.47	0.41 - 2.34 - 2.98	0.53 - 2.41-4.30	0.40 - 3.21-4.38	0.53 - 3.41-5.50	0.53 - 4.28-6.51
COP	W/W		4.31	4.52	4.79	4.65	4.36	4.11	3.74
SCOP			4.98	5.24	4.76	4.38	4.75	4.38	4.38
Energy efficiency class D→A+++*		H	A++	A+++	A++	A+	-	-	-
Seasonal electricity consumption	kWh/a	H	1069	1363	2706	3036	2832	3036	3036

STANDARD 4-WAY CASSETTE Performance data with Digital Inverter Series 2 1Ph & 3Ph

Outdoor unit Indoor unit (Cassette)	RAV- RAV-		GM562ATP-E HM561UTP-E	GM802ATW-E HM801UTP-E	GM902ATW-E HM901UTP-E	GM1102ATW-E HM1101UTP-E	GM1102AT8W-E HM1101UTP-E	GM1402ATW-E HM1401UTP-E	GM1402AT8W-E HM1401UTP-E	GM1602ATW-E HM1601UTP-E	GM1602AT8W-E HM1601UTP-E
Cooling capacity	**kW**		**5.0**	**6.7**	**8.0**	**9.5**	**9.5**	**12.1**	**12.1**	**14.0**	**14.0**
Cooling range (min. - max.)	kW		1.5 - 5.6	1.9 - 8.0	1.9 - 8.8	3.0 - 11.2	3.0 - 11.2	3.0 - 13.2	3.0 - 13.2	3.0 - 15.0	3.0 - 15.0
Power input (min. - rated - max.)	kW	C	0.26 -1.56 - 1.86	0.29 - 1.9 - 2.59	0.29 - 2.29 - 2.88	0.52 - 2.57 - 3.11	0.56 - 2.52 - 3.07	0.52 - 3.88 - 4.23	0.56 - 3.81 - 4.19	0.52 - 5.05 - 6.00	0.56 - 4.92 - 5.90
EER			3.21	3.52	3.50	3.70	3.76	3.12	3.17	2.77	2.84
SEER			6.84	7.50	7.50	7.50	7.15	7.30	6.91	6.60	6.53
Energy efficiency class D→A+++*		C	A++	A++	A++	A++	A++	-	-	-	-
Seasonal electricity consumption	kWh/a	C	256	313	373	443	465	994	1050	1272	1286
Heating capacity	**kW**		**5.3**	**7.7**	**8.6**	**11.2**	**11.2**	**13.0**	**13.0**	**16.0**	**16.0**
Heating range (min. - max.)	kW		1.5 - 6.3	1.6 - 9.0	1.6 - 9.9	3.0 - 13.0	3.0 - 13.0	3.0 - 16.0	3.0 - 16.0	3.0 - 17.0	3.0 - 18.0
Power input (min. - rated - max.)	kW	H	0.26 -1.36 - 2.08	0.27 - 1.99 - 2.66	0.27 - 2.09 - 2.68	0.67 - 2.86 - 3.39	0.71 - 2.82 - 3.35	0.67 - 3.43 - 4.55	0.71 - 3.39 - 4.51	0.67 - 4.72 - 5.47	0.71 - 4.65 - 6.71
COP	W/W		3.90	3.87	4.12	3.92	3.97	3.79	3.83	3.39	3.44
SCOP			4.62	4.60	4.60	4.40	4.29	4.40	4.30	4.40	4.38
Energy efficiency class D→A+++*		H	A++	A++	A++	A+	A+	-	-	-	-
Seasonal electricity consumption	kWh/a	H	848	1552	1917	2544	2609	2544	2603	2542	2554

STANDARD 4-WAY CASSETTE Performance data with Digital Inverter Classic Series 1 1Ph & 3Ph

Outdoor unit Indoor unit (4-way Cassette)	RAV- RAV-		GV561ATP-E HM561UTP-E	GV801ATP-E HM801UTP-E	GV1101ATP-E HM1101UTP-E	GV1101AT8P-E HM1101UTP-E	GV1401ATP-E HM1401UTP-E	GV1401AT8P-E HM1401UTP-E	GV1601ATP-E HM1601UTP-E	GV1601AT8P-E HM1601UTP-E
Cooling capacity	**kW**		**5.0**	**6.7**	**9.5**	**9.5**	**11.5**	**12.1**	**13.0**	**13.0**
Cooling range (min. - max.)	kW		1.5 - 5.6	1.5 - 8.0	3.0 - 11.2	3.0 - 11.2	3.0 - 12.0	3.0 - 14.0	3.0 - 14.0	3.0 - 15.0
Power input (min. - rated - max.)	kW	C	1.60	2.20	3.15	3.10	4.60	4.80	5.40	5.40
EER	W/W		3.13	3.05	3.02	3.06	2.50	2.52	2.41	2.41
SEER			6.20	6.00	6.00	6.20	5.10	5.10	5.90	5.90
Energy efficiency class D→A+++*		C	A++	A+	A+	A++	A	-	-	-
Seasonal electricity consumption	kWh/a	C	282	391	554	537	789	1423	1322	1321
Heating capacity	**kW**		**5.3**	**7.0**	**10.0**	**10.0**	**11.9**	**12.3**	**13.5**	**13.5**
Heating range (min. - max.)	kW		1.5 - 6.3	1.5 - 9.0	3.0 - 13.0	3.0 - 13.0	3.0 - 16.0	3.0 - 16.0	3.0 - 18.0	3.0 - 18.0
Power input (min. - rated - max.)	kW	H	1.40	1.90	3.10	3.00	3.80	4.10	3.90	3.90
COP	W/W		3.79	3.68	3.23	3.33	3.13	3.00	3.46	3.46
SCOP			4.20	4.15	4.00	4.10	3.90	3.90	4.20	4.20
Energy efficiency class D→A+++*		H	A+	A+	A+	A+	A	-	-	-
Seasonal electricity consumption	kWh/a	H	933	1619	2660	2596	2800	2800	2664	2665

STANDARD 4-WAY CASSETTE Physical data indoor

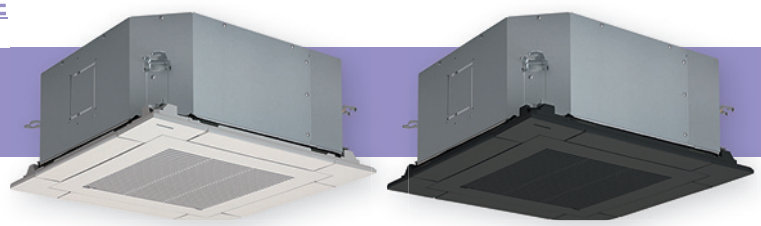
Indoor unit	RAV-	HM561UTP-E	HM801UTP-E	HM901UTP-E	HM1101UTP-E	HM1401UTP-E	HM1601UTP-E
Air flow (h/l)	m^3/h - l/s	1050/780 - 292/217	1230/810 - 342/225	1600/900 - 444/250	2010/1170 - 558/325	2100/1230 - 583/342	2130/1260 - 592/350
Sound pressure level (h-m-l)	dB(A)	32-29-28	35-31-28	40-36-33	43-38-33	44-38-34	45-40-36
Sound power level (h-m-l)	dB(A)	47-44-43	50-46-43	55-51-48	58-53-48	59-53-49	60-55-51
Dimensions (HxWxD)	mm	256 × 840 × 840	256 × 840 × 840	319 × 840 × 840	319 × 840 × 840	319 × 840 × 840	319 × 840 × 840
Weight	kg	20	20	24	24	24	24
Panel		RBC-U33P-E (white) / RBC-U33PB-E (black)					
Panel dimensions (HxWxD)	mm	30 × 950 × 950	30 × 950 × 950	30 × 950 × 950	30 × 950 × 950	30 × 950 × 950	30 × 950 × 950
Panel weight	kg	4.0	4.0	4.0	4.0	4.0	4.0

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

HM_MUTP

COMPACT 4-WAY CASSETTE



The Compact 4-way Cassette has been especially designed for small commercial application where a compact efficient unit is needed. Available in colours black or white.

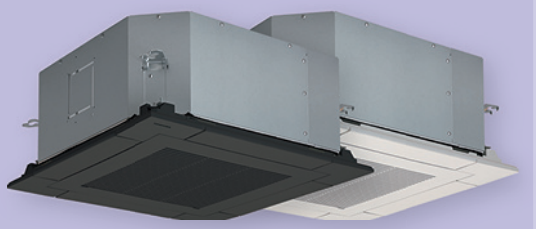
Design
- Elegant and Flat appearance.
- Fits within the T-bar of grid ceiling: 620mm x 620mm.

Comfort
- Individual setting of louvre position: 3 different swing modes: standard, diagonally, opposite and turn around.
- 5 step air flow.

Easy to install
- Compact and thin chassis with only 256mm height.
- Built-in high lift drain pump.
- Lightweight unit, for easy and quick installation.

SCOP MAX	CAPACITY	OPERATION
SEER **6.86** SCOP **4.73**	**2.5**kW > **5**kW	**-27**°C > **+52**°C

Automatic occupancy sensor switches off the unit if nobody is in the room to save energy.



INDOOR UNITS

RAV-HM301MUTP-E
RAV-HM401MUTP-E
RAV-HM561MUTP-E

SDI

DI

OUTDOOR UNITS

RAV-GP561ATW-E

RAV-GM302ATP-E
RAV-GM402ATP-E
RAV-GM562ATP-E

REMOTE CONTROLS

RBC-AXU31UMP-E (white)
RBC-AXU31UMPB-E (black)
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

COMPACT 4-WAY CASSETTE Performance data with Super Digital Inverter Series 1

Outdoor unit Indoor unit			RAV-GP561ATW-E RAV- HM561MUTP-E
Cooling capacity	**kW**		**5.0**
Cooling range (min. - max.)	kW		1.2-5.6
Power input (min. - rated - max.)	kW	C	0.19-1.56-1.97
EER	W/W		3.21
SEER			6.27
Energy efficiency class D→A+++*		C	A++
Seasonal electricity consumption	kWh/a	C	279
Heating capacity	**kW**		**5.6**
Heating range (min. - max.)	kW		0.9-7.0
Power input (min. - rated - max.)	kW	H	0.16-1.60-2.36
COP	W/W		3.50
SCOP			4.32
Energy efficiency class D→A+++*		H	A+
Seasonal electricity consumption	kWh/a	H	1231

COMPACT 4-WAY CASSETTE Performance data with Digital Inverter Series 2

Outdoor unit Indoor unit			RAV-GM302ATP-E RAV-HM301MUTP-E	RAV-GM402ATP-E RAV-HM401MUTP-E	RAV-GM562ATP-E RAV-HM561MUTP-E
Cooling capacity	**kW**		**2.5**	**3.6**	**5.0**
Cooling range (min. - max.)	kW		0.9 - 3.0	0.9 - 4.0	1.5 - 5.6
Power input (min. - rated - max.)	kW	C	0.18 - 0.59 - 0.82	0.18 - 0.90 - 2.00	0.30 - 1.64 - 1.86
EER	W/W		4.24	4.00	3.05
SEER			6.86	6.70	6.19
Energy efficiency class D→A+++*		C	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	128	188	283
Heating capacity	**kW**		**3.4**	**4.0**	**5.3**
Heating range (min. - max.)	kW		0.8 - 4.5	0.8 - 5.0	1.5 - 6.3
Power input (min. - rated - max.)	kW	H	0.17 - 0.76 - 1.40	0.14 - 0.95 - 1.70	0.30- 1.47- 2.40
COP	W/W		4.47	4.21	3.61
SCOP			4.73	4.46	4.4
Energy efficiency class D→A+++*		H	A++	A+	A+
Seasonal electricity consumption	kWh/a	H	681	848	891

COMPACT 4-WAY CASSETTE Physical data indoor

Indoor unit		RAV-HM301MUTP-E	RAV-HM401MUTP-E	RAV-HM561MUTP-E
Air Flow (h/l)	m^3/h - l/s	640/440 - 177/122	660/468 - 183/130	798/546 - 221/152
Sound pressure level (h-m-l)	dB(A)	38 - 36 - 30	41 - 36 - 32	44 - 39 - 35
Sound power level (h-m-l)	dB(A)	53 - 51 - 45	56 - 51 - 47	59 - 54 - 50
Dimensions (HxWxD)	mm	256 x 575 x 575	256 x 575 x 575	256 x 575 x 575
Weight	kg	16	16	16
Panel		RBC-UM21P-E (white) / RBC-UM21PB-E (black)		
Panel Dimensions (HxWxD)	mm	12 x 620 x 620	12 x 620 x 620	12 x 620 x 620
Panel weight	kg	2.5	2.5	2.5

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

HM_U1TP

COMPACT 1-WAY CASSETTE

Compact 1-Way Cassette is easy to install and suitable for small size offices such as the reception rooms of healthcare cabinets.

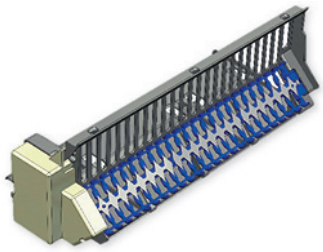
Design
- Elegant white panel design to match any type of interiors.

Flexibility
- 150mm chassis height adapted to ceilings with restricted void space
- Embedded drain pump for enhanced system reliability and simplified installation.

Comfort
- Low noise level down to 30 dB(A) for quiet operation
- 5-speed fan operation for perfect air flow management.

SCOP MAX	CAPACITY	OPERATION
4.10 A+	2.5kW > 4kW	-15°C > +46°C

Advanced air filtration solutions available as an option to help create healthy working spaces.



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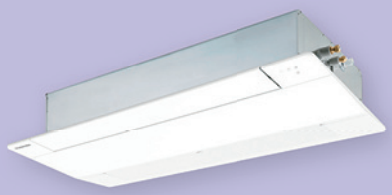


INDOOR UNITS

RAV-HM301U1TP-E
RAV-HM401U1TP-E

DI

OUTDOOR UNITS

RAV-GM302ATP-E
RAV-GM402ATP-E

REMOTE CONTROLS

RBC-AX33UYP-E
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

COMPACT 1-WAY CASSETTE Performance data with Digital Inverter Series 2 1Ph

Outdoor unit Indoor unit (4-way Cassette)			RAV-GM302ATP-E RAV-HM301U1TP-E	RAV-GM402ATP-E RAV-HM401U1TP-E
Cooling capacity	**kW**		**2.50**	**3.60**
Cooling range (min. - max.)	kW		0.90 - 3.00	0.90 - 4.00
Power input (min. - rated - max.)	kW	C	0.19 - 0.69 - 0.92	0.23 - 1.13 - 1.40
EER	W/W		3.62	3.19
SEER			6.20	6.00
Energy efficiency class D→A+++*		C	A++	A+
Seasonal electricity consumption	kWh/a	C	141	210
Heating capacity	**kW**		**3.40**	**4.00**
Heating range (min. - max.)	kW		0.80 - 4.50	0.80 - 5.00
Power input (min. - rated - max.)	kW	H	0.16 - 1.03 - 1.50	0.18 - 1.32 - 2.00
COP	W/W		3.30	3.03
SCOP			4.10	4.00
Energy efficiency class D→A+++*		H	A++	A+
Seasonal electricity consumption	kWh/a	H	888	945

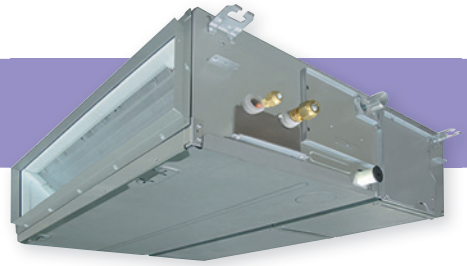
COMPACT 1-WAY CASSETTE Physical data indoor

Indoor unit		RAV-HM301U1TP-E	RAV-HM401U1TP-E
Air Flow (h/l)	m^3/h - l/s	520/310 - 291/217	540/290 - 341/225
Sound pressure level (h-m-l)	dB(A)	39-35-30	40-36-30
Sound power level (h-m-l)	dB(A)	54-49-45	55-51-45
Dimensions (HxWxD)	mm	150 x 990 x 450	150 x 990 x 450
Weight	kg	13	13
Panel		RBC-UY32P-E	
Panel dimensions (HxWxD)	mm	30 x 1220 x 530	30 x 1220 x 530
Panel weight	kg	4.0	4.0

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

HM_BTP
STANDARD DUCT



Whatever the shape of the room. this flexible model ensures a uniform temperature and air distribution for optimal end user comfort.

Adaptability

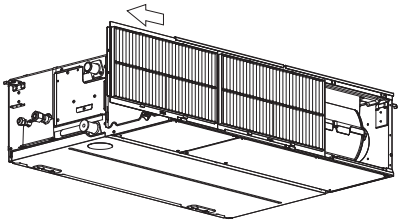
- Up to 150Pa available pressure: thanks to DC fan motor.
- Flexible design, allows the inlet air configuration to be configured between the standard rear inlet design or as an alternative, from the underside of the unit. There is also a provision for a fresh air intake supply via a pre-punched knockout hole.
- Compact and thin chassis. measuring just 275mm in height.

Easy to install

- Built-in high-lift drain pump.
- PC board panel easily accessible from the side of the unit.
- Optional air discharge spigot.

SCOP MAX	CAPACITY	OPERATION
4.85 A++	**5**kW > **16**kW	**-27**°C > **+52**°C

Simplify filter maintenance with live status to know exactly when they need to be cleaned!



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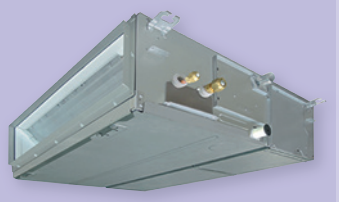


INDOOR UNITS

RAV-HM561BTP-E
RAV-HM801BTP-E
RAV-HM901BTP-E
RAV-HM1101BTP-E
RAV-HM1401BTP-E
RAV-HM1601BTP-E

SDI

RAV-GP561ATW-E
RAV-GP801ATW-E
RAV-GP1101AT(8)-E
RAV-GP1401AT(8)-E(1)
RAV-GP1601AT8-E

DI

RAV-GM562ATP-E
RAV-GM802ATW-E
RAV-GM902ATW-E
RAV-GM1102AT(8)W-E
RAV-GM1402AT(8)W-E
RAV-GM1602AT(8)W-E

DIc

RAV-GV561ATP-E
RAV-GV801ATP-E
RAV-GV1101AT(8)P-E
RAV-GV1401AT(8)P-E
RAV-GV1601AT(8)P-E

OUTDOOR UNITS

REMOTE CONTROLS

RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

STANDARD DUCT Performance data with Super Digital Inverter Series 1 1Ph & 3Ph

Outdoor unit Indoor unit	RAV- RAV-		GP561ATW-E HM561BTP-E	GP801ATW-E HM801BTP-E	GP1101AT-E HM1101BTP-E	GP1401AT-E1 HM1401BTP-E	GP1101AT8-E HM1101BTP-E	GP1401AT8-E HM1401BTP-E	GP1601AT8-E HM1601BTP-E
Cooling capacity	**kW**		**5.0**	**7.1**	**10.0**	**10.0**	**12.5**	**12.5**	**14.0**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9 - 8.0	3.1 - 12.0	2.6 - 12.0	3.1 - 14.0	2.6 - 14.0	2.6 - 16.0
Power input (min. - rated - max.)	kW	C	0.19 - 1.52 - 1.99	0.26 - 1.63 - 3.20	0.65 - 2.40 - 3.63	0.66 - 2.58 - 4.01	0.65 - 3.57 - 3.97	0.66 - 3.81 - 4.89	0.66 - 4.49 - 6.50
EER			3.29	4.36	4.17	3.88	3.50	3.28	3.12
SEER			5.81	7.86	7.19	6.10	6.77	6.02	5.81
Energy efficiency class D→A+++*		C	A+	A++	A++	A+	-	-	-
Seasonal electricity consumption	kWh/a	C	301	316	486	574	1107	1245	1444
Heating capacity	**kW**		**5.6**	**8.0**	**11.2**	**11.2**	**14.0**	**14.0**	**16.0**
Heating range (min. - max.)	kW		0.9-7.4	1.3 - 11.3	2.6 - 13.0	2.4 - 15.6	2.6 - 16.5	2.4 - 18.0	2.4 - 19.0
Power input (min. - rated - max.)	kW	H	0.16 - 1.61 - 2.76	0.20 - 1.85 - 3.55	0.47 - 2.73 - 3.38	0.53 - 2.76 - 4.42	0.47 - 3.63 - 4.43	0.53 - 3.66 - 5.71	0.53 - 4.57 - 6.96
COP	W/W		3.48	4.32	4.10	4.06	3.86	3.83	3.50
SCOP			4.27	4.85	4.30	4.19	4.29	3.99	3.96
Energy efficiency class D→A+++*		H	A+	A++	A+	A+	-	-	-
Seasonal electricity consumption	kWh/a	H	1245	1472	2997	3606	3133	4143	4238

STANDARD DUCT Performance data with Digital Inverter Series 2 1Ph & 3Ph

Outdoor unit Indoor unit	RAV- RAV-		GM562ATP-E HM561BTP-E	GM802ATW-E HM801BTP-E	GM902ATW-E HM901BTP-E	GM1102ATW-E HM1101BTP-E	GM1102AT8W-E HM1101BTP-E	GM1402ATW-E HM1401BTP-E	GM1402AT8W-E HM1401BTP-E	GM1602ATW-E HM1601BTP-E	GM1602AT8W-E HM1601BTP-E
Cooling capacity	**kW**		**5.0**	**6.7**	**8.0**	**9.5**	**9.5**	**12.1**	**12.1**	**14.0**	**14.0**
Cooling range (min. - max.)	kW		1.5 - 5.6	1.9 - 8.0	1.9 - 8.8	3.0 - 11.2	3.0 - 11.2	3.0 - 13.2	3.0 - 13.2	3.0 - 15.0	3.0 - 15.0
Power input (min. - rated - max.)	kW	C	0.31 - 1.83 - 2.05	0.33 - 2.02 - 2.77	0.33 - 2.39 - 2.97	0.64 - 2.60 - 3.21	0.68 - 2.56 - 3.17	0.64 - 4.01 - 4.52	0.68 - 3.94 - 4.48	0.64 - 5.26 - 6.00	0.68 - 5.14 - 5.90
EER			2.73	3.32	3.35	3.65	3.71	3.02	3.07	2.66	2.72
SEER			5.80	6.37	6.75	6.40	6.00	6.15	5.87	5.90	5.80
Energy efficiency class D→A+++*		C	A+	A++	A++	A++	A+	-	-	-	-
Seasonal electricity consumption	kWh/a	C	302	368	415	519	554	1180	1236	1423	1448
Heating capacity	**kW**		**5.3**	**7.7**	**8.6**	**11.2**	**11.2**	**13.0**	**13.0**	**16.0**	**16.0**
Heating range (min. - max.)	kW		1.5 - 6.3	1.6 - 9.0	1.6 - 9.9	3.0 - 13.0	3.0 - 13.0	3.0 - 16.0	3.0 - 16.0	3.0 - 17.0	3.0 - 18.0
Power input (min. - rated - max.)	kW	H	0.31 - 1.62 - 2.47	0.31 - 2.04 - 2.66	0.31 - 2.15 - 2.67	0.74 - 2.91 - 3.42	0.78 - 2.87 - 3.38	0.74 - 3.55 - 4.62	0.78 - 3.50 - 4.58	0.74 - 4.73 - 5.64	0.78 - 4.66 - 6.92
COP	W/W		3.27	3.77	4.00	3.85	3.90	3.66	3.71	3.38	3.43
SCOP			4.11	4.30	4.30	4.00	3.92	3.92	3.84	4.05	3.96
Energy efficiency class D→A+++*		H	A+	A+	A+	A+	A	-	-	-	-
Seasonal electricity consumption	kWh/a	H	954	1660	2050	2937	2999	2998	3061	2901	2966

STANDARD DUCT Performance data with Digital Inverter Classic Series 1 1Ph & 3Ph

Outdoor unit Indoor unit	RAV- RAV-		GV561ATP-E HM561BTP-E	GV801ATP-E HM801BTP-E	GV1101ATP-E HM1101BTP-E	GV1101AT8P-E HM1101BTP-E	GV1401ATP-E HM1401BTP-E	GV1401AT8P-E HM1401BTP-E	GV1601ATP-E HM1601BTP-E	GV1601AT8P-E HM1601BTP-E
Cooling capacity	**kW**		**5.0**	**6.7**	**9.5**	**9.5**	**11.5**	**12.1**	**13.0**	**13.0**
Cooling range (min. - max.)	kW		1.5-5.6	1.5-8.0	3.0-11.2	3.0-11.2	3.0-12.0	3.0-14.0	3.0-14.0	3.0-15.0
Power input (min. - rated - max.)	kW	C	1.85	2.30	3.17	3.06	4.70	4.90	5.40	5.40
EER			2.70	2.91	3.00	3.10	2.45	2.47	2.41	2.41
SEER			5.20	5.1	5.1	5.3	5.1	5.1	4.90	4.90
Energy efficiency class D→A+++*		C	A	A	A	A	A	-	-	-
Seasonal electricity consumption	kWh/a	C	336	460	652	628	789	1423	1590	1591
Heating capacity	**kW**		**5.3**	**7.0**	**10.0**	**10.0**	**11.9**	**12.3**	**13.5**	**13.5**
Heating range (min. - max.)	kW		1.5-6.3	1.5-9.0	3.0-13.0	3.0-13.0	3.0-16.0	3.0-16.0	3.0-18.0	3.0-18.0
Power input (min. - rated - max.)	kW	H	1.65	2.33	3.00	2.94	3.90	4.10	4.00	4.00
COP	W/W		3.21	3.0	3.3	3.40	3.05	3.00	3.38	3.38
SCOP			3.90	4.00	3.80	3.80	3.80	3.80	4.15	4.15
Energy efficiency class D→A+++*		H	A	A+	A	A	A	-	-	-
Seasonal electricity consumption	kWh/a	H	1005	1680	2800	2800	2874	2874	2700	2693

STANDARD DUCT Physical data indoor

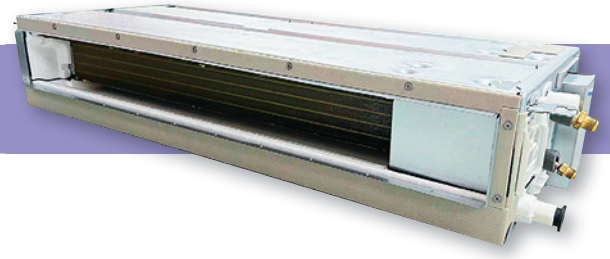
Indoor unit	RAV-	HM561BTP-E	HM801BTP-E	HM901BTP-E	HM1101BTP-E	HM1401BTP-E	HM1601BTP-E
Air flow (h/l)	m^3/h - l/s	800/480 - 222/133	1200/750 - 333/208	1700/1000 - 472/278	2100/1260 - 583/350	2100/1260 - 583/350	2100/1260 - 583/350
Sound pressure level (h-m-l)*	dB(A)	33-29-25	34-30-26	37-33-30	40-36-33	40-36-33	40-36-33
Sound power level (h-m-l)**	dB(A)	55-51-46	55-51-46	60-55-51	63-58-54	63-58-54	63-58-54
Dimensions (HxWxD)	mm	275 x 700 x 750	275 x 1000 x 750	275 x 1400 x 750	275 x 1400 x 750	275 x 1400 x 750	275 x 1400 x 750
Weight	kg	23	31	41	41	41	41
External static pressure (stand/upper limit)	Pa	30/150	30/150	40/150	40/150	50/150	50/150

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed
*bottom air inlet
**back air inlet

(*) The energy efficiency class range of this product category is D→A+++

HM_SDTY

SUPER SLIM DUCT



Whether installed in a ceiling void or in a suspended ceiling, the Super Slim Duct is easy to install and offers high performances as well as important energy savings.

SCOP MAX	CAPACITY	OPERATION
4.35 A+	2.5kW > 8kW	-27°C > +52°C

Flexibility

- Whatever the capacity, the 210mm height and 450mm depth compact chassis is adapted to most projects
- Static pressure up to 50Pa set directly on the duct or by using a wired remote controller.

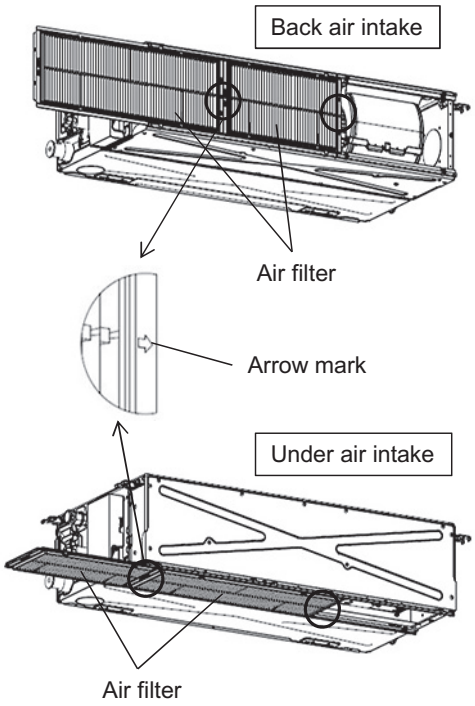
Comfort

- Noise level down to 26 dB(A) for quiet operation, especially well adapted for bedrooms
- 5-speed fan operation for perfect air flow adaptation.

Easy installation

- Built-in drain pump

Prefilter included
Compatible with rear or underside air suction.



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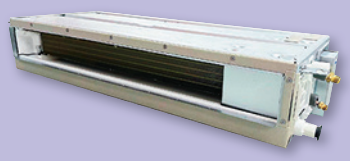

INDOOR UNITS

RAV-HM301SDTY-E
RAV-HM401SDTY-E
RAV-HM561SDTY-E
RAV-HM801SDTY-E

SDI

OUTDOOR UNITS

RAV-GP561ATW-E
RAV-GP801ATW-E

DI

RAV-GM302ATP-E
RAV-GM402ATP-E
RAV-GM562ATP-E
RAV-GM802ATW-E

REMOTE CONTROLS

RBC-AXU31-E

RBC-AMSU52-E
RBC-AWSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

SUPER SLIM DUCT Performance data with Super Digital Inverter Series 1 1Ph

Outdoor unit Indoor unit (Slim duct)			RAV-GP561ATW-E RAV-HM561SDTY-E	RAV-GP801ATW-E RAV-HM801SDTY-E
Cooling capacity	**kW**		**5.0**	**7.10**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9 - 8.0
Power input (min. - rated - max.)	kW	C	0.19 - 1.54 - 1.98	0.26 - 1.85 - 3.44
EER	W/W		3.24	3.83
SEER			6.15	6.68
Energy efficiency class D→A+++*		C	A++	A++
Seasonal electricity consumption	kWh/a	C	284	372
Heating capacity	**kW**		**5.6**	**8.0**
Heating range (min. - max.)	kW		0.9 - 7.0	1.3 - 11.3
Power input (min. - rated - max.)	kW	H	0.16 - 1.57 - 2.66	0.20 - 2.12 - 3.52
COP	W/W		3.56	3.77
SCOP			4.23	4.27
Energy efficiency class D→A+++*		H	A+	A+
Seasonal electricity consumption	kWh/a	H	1256	1669

SUPER SLIM DUCT Performance data with Digital Inverter Series 2 1Ph

Outdoor unit Indoor unit (Slim duct)			RAV-GM302ATP-E RAV-HM301SDTY-E	RAV-GM402ATP-E RAV-HM401SDTY-E	RAV-GM562ATP-E RAV-HM561SDTY-E	RAV-GM802ATW-E RAV-HM801SDTY-E
Cooling capacity	**kW**		**2.5**	**3.6**	**5.0**	**6.7**
Cooling range (min. - max.)	kW		0.9 - 3.0	0.9 - 4.0	1.5 - 5.6	1.9 - 8.0
Power input (min. - rated - max.)	kW	C	0.19 - 0.56 - 0.92	0.18 - 0.93 - 2.00	0.28 - 1.86 - 2.05	0.33 - 2.16 - 2.77
EER	W/W		4.46	3.87	2.69	3.10
SEER			6.41	6.03	5.80	5.63
Energy efficiency class D→A+++*		C	A++	A+	A+	A+
Seasonal electricity consumption	kWh/a	C	136	209	302	416
Heating capacity	**kW**		**3.4**	**4.0**	**5.3**	**7.7**
Heating range (min. - max.)	kW		0.8 - 4.5	0.8 - 5.0	1.5 - 6.3	1.6 - 9.0
Power input (min. - rated - max.)	kW	H	0.17 - 0.86 - 1.40	0.17 - 0.97 - 1.70	0.22 - 1.50 - 2.40	0.31 - 2.24 - 2.66
COP	W/W		3.95	4.12	3.53	3.44
SCOP			4.35	4.00	4.00	4.00
Energy efficiency class D→A+++*		H	A+	A+	A+	A+
Seasonal electricity consumption	kWh/a	H	837	943	980	1783

SUPER SLIM DUCT Physical data indoor

Indoor unit		RAV-HM301SDTY-E	RAV-HM401SDTY-E	RAV-HM561SDTY-E	RAV-HM801SDTY-E
Air Flow (h/l)	m^3/h - l/s	570/420	600/440	780/650	1140/910
Sound pressure level (h-m-l)*	dB(A)	32-29-26	33-30-27	34-32-29	37-34-32
Sound power level (h-m-l)	dB(A)	54-50-46	54-50-46	56-54-51	61-58-55
Dimensions (HxWxD)	mm	210 x 700 x 450	210 x 700 x 450	210 x 900 x 450	210 x 1100 x 450
Weight	kg	15	15	19	22
External static pressure standard (Upper-Lower)	Pa	50-10	50-10	50-10	50-10

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed
*bottom air inlet

(*) The energy efficiency class range of this product category is D→A+++

RM_DTP

HIGH-STATIC DUCT

High-static ducts are specially designed to air-condition large open spaces thanks to their impressive air flow characteristics.

Comfort

- 3-speed DC fan to provide correct air flow and maximise energy savings.
- Compatible with metal or textile ducts.

Adaptability

- Lightweight design for quick and easy installation.
- With 7-step settings, the static pressure of the duct can range from 52 to 250 Pa.
- Up to 5,600 m³/h air flow to efficiently blow the air into large rooms.

Easy to install

- Electronic components accessible from the outside of the unit.
- Air filter and drain pump are available as an option.

SCOP MAX	CAPACITY	OPERATION
3.78	**19**kW > **27**kW	**-27**°C > **+46**°C

The DTP high-static duct is compatible with textile duct diffusion system to blow the air smoothly throughout the room.

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INDOOR UNITS

RAV-RM2241DTP-E2
RAV-RM2801DTP-E2

OUTDOOR UNITS

RAV-GM2241AT8-E1
RAV-GM2801AT8-E1

REMOTE CONTROLS

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31E
RBC-ASCU11-E
RBC-AS41E

HIGH-STATIC DUCT Performance data with Big DI Inverter Series 1 3Ph

Outdoor unit Indoor unit (High Static duct)			RAV-GM2241AT8-E1 RAV-RM2241DTP-E2	RAV-GM2801AT8-E1 RAV-RM2801DTP-E2
Cooling capacity	**kW**		**19.0**	**22.5**
Cooling range (min. - max.)	kW		4.6 - 22.4	4.6 - 27.0
Power input (min. - rated - max.)	kW	C	1.27 - 5.35 - 9.05	1.27 - 6.76 - 11.87
EER	W/W		3.24	2.82
SEER			5.82	5.49
Energy efficiency class		C	-	-
Seasonal electricity consumption	kWh/a	C	2468	2928
Heating capacity	**kW**		**22.4**	**27.0**
Heating range (min. - max.)	kW		4.6 - 25.0	4.6 - 31.5
Power input (min. - rated - max.)	kW	H	1.27 - 5.71 - 10.15	1.27 - 7.52 - 13.83
COP	W/W		3.92	3.59
SCOP			3.78	3.69
Energy efficiency class		H	-	-
Seasonal electricity consumption	kWh/a	H	7174	8136

HIGH-STATIC DUCT Physical data indoor

Indoor unit		RAV-RM2241DTP-E2	RAV-RM2801DTP-E2
Air flow	m^3/h - l/s	3800 - 1055	4800 - 1333
Sound pressure level (back)	dB(A)	44	46
Sound power level (back)	dB(A)	79	81
Dimensions (HxWxD)	mm	448 x 1400 x 900	448 x 1400 x 900
Weight	kg	97	97
Upper limit/middle/standard	Pa	250/150/50	250/150/50

C: cooling mode
H: heating mode

HM_CTP
CEILING

The simple, yet elegant design helps to create a pleasant and relaxing environment, quickly conditioning the room air to the desired temperature.

Comfort
- Automatic louvre control for all year round comfort and efficiency.
- Low noise levels, thanks to high diameter fan and DC motor.

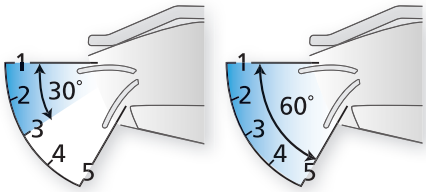
Reliability
- Self-cleaning function, enables the air flow to remain constant and fresh and reduces the frequency of service visits.

Easy to install and to maintain
- This design, represents the best possible solution, where there is a lack of space or absence of a ceiling void.

Adaptability
- Anti-bacterial drain point available as an option.
- Connecting kit available as an option for external I/O without local relay preparation.

SCOP MAX	CAPACITY	OPERATION
5.05	3.6kW > 16kW	-27°C > +52°C

The airflow angle is automatically set to the most suitable setting according to the cooling or heating needs.



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INDOOR UNITS

RAV-HM401CTP-E
RAV-HM561CTP-E
RAV-HM801CTP-E
RAV-HM901CTP-E
RAV-HM1101CTP-E
RAV-HM1401CTP-E
RAV-HM1601CTP-E

SDI

DI

OUTDOOR UNITS

RAV-GP516ATW-E
RAV-GP801ATW-E
RAV-GP1101AT(8)-E
RAV-GP1401AT(8)-E(1)
RAV-GP1601AT8-E

RAV-GM402ATP-E
RAV-GM562ATP-E
RAV-GM802ATW-E
RAV-GM902ATW-E
RAV-GM1102AT(8)W-E
RAV-GM1402AT(8)W-E
RAV-GM1602AT(8)W-E

REMOTE CONTROLS

RBC-AXU31C-E
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

CEILING Performance data with Super Digital Inverter Series 1 1Ph

Outdoor unit Indoor unit (Ceiling)	RAV- RAV-		GP561ATW-E HM561CTP-E	P801ATW-E HM801CTP-E	GP1101AT-E HM1101CTP-E	GP1401AT-E1 HM1401CTP-E
Cooling capacity	**kW**		**5.0**	**7.1**	**10.0**	**12.5**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9 - 8.0	3.1 - 12.0	3.1 - 14.0
Power input	kW	C	0.19 - 1.37 - 1.98	0.26 - 1.60 - 3.17	0.55 - 2.23 - 3.45	0.55 - 3.58 - 3.97
EER			3.65	4.44	4.48	3.49
SEER			6.93	8.35	8.58	7.99
Energy efficiency class D→A+++*		C	A++	A++	A+++	-
Seasonal electricity consumption	kWh/a	C	253	298	408	939
Heating capacity	**kW**		**5.6**	**8.0**	**11.2**	**14.0**
Heating range (min. - max.)	kW		0.9 - 7.4	1.3 - 11.3	2.6 - 13.0	2.6 - 16.5
Power input (min. - rated - max.)	kW	H	0.16 - 1.39 - 2.67	0.20 - 1.80 - 3.50	0.41 - 2.38 - 3.09	0.41 - 3.59 - 4.40
COP	W/W		4.03	4.44	4.71	3.90
SCOP			4.73	5.10	4.75	4.74
Energy efficiency class D→A+++		H	A++	A++	A++	-
Seasonal electricity consumption	kWh/a	H	1125	1401	2712	2838

CEILING Performance data with Super Digital Inverter Series 1 3Ph

Outdoor unit Indoor unit (Ceiling)	RAV- RAV-		GP1101AT8-E HM1101CTP-E	GP1401AT8-E HM1401CTP-E	GP1601AT8-E HM1601CTP-E
Cooling capacity	**kW**		**10.0**	**12.5**	**14.0**
Cooling range (min. - max.)	kW		2.6 -12.0	2.6 - 14.0	2.6 - 16.0
Power input	kW	C	0.66 - 2.56 - 3.81	0.66 - 3.68 - 4.85	0.66 - 4.60 - 6.33
EER			3.91	3.40	3.04
SEER			6.80	6.60	6.24
Energy efficiency class D→A+++*		C	A++	-	-
Seasonal electricity consumption	kWh/a	C	515	1137	1347
Heating capacity	**kW**		**11.2**	**14.0**	**16.0**
Heating range (min. - max.)	kW		2.4 - 14.0	2.4 - 18.0	2.4 - 19.0
Power input (min. - rated - max.)	kW	H	0.53 - 2.51 - 4.26	0.53 - 3.48 - 5.95	0.53 - 4.30 - 6.96
COP	W/W		4.46	4.02	3.72
SCOP			4.23	4.22	4.21
Energy efficiency class D→A+++*		H	A+	-	-
Seasonal electricity consumption	kWh/a	H	3842	3916	3988

CEILING Performance data with Digital Inverter Series 2 1Ph & 3Ph

Outdoor unit Indoor unit (Ceiling)	RAV- RAV-		GM402ATP-E HM401CTP-E	GM562ATP-E HM561CTP-E	GM802ATW-E HM801CTP-E	GM902ATW-E HM901CTP-E	GM1102ATW-E HM1101CTP-E	GM1102AT8W-E HM1101CTP-E	GM1402ATW-E HM1401CTP-E	GM1402AT8W-E HM1401CTP-E	GM1602ATW-E HM1601CTP-E	GM1602AT8W-E HM1601CTP-E
Cooling capacity	**kW**		**3.6**	**5.0**	**6.9**	**8.0**	**9.5**	**9.5**	**12.1**	**12.1**	**14.0**	**14.0**
Cooling range (min. - max.)	kW		0.9 - 4.0	1.5 - 5.6	1.9 - 8.0	1.9 - 8.8	3.0 - 11.2	3.0 - 11.2	3.0 - 13.2	3.0 - 13.2	3.0 - 15.0	3.0 - 15.0
Power input	kW	C	0.18 - 0.83 - 2.00	0.29-1.61-1.95	0.30 - 2.06 - 2.66	0.30 - 2.38 - 2.75	0.58 - 2.59 - 3.29	0.62 - 2.55 - 3.25	0.58 - 4.01 - 4.39	0.62 - 3.94 - 4.35	0.58 - 5.04 - 6.12	0.62 - 4.94 - 6.02
EER	W/W		4.34	3.11	3.35	3.36	3.67	3.72	3.02	3.07	2.78	2.83
SEER			7.2	6.00	7.03	7.03	7.00	6.46	6.16	5.87	6.25	6.12
Energy efficiency class D→A+++*		C	A++	A+	A++	A++	A++	A++	-	-	-	-
Seasonal electricity consu-mption	kWh/a	C	175	291	343	398	475	514	1178	1236	1344	1372
Heating capacity	**kW**		**4.0**	**5.3**	**7.7**	**8.6**	**11.2**	**11.2**	**13.0**	**13.0**	**16.0**	**16.0**
Heating range (min. - max.)	kW		0.8 - 5.0	1.5 - 6.3	1.6 - 9.0	1.6 - 9.9	3.0 - 13.0	3.0 - 13.0	3.0 - 16.0	3.0 - 16.0	3.0 - 17.0	3.0 - 18.0
Power input (min. - rated - max.)	kW	H	0.14 - 0.78 - 1.70	0.29-1.36-2.40	0.29 - 1.99 - 2.57	0.29 - 2.15 - 2.62	0.66 - 2.86 - 3.49	0.70 - 2.83 - 3.45	0.66 - 3.48 - 4.61	0.70 - 3.43 - 4.57	0.66 - 4.75 - 5.78	0.70 - 4.68 - 7.09
COP	W/W		5.13	3.90	3.87	4.00	3.91	3.95	3.74	3.79	3.37	3.41
SCOP			5.13	4.34	4.48	4.60	4.30	4.29	4.28	4.20	4.30	4.22
Energy efficiency class D→A+++*		H	A+++	A+	A+	A++	A+	A+	-	-	-	-
Seasonal electricity consumption	kWh/a	H	736	904	1593	1916	2603	2609	2615	2665	2603	2652

CEILING Physical data indoor

Indoor unit	RAV-	HM401CTP-E	HM561CTP-E	HM801CTP-E	HM901CTP-E	HM1101CTP-E	HM1401CTP-E	HM1601CTP-E
Air flow (h/l)	m^3/h - l/s	900/540 - 250/150	900/540 - 250/150	1410/750 - 392/208	1600/900 - 444/250	1860/1020 - 517/283	2040/1200 - 567/333	2040/1200 - 567/333
Sound pressure level (h-m-l)	dB(A)	37-35-28	37-35-28	41-36-29	42-38-30	44-38-32	46-41-35	46-42-36
Sound power level (h)	dB(A)	52-50-43	52-50-43	56-51-44	57-53-45	59-53-47	61-56-50	61-57-51
Dimensions (HxWxD)	mm	235 x 950 x 690	235 x 950 x 690	235 x 1270 x 690	235 x 1586 x 690	235 x 1586 x 690	235 x 1586 x 690	235 x 1586 x 690
Weight	kg	23	23	29	37	37	37	37

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

HM_KRTP

HIGH-WALL

Compact, quiet with an attractive design, this high-wall is suitable for every kind of project in new construction or refurbishment.

Comfort
• Auto louver mode allows optimum and uniform air distribution.

Control
• Wireless remote control with pre-set functions accessible with dedicated buttons: hi-power mode, quiet mode, comfort sleep, eco-mode.

Healthy
• Self-cleaning feature to prevent mould formation on the heat exchanger coils.

SCOP MAX	CAPACITY	OPERATION
4.42 A+	2.5kW > 11.2kW	-20°C > +52°C

Comfort sleep function adjusts automatically the room temperature and the fan speed.

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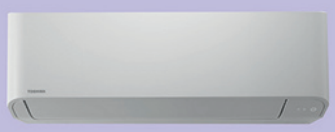

INDOOR UNITS

RAV-HM301KRTP-E
RAV-HM401KRTP-E
RAV-HM561KRTP-E
RAV-HM801KRTP-E
RAV-HM901KRTP-E
RAV-HM1101KRTP-E

SDI

OUTDOOR UNITS

RAV-GP561ATW-E
RAV-GP801AT-E
RAV-GP1101AT(8)-E

DI

RAV-GM302ATP-E
RAV-GM402ATP-E
RAV-GM562ATP-E
RAV-GM802ATW-E
RAV-GM902ATW-E
RAV-GM1102AT(8)W-E

DIc

RAV-GV561ATP-E
RAV-GV801ATP-E
RAV-GV1101AT(8)P-E

REMOTE CONTROLS

IR included

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

HIGH-WALL Performance data with Super Digital Inverter Series 1 1Ph & 3Ph

Outdoor unit	RAV-		GP561ATW-E	GP801ATW-E	GP1101ATP-E	GP1101AT8-E
Indoor unit (High-wall)	RAV-		HM561KRTP-E	HM801KRTP-E	GM1101KRTP-E	GM1101KRTP-E
Cooling capacity	**kW**		**5.0**	**7.1**	**10.0**	**10.0**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9 - 8.0	3.1- 12.0	2.6 - 12.0
Power input	kW	C	0.19 - 1.43 -1.98	0.26 - 2.06 - 3.17	0.55-2.77-3.90	2.86
EER			3.50	3.45	3.61	3.50
SEER			7.84	7.56	7.36	6.53
Energy efficiency class D→A+++*		C	A++	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	223	329	475	536
Heating capacity	**kW**		**5.6**	**8.0**	**11.2**	**11.2**
Heating range (min. - max.)	kW		0.9 - 7.3	1.3 - 11.3	2.6 - 13.0	2.4 - 13.0
Power input (min. - rated - max.)	kW	H	0.16 - 1.39 - 2.67	0.20 - 2.25 - 3.50	0.52 - 3.13 - 4.40	3.25
COP	W/W		4.03	3.56	3.58	3.45
SCOP			4.19	4.16	4.42	4.22
Energy efficiency class D→A+++*		H	A+	A+	A+	A+
Seasonal electricity consumption	kWh/a	H	1268	1717	2911	3591

HIGH-WALL Performance data with Digital Inverter Series 2 1Ph & 3Ph

Outdoor unit	RAV-		GM302ATP-E	GM402ATP-E	GM562ATP-E	GM802ATW-E	GM902ATW-E	GM1102ATW-E	GM1101AT8P-E
Indoor unit (High-wall)	RAV-		HM301KRTP-E	HM401KRTP-E	HM561KRTP-E	HM801KRTP-E	HM901KRTP-E	HM1101KRTP-E	HM1101KRTP-E
Cooling capacity	**kW**		**2.5**	**3.6**	**5.0**	**6.7**	**8.0**	**9.5**	**9.5**
Cooling range (min. - max.)	kW		0.9 - 3.0	0.9 - 4.0	1.5 - 5.6	1.9 - 8.0	1.9 - 8.8	3.0 - 11.2	3.0 - 11.2
Power input	kW	C	0.17 - 0.61 - 0.86	0.18 - 1.13 - 2.00	0.30 - 1.66 - 1.86	0.31 - 2.06 - 2.86	0.31 - 2.67 - 3.16	0.63 - 2.96 - 3.95	0.67 - 2.95 - 3.91
EER	W/W		4.10	3.19	3.01	3.25	3.00	3.21	3.22
SEER			7.00	6.70	6.69	6.60	6.60	6.40	6.10
Energy efficiency class D→A+++*		C	A++	A++	A++	A++	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	125	188	262	355	424	519	545
Heating capacity	**kW**		**3.4**	**4.0**	**5.3**	**7.7**	**8.6**	**11.2**	**11.2**
Heating range (min. - max.)	kW		0.8 - 4.5	0.8 - 5.0	1.5 - 6.3	1.6 - 9.0	1.6 - 9.9	3.0 - 13.0	3.0 - 13.0
Power input (min. - rated - max.)	kW	H	0.17 - 0.85-1.40	0.14 - 1.12 - 1.70	0.30 - 1.55 - 2.40	0.38 - 2.30 - 3.04	0.38 - 2.61 - 3.27	0.73 - 3.44 - 4.33	0.77 - 3.38 - 4.29
COP	W/W		4.00	3.57	3.42	3.35	3.30	3.26	3.31
SCOP			4.12	4.24	4.02	4.05	4.10	4.20	4.20
Energy efficiency class D→A+++*		H	A+	A+	A+	A+	A+	A+	A+
Seasonal electricity consumption	kWh/a	H	884	892	975	1762	2150	2665	2666

HIGH-WALL Performance data with Digital Inverter Classic Series 1 1Ph & 3Ph

Outdoor unit	RAV-		GV561ATP-E	GV801ATP-E	GV1101ATP-E	GV1101AT8P-E
Indoor unit (High-wall)	RAV-		HM561KRTP-E	HM801KRTP-E	HM1101KRTP-E	HM1101KRTP-E
Cooling capacity	**kW**		**5.0**	**6.7**	**9.5**	**9.5**
Cooling range (min. - max.)	kW		1.5 - 5.6	1.5 - 8.0	3.0 - 10.6	3.0 - 11.2
Power input	kW	C	1.45	2.20	3.80	3.40
EER			3.45	3.05	2.50	2.79
SEER			6.20	5.75	6.00	6.10
Energy efficiency class D→A+++*		C	A++	A+	A+	A++
Seasonal electricity consumption	kWh/a	C	282	408	554	545
Heating capacity	**kW**		**5.3**	**7.0**	**10.0**	**10.0**
Heating range (min. - max.)	kW		1.5-6.3	1.5-9.0	3.0-13.0	3.0-13.0
Power input (min. - rated - max.)	kW	H	1.50	2.20	3.30	3.20
COP	W/W		3.53	3.18	3.03	3.13
SCOP			3.90	3.90	4.00	4.10
Energy efficiency class D→A+++*		H	A	A	A+	A+
Seasonal electricity consumption	kWh/a	H	1005	1723	2666	2593

HIGH-WALL Physical data indoor

Indoor unit	RAV-		HM301KRTP-E	HM401KRTP-E	HM561KRTP-E	HM801KRTP-E	HM901KRTP-E	HM1101KRTP-E
Air flow (h/l)	m^3/h - l/s	C	670/450 - 186/125	700/450 - 194/125	960/680 - 267/189	1040/680 - 289/189	1180/ 680 - 328/189	1610/1180 - 447/328
Sound pressure level (h-m-l)	dB(A)	C	40-34-29	41-36-30	42-39-35	45-41-35	47-41-35	49-45-41
Sound power level (h-m-l)	dB(A)	C	55-49-44	56-51-45	57-54-50	60-56-50	62-56-50	64-60-56
Dimensions (HxWxD)	mm		293 x 798 x 230	293 x 798 x 230	320 x 1050 x 250	320 x 1050 x 250	320 x 1050 x 250	350 x 1200 x 280
Weight	kg		10	10	14	14	14	19

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

HM_KRSP

HIGH-WALL IT ROOM

Cooling only systems with a very large air flow capacity and a high sensible heat ratio equal or superior to 80%. This is the solution for applications that require a stable and homogeneous ambient temperature.

MAX AIR FLOW	CAPACITY	OPERATION
SEER **6.60**	**5**kW > **8**kW	**-20**°C > **+52**°C

Comfort

• Air flow up to 1,600 m3/h for an excellent distribution of air in the room..

Rotation & Backup operation

• If two systems are controlled together, they can be set to work alternatively, or one can be the backup REMOVE "of the other" and automatically activate in case of failure..

Indoor Air Quality

• The Self-Cleaning feature helps prevent mould formation on the heat exchanger coil.

The Comfort function automatically adjusts the room temperature and the fan speed.

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INDOOR UNITS

RAV-HM561KRSP-E
RAV-HM801KRSP-E
RAV-HM901KRSP-E

DI

OUTDOOR UNITS

RAV-GM561ATP-E1
RAV-GM801ATP-E
RAV-GM901ATP-E

REMOTE CONTROLS

IR included

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

HIGH-WALL IT ROOM Performance data with Digital Inverter Series 1

Outdoor unit Indoor unit			RAV-GM561ATP-E1 RAV-HM561KRSP-E	RAV-GM801ATP-E RAV-HM801KRSP-E	RAV-GM901ATP-E RAV-HM901KRSP-E
Cooling capacity	kW		5.0	6.7	8.0
Cooling range (min. - max.)	kW		1.3 - 5.6	1.5 - 8.0	1.9 - 8.8
Power input	kW	C	0.30 - 1.615 - 1.86	0.31- 2.25 - 2.85	0.31- 2.58 - 3.5
EER	W/W		3.10	2.98	3.10
SEER			6.60	6.20	6.40
Energy efficiency class D→A+++*		C	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	265	378	437

HIGH-WALL IT ROOM Physical data indoor

Indoor unit			RAV-HM561KRSP-E	RAV-HM801KRSP-E	RAV-HM901KRSP-E
Air Flow (h/l)	m^3/h - l/s	C	1040/289 - 680/189	1610/447 - 1180/328	1610/447 - 1180/328
Sound pressure level (h-m-l)	dB(A)	C	45-39-35	49-45-41	49-45-41
Sound power level (h-m-l)	dB(A)	C	60	64	64
Dimensions (HxWxD)	mm		320 x 1050 x 250	350 x 1200 x 280	348 x 1200 x 280
Weight	kg		14	19	19

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

HM_FT

FLOOR STANDING

Toshiba floor standing unit combines important air flow, wide air diffusion and simplified installation to cool and heat large rooms.

Wide adaptability
- Broad capacity lineup from 2 to 6HP.
- Connectable in monosplit or twin mode.

Comfort
- Wide air flow to cool and heat large areas.
- Horizontal and vertical louvers for optimum air distribution.

Easy to install
- Directly positioned on the floor to simplify installation.
- Plug and play product with embedded link detector.

SCOP MAX	CAPACITY	OPERATION
4.40 A+	5kW > 16kW	-27°C > +52°C

Embedded leak detector linked to safety ventilation to facilitate the integration of the product in every kind of projects.

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INDOOR UNITS

RAV-HM561FT-E
RAV-HM801FT-E
RAV-HM901FT-E
RAV-HM1101FT-E
RAV-HM1401FT-E
RAV-HM1601FT-E

OUTDOOR UNITS

SDI

RAV-GP561ATW-E
RAV-GP801ATW-E
RAV-GP1101AT(8)-E
RAV-GP1401AT(8)-E
RAV-GP1601AT8-E

DI

RAV-GM562ATP-E
RAV-GM802ATW-E
RAV-GM1102AT(8)W-E
RAV-GM1402AT(8)W-E

REMOTE CONTROLS

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

FLOOR STANDING Performance data with Super Digital Inverter Series 1 1Ph

Outdoor unit Indoor unit (High-wall)			RAV-GP561ATW-E RAV-HM561FT-E	RAV-GP801ATW-E RAV-HM801FT-E	RAV-GP1101AT-E RAV-HM1101FT-E	RAV-GP1401AT-E1 RAV-HM1401FT-E
Cooling capacity	**kW**		**5.0**	**7.1**	**10**	**12.3**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9 - 8.0	3.1 - 12.0	3.1 - 14.0
Power input	kW	C	0.19 - 1.42 - 2.0	0.26 - 2.04 - 3.32	0.6 - 2.39 - 3.65	0.6 - 3.78 - 4.07
EER			3.51	3.48	4.18	3.25
SEER			5.87	6.43	6.99	6.49
Energy efficiency class D→A+++*		C	A+	A++	A++	-
Seasonal electricity consumption	kWh/a	C	298	386	500	1137
Heating capacity	**kW**		**5.6**	**8.0**	**11.2**	**13.2**
Heating range (min. - max.)	kW		0.9 - 7.0	1.3 - 11.3	2.6 - 13.0	2.6 - 16.5
Power input (min. - rated - max.)	kW	H	0.16 - 1.65 - 2.80	0.2 - 2.37 - 3.75	0.42 - 2.76 - 3.85	0.42 - 4.40 - 4.61
COP	W/W		3.39	3.38	4.06	3.00
SCOP			4.21	4.43	4.40	4.38
Energy efficiency class D→A+++*		H	A+	A+	A+	-
Seasonal electricity consumption	kWh/a	H	1262	1610	2922	3062

FLOOR STANDING Performance data with Super Digital Inverter Series 1 3Ph

Outdoor unit Indoor unit (High-wall)			RAV-GP561ATW-E RAV-HM561FT-E	RAV-GP801ATW-E RAV-HM801FT-E	RAV-GP1101AT-E RAV-HM1101FT-E	RAV-GP1101AT8-E RAV-HM1101FT-E	RAV-GP1401AT-E1 RAV-HM1401FT-E	RAV-GP1401AT8-E RAV-HM1401FT-E	RAV-GP1601AT8-E RAV-HM1601FT-E
Cooling capacity	**kW**		**5.0**		**10**	**10**	**12.3**	**12.5**	**14.0**
Cooling range (min. - max.)	kW		1.2 - 5.6	1.9 - 8.0	3.1 - 12.0	2.6 - 12.0	3.1 - 14.0	2.6 - 14.0	2.6 - 16.0
Power input	kW	C	0.19-1.42-2.0	0.26-2.04-3.32	0.6-2.39-3.65	0.66-2.46-4.1	0.6-3.78-4.07	0.66-3.61-4.91	0.66-4.39-6.5
EER	W/W		3.51	3.48	4.18	4.07	3.25	3.46	3.19
SEER			5.87	6.43	6.99	6.14	6.49	6.10	5.88
Energy efficiency class D→A+++*		C	A+	A++	A++	A++	-	-	-
Seasonal electricity consumption	kWh/a	C	298	386	500	570	1137	1229	1428
Heating capacity	**kW**		**5.6**	**8.0**	**11.2**	**11.2**	**13.2**	**14.0**	**16.0**
Heating range (min. - max.)	kW		0.9 - 7.0	1.3 - 11.3	2.6 - 13.0	2.4 - 14.0	2.6 - 16.5	2.4 - 18.0	2.4 - 19.0
Power input (min. - rated - max.)	kW	H	0.16-1.65-2.80	0.2-2.37-3.75	0.42-2.76-3.85	0.53-2.77-4.8	0.42-4.40-4.61	0.53-3.81-5.95	0.53-4.83-6.96
COP	W/W		3.39	3.38	4.06	4.04	3.00	3.67	3.31
SCOP			4.21	4.43	4.40	4.02	4.38	4.02	3.98
Energy efficiency class D→A+++*		H	A+	A+	A+	A+	-	-	-
Seasonal electricity consumption	kWh/a	H	1262	1610	2922	3752	3062	4103	4212

FLOOR STANDING Performance data with Digital Inverter Series 2 1Ph & 3Ph

Outdoor unit Indoor unit (High-wall)			RAV-GM562ATP-E RAV-HM561FT-E	RAV-GM802ATW-E RAV-HM801FT-E	RAV-GM902ATW-E RAV-HM901FT-E	RAV-GM1102ATW-E RAV-HM1101FT-E	RAV-GM1102AT8W-E RAV-HM1101FT-E	RAV-GM1402ATW-E RAV-HM1401FT-E	RAV-GM1402AT8W-E RAV-HM1401FT-E	RAV-GM1602ATW-E RAV-HM1601FT-E	RAV-GM1602AT8W-E RAV-HM1601FT-E
Cooling capacity	**kW**		**5**	**6.7**	**8.0**	**9.5**	**9.5**	**12.1**	**12.1**	**14.0**	**14.0**
Cooling range (min. - max.)	kW		1.5 - 5.6	1.9 - 8.0	1.9 - 8.8	3.0 - 11.2	3.0 - 11.2	3.0 - 13.2	3.0 - 13.2	3.0 - 15.0	3.0 - 15.0
Power input	kW	C	0.30-1.79-2.00	0.37 - 2.23 - 2.91	0.37 - 2.42 - 3.02	0.60 - 2.71 - 3.28	0.64 - 2.67 - 3.24	0.60 - 4.32 - 4.62	0.64 - 4.24 - 4.58	0.60 - 5.32 - 6.19	0.64 - 5.22 - 6.09
EER			2.79	3.01	3.30	3.50	3.55	2.80	2.85	2.63	2.68
SEER			5.86	5.53	6.24	6.22	5.88	5.53	5.35	5.20	5.15
Energy efficiency class D→A+++*		C	A+	A	A++	A++	A+	-	-	-	-
Seasonal electricity consumption	kWh/a	C	299	424	449	534	565	1311	1355	1613	1630
Heating capacity	**kW**		**5.3**	**7.7**	**8.6**	**11.2**	**11.2**	**13.0**	**13.0**	**16.0**	**16.0**
Heating range (min. - max.)	kW		1.5 - 6.3	1.6 - 9.0	1.6 - 9.9	3.0 - 13.0	3.0 - 13.0	3.0 - 16.0	3.0 - 16.0	3.0 - 17.0	3.0 - 18.0
Power input (min. - rated - max.)	kW	H	0.22-1.72-2.70	0.32 - 2.48 - 3.17	0.32 - 2.32 - 3.31	0.70 - 3.10 - 3.79	0.74 - 3.07 - 3.75	0.70 - 3.95 - 5.03	0.74 - 3.89 - 4.99	0.70 - 5.65 - 6.16	0.74 - 5.65 - 7.55
COP	W/W		3.08	3.11	3.70	3.61	3.64	3.29	3.34	2.83	2.83
SCOP			4.01	4.00	4.00	3.92	3.92	3.90	3.90	3.90	3.82
Energy efficiency class D→A+++*		H	A+	A+	A+	A	A	-	-	-	-
Seasonal electricity consumption	kWh/a	H	976	1783	2203	2960	2960	2975	2975	2972	3035

FLOOR STANDING Physical data indoor

Indoor unit			RAV-HM561FT-E	RAV-HM801FT-E	RAV-HM901FT-E	RAV-HM1101FT-E	RAV-HM1401FT-E	RAV-HM1601FT-E
Air flow (h/l)	m^3/h - l/s	C	820/600 - 228/167	930/640 - 258/178	1330/820 - 368/228	1660/1170 - 461/325	1760/1350 - 489/375	1760/1350 - 489/375
Sound pressure level (h-m-l)	dB(A)	C	46-42-38	50-45-41	45-40-37	51-46-41	53-48-45	53-48-45
Sound power level (h-m-l)	dB(A)	C	60-56-52	64-60-54	59-54-51	65-61-55	67-62-59	67-62-59
Dimensions (HxWxD)	mm		1750 x 600 x 210	1750 x 600 x 210	1750 x 600 x 390	1750 x 600 x 390	1750 x 600 x 390	1750 x 600 x 390
Weight	kg		44	45	59	59	59	59

C: cooling mode
H: heating mode
h-m-l: high - medium - low speed

(*) The energy efficiency class range of this product category is D→A+++

TCB-IFDL
DX COIL

Enables to connect a third party indoor unit or an air handing unit to a light commercial outdoor unit.
It can control air handling units up to 5 750 m³/h.
Compatible outdoor units from Super Digital Inverter to Digital Inverter ranges.

AIR FLOW
Up to **5 750** m³/h

CAPACITY
1HP > **10**HP

Control
- With the same DX-kit, the installer can choose to control the AHU via return air (TA) or via Capacity Control (DCC)
- The wired control RBC-AMSU52-E with its complete set of controlling features, is the recommended user interface.

Available input/outputs
- 16 digital outputs.
- 6 digital inputs.
- 2 analogue outputs.
- 4 analogue inputs.

Compatible with unique features like Rotation, Backup operation, Free Cooling and a 3-Step night mode which availability depends upon the selected outdoor unit.

INDOOR UNITS

TCB-IFDLR01UP-E

SDI

RAV-GP561ATW-E
RAV-GP801ATW-E
RAV-GP1101AT(8)-E
RAV-GP1401AT-E1
RAV-GP1401AT8-E
RAV-GP1601AT8-E

RAV-GM302ATP-E
RAV-GM402ATP-E
RAV-GM562ATP-E
RAV-GM802ATW-E
RAV-GM902ATW-E
RAV-GM1102AT(8)W-E
RAV-GM1402AT(8)W-E
RAV-GM1602AT(8)W-E

DI

RAV-GM2241AT8-E1
RAV-GM2801AT8-E1

REMOTE CONTROLS

RBC-AMSU52-E

OUTDOOR UNITS

DX COIL Performance data with Super Digital Inverter Series 1

	HP	2	3	4	5	6
AHU Air Flow rate	Std.	900	1350	1800	2250	2700
	Min.	480	680	1020	1200	1200
	Max.	1080	1620	2160	2700	3500
Dx-coil Internal Volume(cc)	Min.	800	1000	1500	1700	1700
	Max.	1150	1725	2300	2875	3450
Copper Tube Dia.(mm)		Ø12.7. Ø9.52. Ø8.00 (Recommended Ø9.52 or Less)				
Cooling	Max. Capacity (kW)	5.6	8.0	12.0	14.0	16.0
Heating	Max. Capacity (kW)	7.4	11.2	15.6	18.0	19.0

DX COIL Performance data with Digital Inverter Series 1

	HP	1	1,5	2	3	3,5	4	5	6	8	10
AHU Air Flow rate	Std.	450	675	900	1350	1575	1800	2250	2700	3600	4200
	Min.	310	310	480	680	680	1020	1200	1200	2880	3360
	Max.	700	810	1080	1620	1890	2160	2700	3500	4320	5040
Dx-coil Internal Volume(cc)	Min.	425	500	800	1000	1185	1500	1700	1700	3000	3000
	Max.	700	863	1150	1725	2013	2300	2875	3450	4600	5750
Copper Tube Dia.(mm)		Ø12.7. Ø9.52. Ø8.00 (Recommended Ø9.52 or Less)									
Cooling	Max. Capacity (kW)	3.0	4.0	5.6	8.0	8.8	11.2	13.2	16.0	22.4	27.0
Heating	Max. Capacity (kW)	4.5	5.0	6.3	9.0	9.9	13.0	16.0	18.0	25.0	31.5

DX COIL Physical Data

DX Controller unit		TCB-IFDLR01UP-E With relay terminal blocks for 6 DO
Controllable operation type		TA & DDC
Dimensions (HxWxD)	mm	420x330x122
Weight	kg	4.1
Operating temperature/humidity	°C / RH	5-52 / 10-80
Operating range - Cooling coil "Air on" temp	°C	15°CWB ~ 24°CWB
Operating range - Heating coil "Air on" temp	°C	12°CWB ~ 28°CWB
Power supply	V-ph-Hz	220~240-1-50

SDI - DI - Big DI
TWIN

Connect 4 indoors units on the same system to satisfy the cooling and heating requirements of larger area.

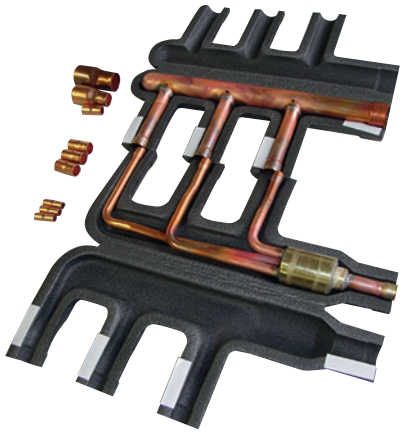
Comfort
- Precise air flow control, accurately controls the distribution of the air regardless of the room size.

Adaptability
- Twin, triple or double twin configurations.
- Compatible with every type of LC indoor units: 4–way cassette, duct, high-wall ceiling and floor standing.

Control
- One user-friendly controller for all the indoor units to simplify the control.

SCOP MAX	CAPACITY	OPERATION
5.05	**9.5**kW > **27**kW	**-27**°C > **+52**°C

Toshiba RAV simplistic piping design allows multiple indoor units to be connected via a simple branching methodology.



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CASSETTE

RAV-HM_UTP-E
RAV-HM_MUTP-E
RAV-HM_U1TP-E

DUCTED

RAV-HM_BTP-E
RAV-HM_SDTY-E

CEILING

RAV-HM_CTP-E

HIGH-WALL

RAV-HM_KRTP-E

FLOOR STANDING

RAV-HM_FT-E

OUTDOOR UNITS

RAV-GP1101AT(8)-E
RAV-GP1401AT(8)-E
RAV-GP1601AT8-E

RAV-GM1101AT(8)P-E
RAV-GM1401AT(8)P-E
RAV-GM1601AT(8)P-E

RAV-GM2241AT8-E1
RAV-GM2801AT8-E1

REMOTE CONTROLS

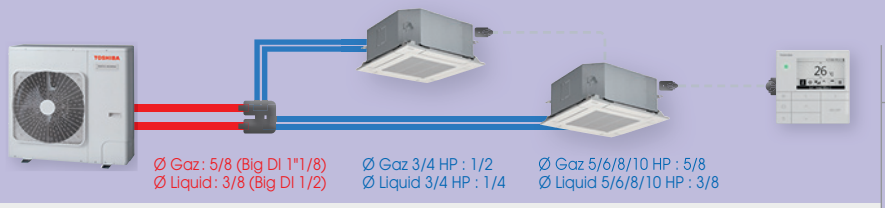
RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E

SYSTEM OVERVIEW

TWIN SYSTEM - 2 indoor units connected

Outdoor unit

Digital Inverter
4/5 HP
or
Super Digital Inverter
3/4/5/6 HP
or
Big Digital Inverter
8/10 HP



Total lenght SDI-DI < 50 m, Big DI < 60 m | Max pipe lenght SDI-DI < 15 m, Big DI > 20 m | Height difference CDU-IDU < 30 m

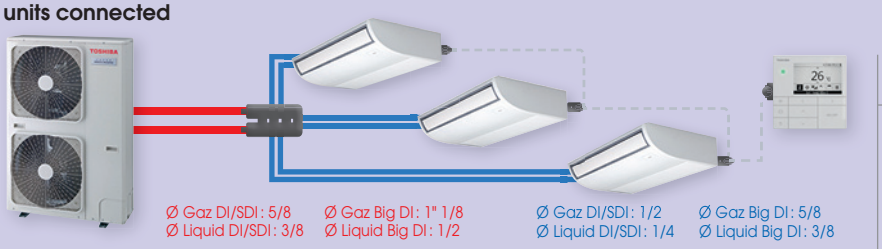
Remote

RBC-AMSU52-E

TRIPLE SYSTEM - 3 indoor units connected

Outdoor unit

Super Digital Inverter
6 HP
or
BIG Digital Inverter
8/10 HP



Total lenght SDI-DI < 50 m, Big DI < 60 m | Max pipe length SDI-DI <15 m, Big DI < 20 m | Height difference CDU-IDU < 30 m

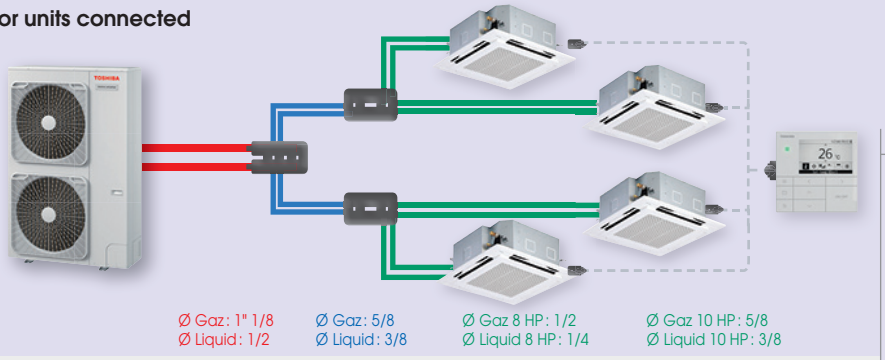
Remote

RBC-AMSU52-E

W-TWIN SYSTEM - 4 indoor units connected

Outdoor unit

Big Digital Inverter
8/10 HP



Total lenght < 60 m | Max pipe lenght from 1st branch kit to IDU < 35m | Height difference CDU-IDU < 30m

Remote

RBC-AMSU52-E

TWIN SPLIT SDI

Cooling & heating

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	Cooling capacity nin. - nominal - max kW	Heating capacity nin. - nominal - max kW	EER	SEER	COP	SCOP	Energy class*
Smart 4-way cassette	GP1101AT-E/TR	HM561UT-E/TR	4	3.1 - 10 - 12.0	2.6 - 11.2 - 13.0	5.26	9.15	5.14	5.03	A+++/A++
	GP1401AT-E1/TR1	HM801UT-E/TR	5	3.1 - 12.5 - 14.0	2.6 - 14 - 16.5	4.30	8.79	4.61	5	-/-
Standard 4-way cassette	GP1101AT-E/TR	HM561UTP-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	4.69	8.88	4.79	4.76	A++/A++
	GP1401AT-E1/TR1	HM801UTP-E/TR	5	3.1 - 12.5 - 14.0	2.6 - 14.0 - 16.5	3.96	8.53	4.36	4.75	-/-
	GP1101AT8-E/TR	HM561UTP-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 15.6	4.31	7.21	4.65	4.38	A++/A+
	GP1401AT8-E/TR	HM801UTP-E/TR	5	2.6 - 12.5 - 14.0	2.4 - 14.0 - 18.0	3.65	7.29	4.11	4.38	-/-
	GP1601AT8-E/TR	HM801UTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.23	6.95	3.74	4.38	-/-
Compact 4-way cassette	GP801ATW-E	HM401MUT-E	3	1.9 - 7.1 - 8.0	1.3 - 8.0 - 11.3	4.10	7.91	4.40	4.87	A++/A++
	GP801ATW-E	HM401MUTP-E	3	1.9 - 7.1 - 8.0	1.3 - 8.0 - 11.3	4.1	7.91	4.4	4.87	A++/A++
	GP1101AT-E/TR	HM561MUT-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	4.18	7.93	4.19	4.42	A++/A+
	GP1101AT-E/TR	HM561MUTP-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	4.18	7.93	4.19	4.42	A++/A+
	GP1101AT8-E/TR	HM561MUT-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 14.0	3.85	6.32	3.74	3.94	A++/A
	GP1101AT8-E/TR	HM561MUTP-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 14.0	3.85	6.32	3.74	3.94	A++/A
Standard duct	GP1101AT-E/TR	HM561BTP-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	4.17	7.11	4.10	4.3	A++/A+
	GP1401AT-E1/TR1	HM801BTP-E/TR	5	3.1 - 12.5 - 14.0	2.6 - 14.0 - 16.5	3.50	6.72	3.86	4.29	-/-
	GP1101AT8-E/TR	HM561BTP-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 15.6	3.88	6.02	4.06	4.19	A+/A
	GP1401AT8-E/TR	HM801BTP-E/TR	5	2.6 - 12.5 - 14.0	2.4 - 14.0 - 18.0	3.28	5.98	3.83	3.99	-/-
	GP1601AT8-E/TR	HM801BTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.12	5.78	3.50	3.96	-/-
Super slim duct	GP801ATW-E/TR	HM401SDTY-E/TR	3	1.9 - 7.1 - 8.0	1.3 - 8.0 - 11.3	3.83	6.5	3.77	4.26	A++/A+
	GP1101AT-E/TR	HM561SDTY-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	3.91	6.8	4.19	4.02	A++/A+
	GP1101AT8-E/TR	HM561SDTY-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 14.0	3.60	5.66	4.21	3.9	A+/A
	GP1601AT8-E/TR	HM801SDTY-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.19	5.79	3.29	4.1	-/-
Ceiling	GP801AT-E	HM401CTP-E	3	1.9 - 7.1 - 8.0	1.3 - 8.0 - 11.3	4.44	8.2	4.44	5.09	A++/A++
	GP1101AT-E/TR	HM561CTP-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	4.48	8.47	4.71	4.75	A++/A++
	GP1401AT-E1/TR1	HM801CTP-E/TR	5	3.1 - 12.5 - 14.0	2.6 - 14.0 - 16.5	3.49	7.93	3.90	4.73	-/-
	GP1101AT8-E/TR	HM561CTP-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 14.0	3.91	6.7	4.46	4.23	A++/A+
	GP1401AT8-E/TR	HM801CTP-E/TR	5	2.6 - 12.5 - 14.0	2.4 - 14.0 - 18.0	3.40	6.55	4.02	4.22	-/-
	GP1601AT8-E/TR	HM801CTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.04	6.2	3.72	4.21	-/-
Floor standing	GP1101AT-E/TR	HM561FT-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	4.18	6.84	4.06	4.4	A++/A+
	GP1401AT-E1/TR1	HM801FT-E/TR	5	3.1 - 12.5 - 14.0	2.6 - 14 - 16.5	3.55	6.47	3.53	4.38	—/—
	GP1101AT8-E/TR	HM561FT-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 14.0	4.07	6.02	4.04	4.02	A+/A+
	GP1401AT8-E/TR	HM801FT-E/TR	5	2.6 - 12.5 - 14.0	2.4 - 14.0 - 18.0	3.46	6.01	3.67	4.02	—/—
	GP1601AT8-E/TR	HM801FT-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.19	5.81	3.31	3.98	—/—
High-wall	GP1101AT-E/TR	HM561KRTP-E/TR	4	3.1 - 10.0 - 12.0	2.6 - 11.2 - 13.0	4.1	8.51	4.1	4.07	A++/A+
	GP1401AT-E1/TR1	HM801KRTP-E/TR	5	3.1 - 12.5 - 14.0	2.6 - 14.0 - 16.5	3.45	7.1	3.66	4.4	-/-
	GP1101AT8-E/TR	HM561KRTP-E/TR	4	2.6 - 10.0 - 12.0	2.4 - 11.2 - 14.0	3.83	6.57	4.21	4.16	A++/A+
	GP1401AT8-E/TR	HM801KRTP-E/TR	5	2.6 - 12.3 - 13.5	2.4 - 14.0 - 18.0	3.30	6.44	3.70	4.14	-/-
	GP1601AT8-E/TR	HM801KRTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.01	6.16	3.29	4.11	-/-

(*) The energy efficiency class range of this product category is D→A+++

TRIPLE SPLIT SDI

Cooling & heating

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	Cooling capacity nin. - nominal - max kW	Heating capacity nin. - nominal - max kW	EER	SEER	COP	SCOP	Energy class*
Standard 4-way cassette	GP1601AT8-E/TR	HM561UTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.23	6.71	3.74	4.36	-/-
Compact 4-way cassette	GP1601AT8-E/TR	HM561MUT-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.30	6.32	3.51	4.15	-/-
Standard duct	GP1601AT8-E/TR	HM561BTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.12	5.43	3.5	3.94	-/-
Super slim duct	GP1601AT8-E/TR	HM561SDT-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	2.91	5.98	3.5	4.07	-/-
Ceiling	GP1601AT8-E/TR	HM561CTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.04	5.95	3.72	4.19	-/-
High-wall	GP1601AT8-E/TR	HM561KRTP-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 14.0 - 19.0	3.19	5.75	3.31	3.98	-/-
Floor standing	GP1601AT8-E/TR	HM561FT-E/TR	6	2.6 - 14.0 - 16.0	2.4 - 16.0 - 19.0	3.19	5.55	3.31	3.96	-/-

TWIN SPLIT DI

Cooling & heating

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	Cooling capacity nin. - nominal - max kW	Heating capacity nin. - nominal - max kW	EER	SEER	COP	SCOP	Energy class*
Standard 4-way cassette	GM1102ATW-E/TR	HM561UTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.7	7.38	3.92	4.4	A++/A+
	GM1102AT8W-E/TR	HM561UTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.76	7.03	3.97	4.29	-/A+
	GM1402ATW-E/TR	HM801UTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	3.12	7.25	3.79	4.4	-/-
	GM1402AT8W-E/TR	HM801UTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	3.17	6.86	3.83	4.3	-/-
	GM1602ATW-E/TR	HM801UTP-E	6	3 - 14 - 15	3 - 16 - 17	2.77	6.56	3.39	4.4	-/-
	GM1602AT8W-E/TR	HM801UTP-E	6	3 - 14 - 15	3 - 16 - 18	2.84	6.49	3.44	4.38	A++/-
Compact 4-way cassette	GM1102ATW-E/TR	HM561MUT-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.52	6.7	3.55	4.1	A++/A+
	GM1102ATW-E/TR	HM561MUTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.52	6.7	3.55	4.1	A++/A+
	GM1102AT8W-E/TR	HM561MUT-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.58	6.17	3.6	4.06	A++/A+
	GM1102AT8W-E/TR	HM561MUTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.58	6.17	3.6	4.06	A++/A+
Standard duct	GM1102ATW-E/TR	HM561BTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.65	6.3	3.85	4	A+/A+
	GM1102AT8W-E/TR	HM561BTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.71	5.91	3.9	3.92	-/A
	GM1402ATW-E/TR	HM801BTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	3.02	6.1	3.66	3.92	-/-
	GM1402AT8W-E/TR	HM801BTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	3.07	5.83	3.71	3.84	-/-
	GM1602ATW-E/TR	HM801BTP-E	6	3 - 14 - 15	3 - 16 - 17	2.66	5.86	3.38	4.05	-/-
	GM1602AT8W-E/TR	HM801BTP-E	6	3 - 14 - 15	3 - 16 - 18	2.72	5.76	3.43	3.96	A+/-
Super slim duct	GM1102ATW-E/TR	HM561SDTY-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.50	6.04	3.61	3.91	A+/A
	GM1102AT8W-E/TR	HM561SDTY-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.50	5.63	3.61	3.90	-/A
	GM1602ATW-E/TR	HM801SDTY-E	6	3 - 14 - 15	3 - 16 - 17	2.63	5.15	2.83	3.84	-/-
	GM1602AT8W-E/TR	HM801SDTY-E	6	3 - 14 - 15	3 - 16 - 18	2.63	5.04	2.83	3.76	A++/-
Ceiling	GM1102ATW-E/TR	HM561CTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.67	6.89	3.91	4.3	A++/A+
	GM1102AT8W-E/TR	HM561CTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.72	6.37	3.95	4.29	-/A+
	GM1402ATW-E/TR	HM801CTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	3.02	6.11	3.74	4.28	-/-
	GM1402AT8W-E/TR	HM801CTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	3.07	5.83	3.79	4.2	-/-
	GM1602ATW-E/TR	HM801CTP-E	6	3 - 14 - 15	3 - 16 - 17	2.78	6.21	3.37	4.3	-/-
	GM1602AT8W-E/TR	HM801CTP-E	6	3 - 14 - 15	3 - 16 - 18	2.83	6.08	3.41	4.22	A++/-
High-wall	GM1102ATW-E/TR	HM561KRTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.21	6.3	3.26	4.2	A+/A+
	GM1102AT8W-E/TR	HM561KRTP-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.22	6.01	3.31	4.19	-/A+
	GM1402ATW-E/TR	HM801KRTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	2.88	5.97	2.9	4.2	-/-
	GM1402AT8W-E/TR	HM801KRTP-E	5	3 - 12.1 - 13.2	3 - 13 - 16	2.93	5.65	2.94	4.19	-/-
	GM1602ATW-E/TR	HM801KRTP-E	6	3 - 14 - 15	3 - 16 - 17	2.57	5.66	2.58	4.2	-/-
	GM1602AT8W-E/TR	HM801KRTP-E	6	3 - 14 - 15	3 - 16 - 18	2.62	5.56	2.63	4.16	A++/-
Floor standing	GM1102ATW-E/TR	HM561FT-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.5	6.1	3.61	3.92	A+/A
	GM1102AT8W-E/TR	HM561FT-E	4	3 - 9.5 - 11.2	3 - 11.2 - 13	3.55	5.77	3.64	3.92	-/A
	GM1402ATW-E/TR	HM801FT-E	5	3 - 12.1 - 13.2	3 - 13 - 16	2.8	5.46	3.29	3.9	-/-
	GM1402AT8W-E/TR	HM801FT-E	5	3 - 12.1 - 13.2	3 - 13 - 16	2.85	5.29	3.34	3.9	-/-
	GM1602ATW-E/TR	HM801FT-E	6	3 - 14 - 15	3 - 16 - 17	2.63	5.15	2.83	3.9	-/-
	GM1602AT8W-E/TR	HM801FT-E	6	3 - 14 - 15	3 - 16 - 18	2.68	5.09	2.83	3.82	/-

TRIPLE SPLIT DI

Cooling & heating

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	Cooling capacity nin. - nominal - max kW	Heating capacity nin. - nominal - max kW	EER	SEER	COP	SCOP	Energy class*
Standard 4-way cassette	GM1602ATW-E/TR	HM561UTP-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.77	6.51	3.39	4.4	-/-
	GM1602AT8W-E/TR	HM561UTP-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.84	6.44	3.44	4.38	-/-
Compact 4-way cassette	GM1602ATW-E/TR	HM561MUT-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.55	5.46	2.63	4.09	-/-
	GM1602ATW-E/TR	HM561MUTP-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.55	5.46	2.63	4.09	-/-
	GM1602AT8W-E/TR	HM561MUT-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.6	5.37	2.68	4.06	-/-
	GM1602AT8W-E/TR	HM561MUTP-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.6	5.37	2.68	4.06	-/-
Standard duct	GM1602ATW-E/TR	HM561BTP-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.66	5.83	3.38	4.05	-/-
	GM1602AT8W-E/TR	HM561BTP-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.72	5.73	3.43	3.96	-/-
Super slim duct	GM1602ATW-E/TR	HM561SDTY-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.63	5.1	2.83	3.84	-/-
	GM1602AT8W-E/TR	HM561SDTY-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.63	4.99	2.83	3.75	-/-
Ceiling	GM1602ATW-E/TR	HM561CTP-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.78	6.18	3.37	4.3	-/-
	GM1602AT8W-E/TR	HM561CTP-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.83	6.05	3.41	4.22	-/-
Floor standing	GM1602ATW-E/TR	HM561FT-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.63	5.1	2.83	3.9	-/-
	GM1602AT8W-E/TR	HM561FT-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.68	5.05	2.83	3.82	-/-
High-wall	GM1602ATW-E/TR	HM561KRTP-E/TR	6	3 - 14 - 15	3 - 16 - 17	2.57	5.63	2.58	4.19	-/-
	GM1602AT8W-E/TR	HM561KRTP-E/TR	6	3 - 14 - 15	3 - 16 - 18	2.62	5.53	2.63	4.16	-/-

(*) The energy efficiency class range of this product category is D→A+++

TOSHIBA

TWIN SPLIT BIG DI

Cooling & heating

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	Cooling capacity nin. - nominal - max kW	Heating capacity nin. - nominal - max kW	EER	SEER	COP	SCOP	Energy class*
Standard 4-way cassette	GM2241AT8-E1/TR1	HM1101UTP-E	8	4.6 - 20.0 - 22.4	4.6 - 22.4 - 25.0	3.6	6.53	4.23	4.05	-/-
	GM2801AT8-E1/TR1	HM1401UTP-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	3	6.21	3.8	3.9	-/-
Standard duct	GM2241AT8-E1/TR1	HM1101BTP-E	8	4.6 - 20.0 - 22.4	4.6 - 22.4 - 25.0	3.24	5.03	4.02	3.72	-/-
	GM2801AT8-E1/TR1	HM1401BTP-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	2.65	5	3.62	3.64	-/-
Ceiling	GM2241AT8-E1/TR1	HM1101CTP-E	8	4.6 - 20.0 - 25.0	4.6 - 22.4 - 25.0	3.24	5.67	3.92	3.79	-/-
	GM2801AT8-E1/TR1	HM1401CTP-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	2.62	5.16	3.57	3.65	-/-
Floor standing	GM2241AT8-E1/TR1	HM1101FT-E	8	4.6 - 20.0 - 25.0	4.6 - 22.4 - 25.0	3.24	5.42	3.28	3.62	-/-
	GM2801AT8-E1/TR1	HM1401FT-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	2.65	5.20	3.83	3.59	-/-

TRIPLE SPLIT BIG DI

Cooling & heating

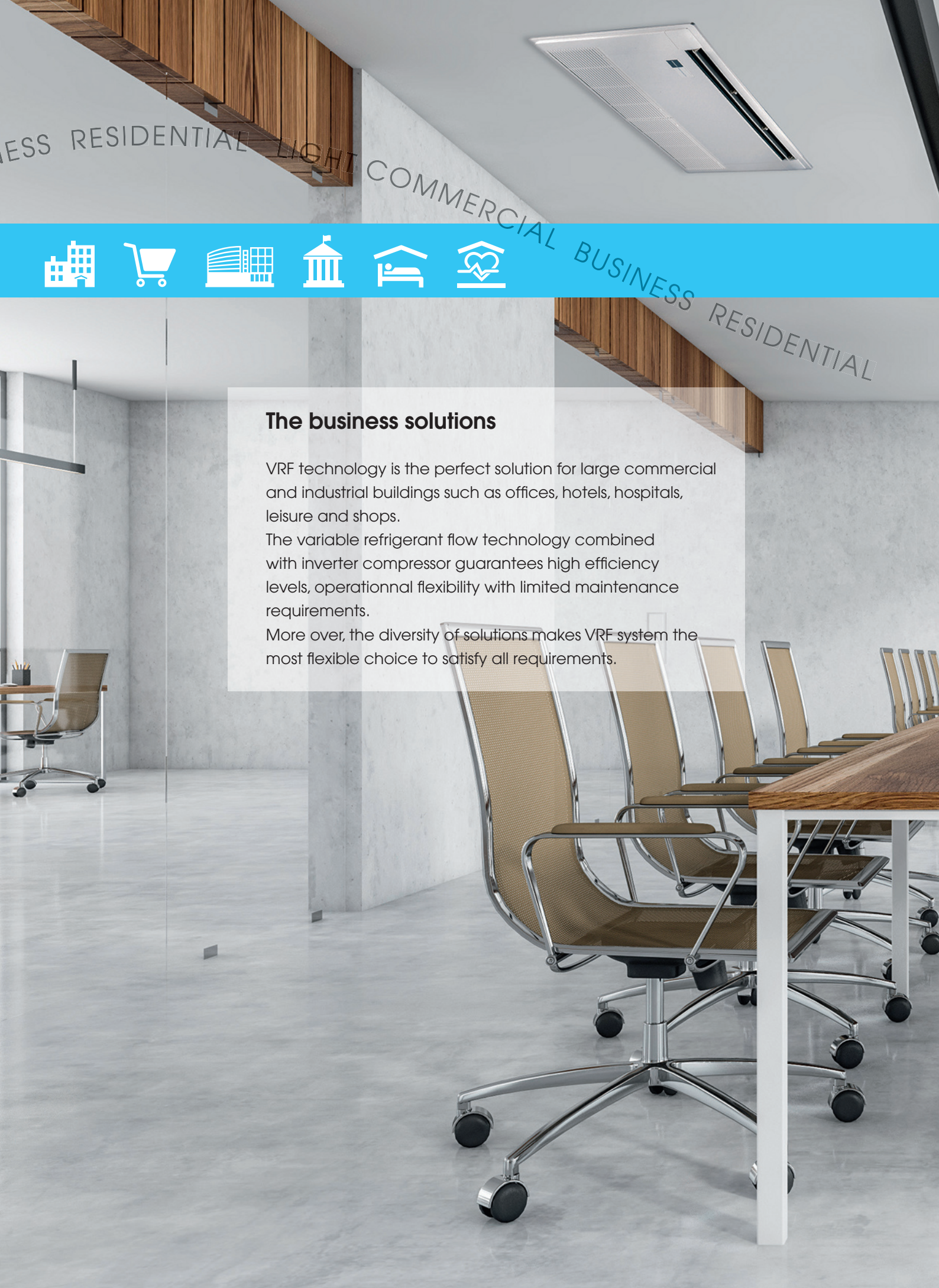
Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	Cooling capacity nin. - nominal - max kW	Heating capacity nin. - nominal - max kW	EER	SEER	COP	SCOP	Energy class*
Standard 4-way cassette	GM2241AT8-E1	HM561UTP-E	8	4.6 - 20.0 - 22.4	4.6 - 22.4 - 25.0	3.6	6.85	4.23	4.06	-/-
	GM2801AT8-E1	HM801UTP-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	3	6.45	3.8	3.92	-/-
Standard duct	GM2241AT8-E1	HM561BTP-E	8	4.6 - 20.0 - 22.4	4.6 - 22.4 - 25.0	3.24	5.60	4.02	3.76	-/-
	GM2801AT8-E1	HM801BTP-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	2.65	5.37	3.62	3.67	-/-
Super slim duct	GM2241AT8-E1	HM801SDTY-E	8	4.6 - 20 - 22.4	4.6 - 22.4 - 25	3	5.77	3.66	3.88	-/-
	GM2801AT8-E1	HM801SDTY-E	10	4.6 - 23.5 - 27	4.6 - 27 - 31.5	2.65	5.14	3.29	3.59	-/-
Ceiling	GM2241AT8-E1	HM561CTP-E	8	4.6 - 20.0 - 22.4	4.6 - 22.4 - 25.0	3.24	5.94	3.92	3.81	-/-
	GM2801AT8-E1	HM801CTP-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	2.62	5.41	3.57	3.67	-/-
Floor standing	GM2241AT8-E1	HM801FT-E	8	4.6 - 20 - 22.4	4.6 - 22.4 - 25	3.24	5.36	3.98	3.62	-/-
	GM2801AT8-E1	HM801FT-E	10	4.6 - 23.5 - 27	4.6 - 27 - 31.5	2.65	5.15	3.29	3.59	-/-
High-wall	GM2241AT8-E1	HM801KRTP-E	8	4.6 - 20.0 - 22.4	4.6 - 22.4 - 25.0	3	5.81	3.66	3.78	-/-
	GM2801AT8-E1	HM801KRTP-E	10	4.6 - 23.5 - 27.0	4.6 - 27.0 - 31.5	2.55	5.47	3.53	3.65	-/-

DOUBLE TWIN SPLIT BIG DI

Cooling & heating

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	Cooling capacity nin. - nominal - max kW	Heating capacity nin. - nominal - max kW	EER	SEER	COP	SCOP	Energy class*
Standard 4-way cassette	GM2241AT8-E1	HM561UTP-E	8	4.6 - 20.0 -22.4	4.6 - 22.4 - 25.0	3.6	6.80	4.23	4.06	-/-
	GM2801AT8-E1	HM801UTP-E	10	4.6 - 23.0 -27.0	4.6 - 27.0 - 31.5	3	6.42	3.8	3.91	-/-
Compact 4-way cassette	GM2241AT8-E1	HM561MUT-E	8	4.6 - 20.0 -22.4	4.6 - 22.4 - 25.0	3.15	6.24	3.66	4.04	-/-
	GM2241AT8-E1	HM561MUTP-E	8	4.6 - 20.0 -22.4		3.15	6.24	3.66	4.04	-/-
Standard duct	GM2241AT8-E1	HM561BTP-E	8	4.6 - 20.0 -22.4	4.6 - 22.4 - 25.0	3.24	5.58	4.02	3.76	-/-
	GM2801AT8-E1	HM801BTP-E	10	4.6 - 23.5 -27.0	4.6 - 27.0 - 31.5	2.65	5.35	3.62	3.67	-/-
Super slim duct	GM2241AT8-E1	HM561SDTY-E	8	4.6 - 20 - 22.4	4.6 - 22.4 - 25	3	5.72	3.66	3.88	-/-
	GM2801AT8-E1	HM801SDTY-E	10	4.6 - 23.5 - 27	4.6 - 27 - 31.5	2.65	5.11	3.29	3.59	-/-
Ceiling	GM2241AT8-E1	HM561CTP-E	8	4.6 - 20.0 -22.4	4.6 - 22.4 - 25.0	3.24	5.92	3.92	3.81	-/-
	GM2801AT8-E1	HM801CTP-E	10	4.6 - 23.5 -27.0	4.6 - 27.0 - 31.5	2.62	5.38	3.57	3.67	-/-
Floor standing	GM2241AT8-E1	HM561FT-E	8	4.6 - 20 - 22.4	4.6 - 22.4 - 25	3.24	5.32	3.98	3.61	-/-
	GM2801AT8-E1	HM561FT-E	10	4.6 - 23.5 - 27	4.6 - 27 - 31.5	2.65	5.12	3.29	3.59	-/-
High-wall	GM2241AT8-E1	HM561KRTP-E	8	4.6 - 20.0 -22.4	4.6 - 22.4 - 25.0	3	5.78	3.66	3.78	-/-
	GM2801AT8-E1	HM801KRTP-E	10	4.6 - 23.5 -27.0	4.6 - 27.0 - 31.5	2.55	5.45	3.53	3.65	-/-

(*) The energy efficiency class range of this product category is D→A+++



The business solutions

VRF technology is the perfect solution for large commercial and industrial buildings such as offices, hotels, hospitals, leisure and shops.
The variable refrigerant flow technology combined with inverter compressor guarantees high efficiency levels, operationnal flexibility with limited maintenance requirements.
More over, the diversity of solutions makes VRF system the most flexible choice to satisfy all requirements.

BUSINESS

EXCELLENCE IN SEASONAL EFFICIENCY

MiNi-SMMS, MiNi SMMS-e, SMMS-u, SHRM-e & & SHRM-Advance

CREATING BENEFITS AROUND COMFORT

Benefits for the consultant

Our VRF offers unlimited possibilities in terms of capacity, connectivity, indoor unit lineup and control solutions, providing the correct solution for your customers needs. Toshiba selection tool will guide you through the selection process with minimal input from your side, ensuring troublefree installation and operation. All systems come with the Eurovent certification as standard.

Benefits for the installer

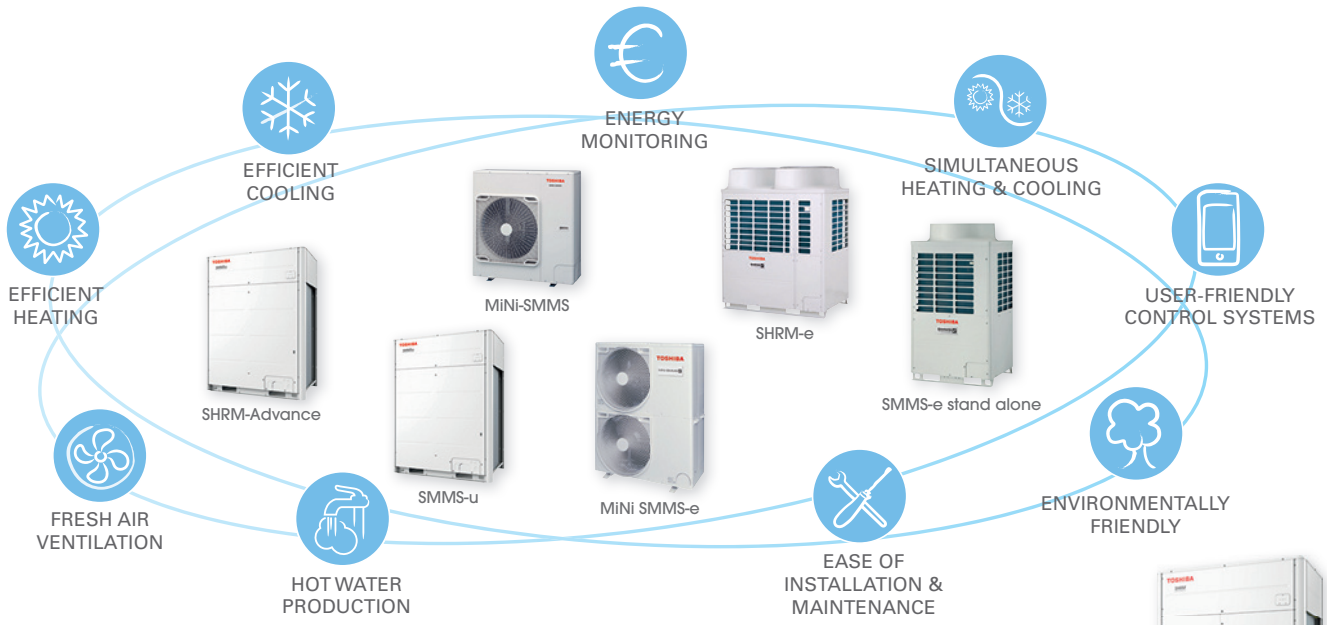
Designed to perform and engineered to perfection, Toshiba VRF excels in anaging the heating, cooling, hot water and fresh air input into offices, shops, restaurants and domestic housing, with unrivalled connection flexibility. You can rely on Toshiba support, to assist you from the project phase to commissioning and troubleshooting.

Benefits for the user

There is nothing like a comfortable place to enjoy the present moment. Full of Toshiba innovations, our VRF guarantee all year round comfort combined with superior energy management, advanced air filtration and full control solutions for maximized product usability.

Benefits for the planet

Toshiba Air Conditioning has an unwavering drive to make and do things that lead to a better world. After the switch to low GWP refrigerant for its residential and light commercial products, Toshiba offers a full VRF R32 linuep with sideblow MiNi-SMMS and topblow SHRM Advance. Be prepared to a new green dimension in your projects and in your life.



SHRM-Advance & MiNi-SMMS, the future is now

The new SHRM-Advance and MiNi-SMMS are the most advanced solutions to provide cooling & heating for commercial applications. Be surprised by all the possibilities offered by these new solutions benefiting from 40 years of inspired innovations!

- 4 to 6HP
- Single fan compact chassis
- High efficiency up to 9.98 SEER
- EN(EIC) 60335-2-40 ed6 compliant

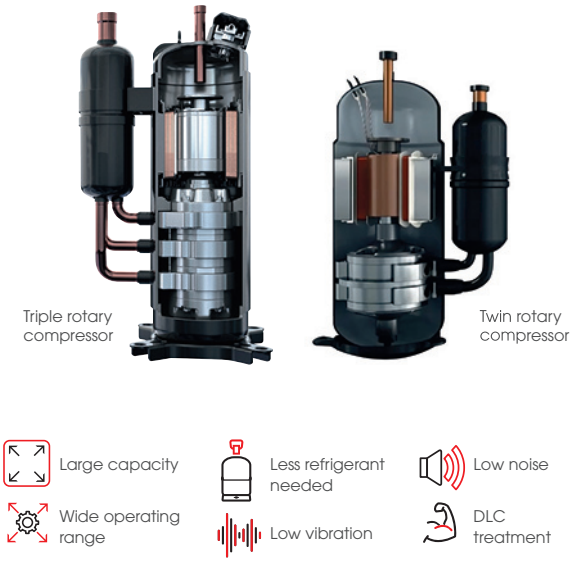
- 8 to 24HP
- 2-pipe* and 3-pipe operations
- Wide choice of indoor unit
- High ef f iciency up to 8.9 SEER
- EN(EIC) 60335-2-40 ed6 compliant

* 8, 10 & 12HP

HIGH EFFICIENCY AND LOW OPERATION COSTS

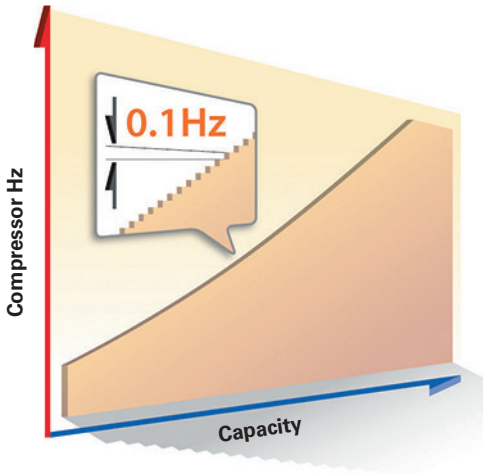
Innovative compressor technology

Toshiba rotary compressor technology brings outstanding performances to all SMMS systems with no compromise on system reliability.



Infinite variable control

Inverter control feature has been continually developed, since its inception by Toshiba Air Conditioning engineers back in 2004 with the original SMMS system. The control has the ability to adjust the compressor rotational speed in a near seamless 0,1 Hz steps. This control when matched with Toshiba's newest and latest Twin Rotary compressors, allows the system to respond precisely to the capacity needs of the end user, whilst minimizing energy losses.



Maximum part load and full load efficiencies

		SMMS-U	SHRM ADVANCE	MiNi-SMMS
HEATING	SCOP	UP TO 4.8	UP TO 4.6	UP TO 5.2
	Ethash	UP TO 188%	UP TO 183%	UP TO 206%
COOLING	SEER	UP TO 7.7	UP TO 8.9	UP TO 10
	Ethasc	UP TO 306%	UP TO 353%	UP TO 397%

INDUSTRY Top Class

Thanks to Toshiba's rotary compressor technology, 0.1Hz inverter and "intelligent flow" technology, the Toshiba's VRF achieve a SEER of 9.98 (MiNi-SMMS), one of the highest seasonal efficiency in the market.

Maximum efficiency is obtained under 50% part load conditions, under which VRF systems operate predominantly.

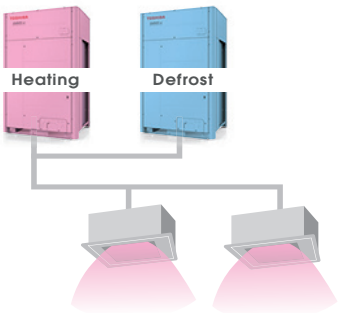
The expert use and evolution of Toshiba's core technologies have allowed the Toshiba VRF system to achieve one of the highest part load COP and EER in the industry.

MiNi-SMMS, MiNi SMMS-e, SMMS-u, SHRM-e & SHRM-Advance

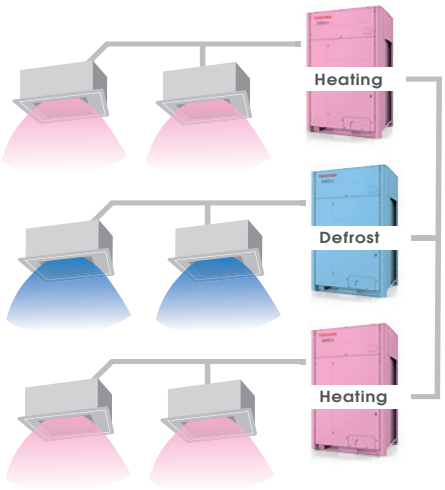
SUPERIOR AIR COMFORT

Intelligent defrost

Individual defrost: continuous heating up to 5 hours



Kobetsu
No simultaneous defrost in combination configuration.
Heating operation never stops.

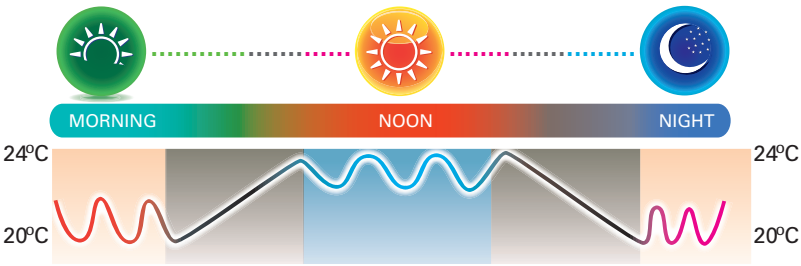


Renkey
No simultaneous defrost with multi system configuration.
Heating operation never stops.

* Applicable on MiNi-SMMS, SMMS-u and SHRM-Advance

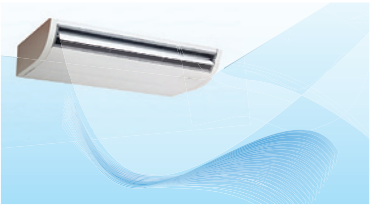
Dual set point for more precision

The Dual Set Point increases the system's energy efficiency and reduces overall running costs, with longer periods of time in thermal off mode. Heating and cooling temperatures at which the indoor unit will begin to operate can now be individually selected giving maximum flexibility to the user.

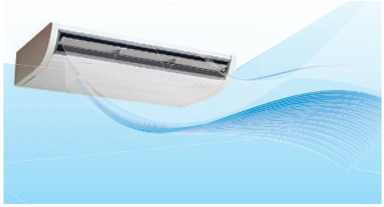


Cool comfort with soft cooling mode

The development of the soft cooling mode provides a new level for cool comfort. You will have the freedom to personalize the air flow intensity, angle and direction directly from the remote control and enjoy the indoor environment at the right temperature without being directly exposed to the cold draft.



Standard operating mode

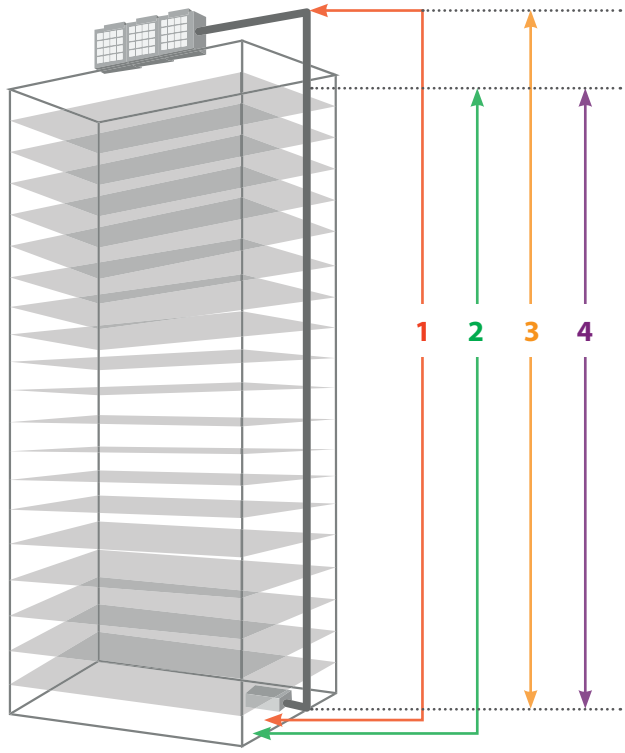


Soft cooling mode

FLEXIBLE DESIGN AND QUICK INSTALLATION

Piping design flexibility

Toshiba Air Conditioning's piping technology makes them one of the industries leaders in system flexibility and ease of installation and with the e-series VRF system, the level of flexibility has increased further, giving more options to the contractor and installer alike.



For more details, please refer to installation manuals.

1 Total piping length

Toshiba Air Conditioning's VRF can reach up to 1,200 meters maximum piping length.

Total piping length
1,200 m*

2 Farthest equivalent length

The maximum equivalent distance between the outdoor unit and the farthest indoor unit tops at 250 meters for SMMS-u and 190 meters for SHRM Advance.

Farthest equivalent length
250 m/190 m

3 Height between outdoor unit and indoor unit

Another benefit is the maximum vertical distance between the outdoor and indoor units, which can extend up to 110 meters for SMMS-u & 90 meters for SHRM Advance. Toshiba Air Conditioning's VRF enhanced piping capabilities result in more benefits for system design and installation flexibility, as well as lower installation costs.

110 m/90 m

4 Height difference FCU-FCU

Maximum vertical distance between indoor units can reach up to 40 meters, which is equal to an entire 11-storey Height difference between outdoor unit and indoor unit 40 m building.

Height difference between outdoor unit and indoor unit
40 m

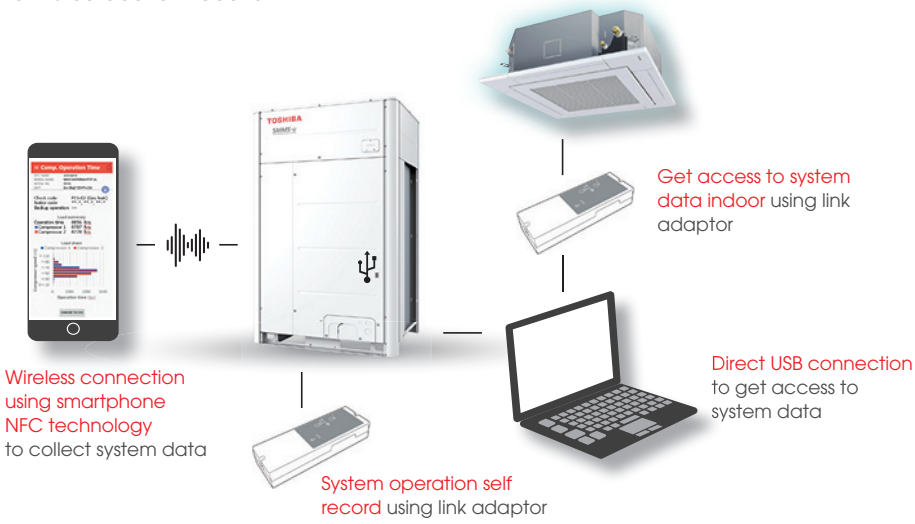
SMMS-u/SHRM-Advance"

Toshiba Air Conditioning selection tool

Designed for novice and expert users, Toshiba Air Conditioning selection software creates simple, yet detailed VRF system schematics. It is highly versatile, allowing the level of detail to be tailored to suit customer requirements. Final detailed reports can be produced and sent to customers in PDF format or in more complex files, such as AutoCAD DXF, allowing simple integration into existing software packages.

Easy commissioning and maintenance

Save time during commissioning and maintenance. Choose between the "Wave Tool Advance" using Smartphone NFC connection or the link adaptor connected to the outdoor or indoor unit.



BUSINESS

CHOOSE YOUR ADAPTED SYSTEM SOLUTION
MAPPING BY APPLICATIONS

OUTDOOR UNITS

Reversible cooling or heating

Simultaneous cooling & heating

	Residential	Light commercial			Business	
MiNi SMMS Sideblow 1 fan & MiNi-SMMS	■ Individual housing mainly	■	■	■	■	■
	Up to 250 m² per system Max. 13 IDUs per system	Up to 250 m² per system and max. 13 IDUs per system MiNi SMMS Sideblow - single phase power supply - R410a Refrigerant MiNi SMMS - single phase power supply - R32 Refrigerant R32 inside MiNi-SMMS				
MiNi SMMS-e 1Ph & 3Ph	■ Individual housing mainly	■	■	■	■	■
	Up to 400 m² per system Max. 16 IDUs per system MiNi SMMS-e - single phase power supply - R410a Refrigerant MiNi SMMS-e - three phase power supply - R410a Refrigerant					
Stand alone SMMS-e & SMMS-u	■ Collective housing mainly	■	■	■	■	■
	3-phase electrical power supply only	Up to 6,000 m² per system Max. 128 IDUs per system SMMS-e - three phase power supply - R410a Refrigerant SMMS-u - three phase power supply - R410a Refrigerant				
SHRM-e, SHRM Advance	■ Collective housing mainly		■	■	■	■
	3-phase electrical power supply only	Up to 2,500 m² per system. Max. 69 IDUs per system SHRM-e - three phase power supply - R410a Refrigerant SHRM-Advance - three phase power supply - R32 Refrigerant				

INDOOR UNITS

Duct	o (Standard duct)	o (Standard or high static pressure)	o (Slim or standard)	o (Slim for rooms & standard for lobby)	o
High-wall	o	o	o	o (For rooms - low sound version)	o
Ceiling		o			o
Console	o (Bi-flow version)		o	o (For lobby)	o

The data provided on this page is for informational purposes only and not for the purpose of providing legal or other professional advice.

TOSHIBA

CHOOSE YOUR ADAPTED SYSTEM SOLUTION

OUTDOOR UNIT MAPPING FOR EUROPE

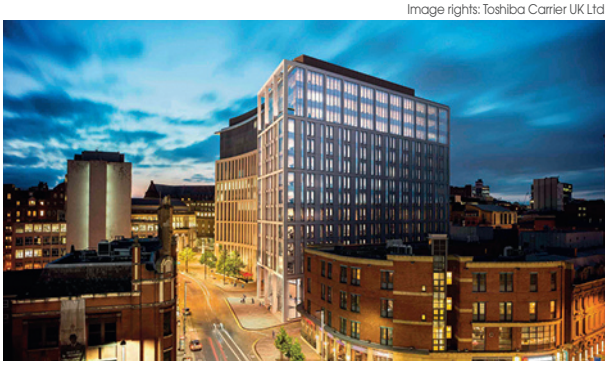
OUTDOOR UNIT MAPPING FOR EUROPE		NEW  MiNi-SMMS	 Side Blow	 MiNi SMMS-e	 SMMS-e	 SMMS-u	NEW  SHRM Advance	 SHRM-e	
		R32	R410A	R410A	R410A	R410A	R32	R410A	
		MCY-MUG0_1HSW-E/TR	MCY-MHP0_4HT-E	MCY-MHP0_4HS(8)-E/TR	MMY-SAP_6HT8P-E	MMY-MUP_1HT8P-E/TR	MMY-SUG_1MT8(J)P-E	MMY-MAP_6FT8P-E/TR	
		Heat pump			Heat pump	Heat pump	Heat pump	Heat pump	
		Single module	Single module	Single module	Single module	Single module	Free combination	Single module	Single module	Combinations
OUTDOOR UNIT MAPPING FOR EUROPE	4	●▼ (1Ph)	●▼ (1Ph)	●▼ (1Ph/3Ph)						
	5	●▼ (1Ph)	●▼ (1Ph)	●▼ (1Ph/3Ph)						
	6	●▼ (1Ph)		●▼ (1Ph/3Ph)						
	8			●▼ (3Ph)	●▼	●▼		●▼	●▼	
	10			●▼ (3Ph)	●▼	●▼		●▼	●▼	
	12					●▼		●▼	●▼	
	14					●▼		●▼	●▼	
	16					●▼		●▼	●▼	
	18					●▼		●▼	●▼	
	20					●▼		●▼	●▼	
	22					●▼		●▼		●
	24					●▼	●	●▼		●
	26						●			●
	28						●			●
	30						●			●
	32						●			●
	34						●			●
	36						●			●
	38						●			●
	40						●			●
	42						●			●
	44						●			●
	46						●			●
	48						●			●
	50						●			●
	52						●			●
	54						●			●
	56						●			
	58						●			
	60						●			
	---						●			
	120						●			
Fresh air solution	Fresh air duct					●	●	●		
	Air to air heat exchanger + DX coil			● (4, 5 & 6HP only)					●	●
	DX Kit				●	●	●		●	●
Hot water	Hot water module			● (8 & 10HP only)		●	●	● (mid temperature only)		●
Small capacity indoor units	0.3HP indoor unit	●				●	●	●		
	0.6HP indoor unit	●		●	●	●	●	●	●	●
Accessories	Leak detection	●	●	●	●	●	●	●	●	●
	Shut-off valve	●		●	●			●	●	●

●:available combination - ▼:Eurovent certified Note : Sound Pressure data not certified by Eurovent

PROJECT *REFERENCES*

OFFICE BUILDING

Image rights: Toshiba Carrier UK Ltd



Project

LANDMARK
180,000 sqm multi-storey, grade A office

Manchester, UK

Constraints

- 3-pipe solution
- Multi-storey building
- Rooftop CDU integration

Installer

CASTLE BUILDING
Services Ltd

Hebburn, UK

SOLUTION

SHRM-e

Duct

Images rights: AIR-COND / Photographer Simon Fischbacher: www.simonfischbacher.at

SHOP

Project

PADO
Shopping center

Parndorf, Austria

Constraints

- Hot summer & cold winter
- Wide surface
- Multi shop management

Installer

CAVERION

Wildon, Austria

SOLUTION

SMMS-e

MiNi SMMS-e

Cassette

HOTEL

Project

GENNADI GRAND RESORT HOTEL
Luxury five-star hotel guest-room air-conditioning

Rhodes Island, Greece

Constraints

- Grade A high efficiency building
- Low-height architecture
- Sea-side location

Installer

RODOS AIR

Rhodes Island, Greece

SOLUTION

SMMS-e

Slim Duct

TOSHIBA

MCY-MUG_HSW
MiNi-SMMS 1Ph

MADE IN EUROPE

High efficiency for true energy savings, low GWP refrigerant to help support decarbonization, compact chassis for simplified product integration: the perfect investment to answer all small to medium building heating and cooling requirements.

SCOP MAX	CAPACITY	OPERATION
5.21	**4**HP > **6**HP	**-20**°C > **+46**°C

Decarbonisation
• R32 low GWP refrigerant, combined with MiNi-SMMS lower refrigerant charge to reduce the total equivalent CO2 by 80%, compared with R410A legacy products.

Challenging spaces solution
• The MiNi-SMMS encompasses into a compact 0.37m² footprint outdoor unit all of Toshiba Air Conditioning VRF experience to answer residential or light commercial buildings heating and cooling requirements.

Enhanced efficiency
• The alliance of Twin rotary compressor technology, accurate Inverter control and Intelligent VRF control contributes to reach unparalleled seasonal efficiencies.

Smart comfort
• Night operation down to 44dB(A) to preserve users and neighbourhood comfort
• Efficient defrost system to extend heating operation time;

Extended flexibility
• Max 300m piping length and max 50m height between outdoor and indoor units for maximzed project coverage

Using the link adaptor, access easily to any system data status.

The connection is possible from outdoor & indoor units.

MiNi-SMMS 1PH Performances

Outdoor unit		MCY-	MUG0401HSW-E	MUG0501HSW-E	MUG0601HSW-E
		HP	4	5	6
Cooling capacity	**kW**	**C**	**12.1**	**14.0**	**15.5**
Power input (rated)	kW	C	2.92	3.73	4.29
EER	W/W	C	4.14	3.75	3.61
EthasC/SEER	W/W	C	396.2%/9.98	365.4%/9.21	349.0%/8.8
Running current	A	C	14.2/13.6/13.1	17.8/17/16.3	20.3/19.4/18.6
Heating capacity rated/max	**kW**	**H**	**12.1/14.2**	**14.0/16.0**	**15.5/17**
Power input (rated)	kW	H	2.38	2.95	3.36
COP	W/W	H	5.08	4.75	4.61
EthasH/SCOP		H	205.4%/5.21	194.2%/4.93	189.0%/4.80
Running current	A	H	11.9/11.4/10.9	14.4/13.7/13.2	16.1/15.4/14.8
Maximum overcurrent protection	A		32.0	32.0	32.0

MiNi-SMMS 1PH Physical data

Outdoor unit		MCY-	MUG0401HSW-E	MUG0501HSW-E	MUG0601HSW-E
Air flow	m³/h		4560	4740	4740
Sound power level	dB(A)	H	71	72	73
Sound pressure level	dB(A)	H	54	55	56
Sound power level	dB(A)	C	69	70	71
Sound pressure level	dB(A)	C	52	53	54
External static pressure available	Pa		20	20	20
Dimensions (HxWxD)	mm		1050x1010x370	1050x1010x370	1050x1010x370
Weight	kg		100	100	100
Compressor type			Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R32	kg		2	2	2
	TCO2eq		2	2	2
Gas line type - diameter	inch		Flare - 5/8'	Flare - 5/8'	Flare - 5/8'
Liquid line type - diameter	inch		Flare - 3/8'	Flare - 3/8'	Flare - 3/8'
Maximum pipe length	m		300	300	300
Farthest piping equivalent/actual length	m		150/120	150/120	150/120
Maximum lift(indoor unit above/below)	m		40/'50	40/'50	40/'50
Maximum number of connected indoor units			8	10	13
Operating range - db	°C	C		-5 to 46	
Operating range - wb	°C	H		-20 to 15.5	
Power supply	V-ph-Hz			220/230/240-1-50	

C: cooling mode
H: heating mode

MCY-MHP_HT
SIDE BLOW 1PH

Compact, efficient, adaptable, energy saver, the sideblow VRF is the solution to cool and heat small/medium size buildings.

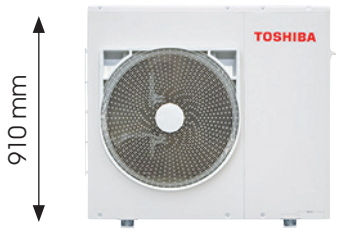
Efficiency
• Toshiba Air Conditioning's in-house designed twin rotary inverter controlled compressor operates precisely to match the indoor demand, providing class leading levels of performance and system efficiency.

Adaptability
• Extensive indoor model range, with various styles of indoor unit designs, including small capacity 0.6Hp models.
• Possibility to merge different styles of indoor units.

Comfort
• One user-friendly controller for all the indoor units helps to simplify the unit control.

SCOP MAX	CAPACITY	OPERATION
4.21	**4**HP > **5**HP	**-20**°C > **+46**°C

Outdoor unit height greatly reduced (>1m) for easier integration and installation.



SIDE BLOW 1PH Performances

Outdoor unit			MCY-MHP0406HT-E	MCY-MHP0506HT-E1
		HP	4	5
Cooling capacity	**kW**		**12.1**	**14.0**
Power input	kW	C	3.24	4.34
EER	W/W		3.73	3.23
EthasC/SEER			320.2% / 8.08	307.8% / 7.77
Running current	A	C	14.4 / 13.8 / 13.2	20.8 / 19.9 / 19.0
Heating capacity	**kW**		**12.5**	**16.0**
Power input	kW	H	2.83	4.00
COP	W/W		4.42	4.00
EthasH/SCOP			150.2% / 3.83	152.2% / 3.88
Running current	A	H	13.4 / 12.8 / 12.3	19.1 / 18.3 / 17.5
Peak demand current	A		26.5	28.0

SIDE BLOW 1PH Physical data

Outdoor unit			MCY-MHP0406HT-E	MCY-MHP0506HT-E1
Air flow	m^3/h - l/s		4020 - 1117	4260 - 1183
Sound pressure level	dB(A)	C/H	54/57	54/58
Max indoor connectivity			8	10
Dimensions (HxWxD)	mm		910 x 990 x 390	910 x 990 x 390
Weight	kg		100	100
Compressor type			Twin Rotary	Twin Rotary
Refrigerant charge R410A	kg/TCO2eq		3.3/6.9	3.3/6.9
Gas line type - diameter			Flare - 5/8"	Flare - 5/8"
Liquid line type - diameter			Flare - 3/8"	Flare - 3/8"
Discharge line connection type - diameter				
Maximum equivalent length separation*	m		60	60
Maximum actual piping separation*	m		50	50
Maximum total pipe length*	m		90	90
Maximum lift (indoor unit above/below)	m		15/15	15/15
Operating range - db	°C	C	-5/46	-5/46
Operating range - wb	°C	H	-20/15	-20/15
Power supply	V-ph-Hz		220 / 230 / 240-1-50	220 / 230 / 240-1-50

* when PMV Kit is used: Maximum equivalent length separation (50 m); Maximum actual piping separation (40 m); Maximum total pipe length (75 m).
C: cooling mode
H: heating mode

TOSHIBA

MCY-MHP_HS
MiNi SMMS-e 1Ph

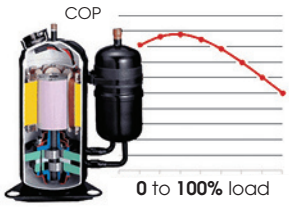
Incorporating all of Toshiba Air Conditioning's VRF experience and knowledge into a system that measures no more than 1.2m high, results in a perfect solution for all small to medium building heating and cooling requirements.

Technology
- Toshiba Air Conditioning's in-house designed twin rotary inverter controlled compressor operates precisely to match the indoor demand, providing class leading levels of performance and system efficiency.
- Precise refrigerant control ensures each indoor unit receives the right amount of refrigerant.

Connectivity
- With 180m total (125m equivalent) piping length, ensures the MiNi SMMS-e system is adaptable for all types of projects.
- Extensive indoor model range, with various styles of indoor unit designs, including small capacity (0.6Hp) and air-to-air heat exchanger models.

SCOP MAX	CAPACITY	OPERATION
4.37	**4**HP > **6**HP	**-20**°C > **+46**°C

The twin rotary inverter controlled compressor shows high efficiency levels even at very low heating loads.



MiNi SMMS-e 1Ph Performances

Outdoor unit		HP	MCY-MHP0404HS-E 4	MCY-MHP0504HS-E 5	MCY-MHP0604HS-E 6
Cooling capacity	**kW**		**12.1**	**14.0**	**15.5**
Power input	kW	C	2.83	3.50	4.29
EER	W/W		4.28	4.00	3.61
EthasC/SEER			373.8% / 9.42	366.2% / 9.23	384.2% / 9.68
Running current	A	C	13.5 / 13.0 / 12.4	16.6 / 15.9 / 15.2	20.1 / 19.2 / 18.4
Heating capacity	**kW**		**12.5**	**16.0**	**18.0**
Power input	kW	H	2.59	3.75	4.31
COP	W/W		4.83	4.27	4.18
EthasH/SCOP			163.8% / 4.17	166.6% / 4.24	171.8% / 4.37
Running current	A	H	12.5 / 12.0 / 11.5	17.8 / 17.0 / 16.3	20.2 / 19.3 / 18.5
Peak demand current	A		23.5	26.5	28.0

MiNi SMMS-e 1Ph Physical data

Outdoor unit			MCY-MHP0404HS-E	MCY-MHP0504HS-E	MCY-MHP0604HS-E
Air flow	m^3/h - l/s		5660 - 1572	5820 - 1617	6050 - 1681
Sound pressure level	dB(A)	C/H	49/52	50/53	51/54
Max indoor connectivity			8	10	13
Dimensions (HxWxD)	mm		1235 x 990 x 390	1235 x 990 x 390	1235 x 990 x 390
Weight	kg		127	127	127
Compressor type			Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R410A	kg/TCO2eq		6.4 / 13.4	6.4 / 13.4	6.4 / 13.4
Gas line type - diameter			Flare - 5/8"	Flare - 5/8"	Flare - 3/4"
Liquid line type - diameter			Flare - 3/8"	Flare - 3/8"	Flare - 3/8"
Discharge line connection type - diameter					
Maximum equivalent length separation*	m		125	125	125
Maximum actual piping separation*	m		100	100	100
Maximum total pipe length*	m		180	180	180
Maximum lift (indoor unit above/below)	m		30/20	30/20	30/20
Operating range - db	°C	C	-5/46	-5/46	-5/46
Operating range - wb	°C	H	-20.0 / 15.0	-20.0 / 15.0	-20.0 / 15.0
Power supply	V-ph-Hz		220 / 230 / 240-1-50	220 / 230 / 240-1-50	220 / 230 / 240-1-50

* when PMV Kit is used: Maximum equivalent length separation (80 m); Maximum actual piping separation (65 m); Maximum total pipe length (150 m).
C: cooling mode
H: heating mode

MCY-MHP_HS8
MiNi SMMS-e 3Ph

Incorporating all of Toshiba Air Conditioning's VRF experience and knowledge into a system that measures no more than 1.2m high, results in a perfect solution for all small to medium building heating and cooling requirements.

Technology
- Toshiba Air Conditioning's in-house designed twin rotary inverter controlled compressor operates precisely to match the indoor demand, providing class leading levels of performance and system eff iciency.
- Precise refrigerant control ensures each indoor unit receives the right amount of refrigerant.

Connectivity
- With 180m total piping length, ensures the MiNi SMMS-e system is adaptable to all types of projects.
- Extensive indoor model range, with various styles of indoor unit designs, including small capacity (0.6Hp) and air-to-water heat exchanger models.
- 3Ph power supply.

SCOP MAX	CAPACITY	OPERATION
4.38	**4**HP > **10**HP	**-20**°C > **+46**°C

With 30Pa available pressure, the MiNi SMMS-e can be installed indoor behind a transfer grid.

MiNi SMMS-e 3Ph Performances

Outdoor unit		HP	MCY-MHP0404HS8-E 4	MCY-MHP0504HS8-E 5	MCY-MHP0604HS8-E 6	MCY-MHP0806HS8-E 8	MCY-MHP1006HS8-E 10
Cooling capacity	**kW**		**12.1**	**14.0**	**15.5**	**22.4**	**28**
Power input	kW	C	2.82	3.47	4.25	6.67	9.34
EER	W/W		4.29	4.03	3.65	3.36	3.00
EthasC/SEER	W/W		375.8% / 9.47	368.6% / 9.29	386.6% / 9.74	320.6% / 8.09	293.0% / 7.40
Running current	A	C	4.8 / 4.5 / 4.4	5.7 / 5.4 / 5.2	7.0 / 6.7 / 6.4	11.1 / 10.6 / 10.2	15.3 / 14.5 / 14.0
Heating capacity	**kW**		**12.5**	**16.0**	**18.0**	**22.4**	**28.0**
Power input	kW	H	2.57	3.72	4.27	5.20	7.00
COP	W/W		4.86	4.30	4.22	4.31	4.00
EthasH/SCOP			164.6% / 4.19	167.0% / 4.25	172.2% / 4.38	177.0% / 4.50	173.8% / 4.42
Running current	A	H	4.4 / 4.2 / 4.0	6.1 / 5.8 / 5.6	7.0 / 6.6 / 6.4	8.7 / 8.2 / 7.9	11.4 / 10.9 / 10.5

MiNi SMMS-e 3Ph Physical data

Outdoor unit			MCY-MHP0404HS8-E	MCY-MHP0504HS8-E	MCY-MHP0604HS8-E	MCY-MHP0806HS8-E	MCY-MHP1006HS8-E
Air Flow	m^3/h - l/s		5660 - 1572	5820 - 1617	6050 - 1681	8460-2350	8820-2450
Sound pressure level	dB(A)	C/H	49 / 52	50 / 53	51 / 54	58 / 59	59 / 60
Dimensions (HxWxD)	mm		1235 x 990 x 390	1235 x 990 x 390	1235 x 990 x 390	1740 x 990 x 390	1740 x 990 x 390
Weight	kg		125	125	125	147	147
Compressor type			Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R410A	kg/TCO2eq		6.4 / 13.4	6.4 / 13.4	6.4 / 13.4	4.4 / 9.2	4.4 / 9.2
Gas line type - diameter			Flare - 5/8"	Flare - 5/8"	Flare - 3/4"	Flare 3/4"	Flare 3/4"
Liquid line type - diameter			Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	Flare 3/8"(*2)	Flare 3/8"(*2)
Discharge line connection type - diameter							
Maximum equivalent length separation*	m		125	125	125	150	150
Maximum actual piping separation*	m		100	100	100	120	120
Maximum total pipe length*	m		180	180	180	300	300
Maximum lift (indoor unit above/below)	m		20/30	20/30	20/30	30/30	30/30
Operating range - db	°C	C	-5/46	-5/46	-5/46	-5/46	-5/46
Operating range - wb	°C	H	-20/15	-20/15	-20/15	-20/15	-20/15
Power supply	V-ph-Hz		380 / 400 / 415-3-50	380 / 400 / 415-3-50	380 / 400 / 415-3-50	380 / 400 / 415-3-50	380 / 400 / 415-3-50

* when PMV Kit is used: Maximum equivalent length separation (80 m); Maximum actual piping separation (65 m); Maximum total pipe length (150 m).
*2 Need to expand to 1/2"under certain condition.
*3 When the No. of connecting indoor units exceeds 12, maximum total capacity code of indoor units will be 11.
C: cooling mode
H: heating mode

TOSHIBA

MMY-SAP_HT8P
SMMS-E STAND ALONE

Keep all benefits of Toshiba Air Conditioning's SMMS-e with 50% less pre- charge refrigerant: new intelligent and innovative features that maximise end user comfort and system efficiencies.

MAX EFFICIENCY	CAPACITY	OPERATION
3.81	**8**HP > **10**HP	**-25**°C > **+46**°C

Excellence

- Toshiba Air Conditioning's in-house designed DC twin rotary compressor offers outstanding capacity, efficiency and comfort even under part load conditions.
- Incorporating Toshiba's latest inverter control for compressor precise regulation, maximum performance and energy savings.
- Outstanding 4-side heat exchanger + sub cooling heat exchanger for optimized efficiency.
- Precise refrigerant control to ensure that each indoor unit receives exactly the right amount of refrigerant.

Expansion

- A wide choice of indoor unit styles and capacity ranges to match customer needs and room configurations.

Enhancement

- With up to 235 m in equivalent length, 90 m from the first branch kit to the farthest indoor unit and 70 m height difference, the system is fully adaptable to all project types.

For maximum peace of mind should a compressor failure occur, backup operation is available.

The ALL inverter control can be adjusted to compensate for a failed compressor.

SMMS-E STAND ALONE Performances

Outdoor unit		MMY-HP	SAP0806HT8P-E 8	SAP1006HT8P-E 10
Cooling capacity	**kW**		**22.4**	**28.0**
Power input	kW	C	5.54	7.69
EER	W/W		4.04	3.64
EthasC/SEER			249.8% / 6.32	244.2% / 6.18
Running current	A	C	8.8	12.4
Heating capacity	**kW**		**25.0**	**31.5**
Power input	kW	H	5.65	7.59
COP	W/W		4.42	4.15
EthasH/SCOP			148.6% / 3.79	149.4% / 3.81
Running current	A	H	8.96	11.90
Maximum overcurrent protection3	A		25.0	25.0

SMMS-E STAND ALONE Physical data

Outdoor unit		MMY-	SAP0806HT8P-E	SAP1006HT8P-E
Air Flow	m^3/h		9700	9700
Air Flow	l/s		2694	2694
Sound Power Level	dB(A)	H	74	74
Sound pressure level	dB(A)	H	56	58
Sound Power Level	dB(A)	C	74	74
Sound pressure level	dB(A)	C	55	57
External Static pressure available	Pa		60	60
Dimensions (HxWxD)	mm		1830 x 990 x 780	1830 x 990 x 780
Weight	kg	HP	227	227
Compressor type			Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R410A	kg/TCO2eq		5.7 / 11.9	5.7 / 11.9
Gas line type - diameter			Brazed - 3/4"	Brazed - 7/8"
Liquid line type - diameter			Flare - 1/2"	Flare - 1/2"
Farthest piping equivalent length	m		235	235
Farthest piping actual length	m		190	190
Maximum pipe length	m		300	300
Maximum lift (indoor unit above/below)[1]	m		40 / 70	40 / 70
Operating range - db[2]	°C	C	-10 / 46	-10 / 46
Operating range - wb[3, 4]	°C	H	-25 / 15.5	-25 / 15.5
Power supply	V-ph-Hz		380 / 415-3-50	380 / 415-3-50

1) Indoor above condition:If the height difference between indoor units exceeds 3 m, set 30 m or less. Indoor below condition: If the height difference between indoor units exceeds 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 2) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. Consider installation location/surroundings and system design when expected to operate below -5°C. 3) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C. 4) Low ambient heating (-20degC or less) for extended periods of time is not allowed.
C: cooling mode
H: heating mode

MMY-SAP0806HT8JP-E	Anti Heavy Corrosion
MMY-SAP1006HT8JP-E	Anti Heavy Corrosion

MMY-MUP_1HT8P
SMMS-u

SMMS-u, the latest generation of VRF engineered in Japan, integrates a totally new redesigned chassis, a new compressor and a new heat exchanger to achieve unrivalled efficiency, outstanding comfort level and low environmental footprint.

SCOP MAX **4.79**

CAPACITY **8**HP > **24**HP

OPERATION **-25**°C > **+52**°C

Unrivalled
- Space efficient chassis design to ease product integration with no compromise on efficiency.
- Exclusive Toshiba Triple rotary compressor offering high capacity, outstanding performances with less refrigerant.
- Super efficient heat exchanger covering full product height to maximize energy exchange.
- Intelligent VRF control ensures exact quantity of refrigerant to be delivered to the indoor units to avoid waste of energy.
- KO-BE-TSU and Renkey new defrost solution for constant comfort level.

Universal
- Up to 24HP in single module and max 120HP in combination, enter into a new dimension!
- Up to 1,200m piping length max to cover the full building without splitting systems.
- Less constraints with 128 indoor units maximum per system.
- -25 to +52°C operating range to cover all climates over Europe.

Usability
- Ease commissioning and maintenance with direct USB connection, Wave Tool advance and Link adaptor.
- Trust into the new TU2C link protocol offering faster and stronger data transfer.

The exclusive Toshiba triple rotary compressor brings outstanding performances to the SMMS-u with no compromise on system reliability.

Triple rotary compressor

SMMS-u Performances

Outdoor unit		MMY-HP	MUP0801HT8P-E 8	MUP1001HT8P-E 10	MUP1201HT8P-E 12	MUP1401HT8P-E 14	MUP1601HT8P-E 16	MUP1801HT8P-E 18	MUP2001HT8P-E 20	MUP2201HT8P-E 22	MUP2401HT8P-E1 24
Cooling capacity	**kW**		**22.4**	**28.0**	**33.5**	**40.0**	**45.0**	**50.4**	**56.0**	**61.5**	**67.0**
Power input	kW	C	5.64	8.36	10.34	14.55	14.06	15.90	18.01	20.43	24.19
EER	W/W		3.97	3.35	3.24	2.75	3.20	3.17	3.11	3.01	2.77
EthasC/SEER	W/W		294.6%/7.44	306.2%/7.73	289.8%/7.32	279.0%/7.05	305.4%/7.71	304.2%/7.68	301.8%/7.62	286.2%/7.23	271.8%/6.87
Running current	A	C	9.15	13.40	16.00	22.60	21.60	24.40	27.70	31.40	37.10
Heating capacity rated/max	**kW**		**22.4/25**	**28/31.5**	**33.5/37.5**	**40/45**	**45/50**	**50.4/56**	**56/63**	**61.5/69**	**61.5/70**
Power input (rated)	kW	H	5.28	7.20	7.77	10.00	11.94	12.54	14.93	16.18	18.98
COP	W/W		4.24	3.89	4.31	4.00	3.77	4.02	3.75	3.80	3.24
EthasH/SCOP			177.0%/4.5	188.2%/4.78	187.0%/4.75	181.0%/4.6	188.6%/4.79	187.0%/4.75	174.2%/4.43	174.6%/4.44	163.8%/4.17
Running current	A	H	8.56	11.50	12.10	15.50	18.30	19.30	22.90	24.80	29.10
Maximum overcurrent protection[1]	A		20.0	32.0	32.0	40.0	40.0	50.0	50.0	63.0	80.0

1) if outdoor units are combined, refer to the installation manual.

SMMS-u Physical data

Outdoor unit		MMY-	MUP0801HT8P-E	MUP1001HT8P-E	MUP1201HT8P-E	MUP1401HT8P-E	MUP1601HT8P-E	MUP1801HT8P-E	MUP2001HT8P-E	MUP2201HT8P-E	MUP2401HT8P-E1
Air Flow	m³/h		9900	10500	11700	11880	15300	16800	15900	16500	16500
Sound Power Level	dB(A)	H	76	77	81	82	86	89	90	90	90
Sound pressure level	dB(A)	H	56	58	62	62	63	67	67	67	67
Sound Power Level	dB(A)	C	75	77	79	79	83	84	86	86	86
Sound pressure level	dB(A)	C	53	55	58	58	60	61	63	63	63
External Static pressure available	Pa		80	80	80	80	80	80	80	80	80
Dimensions (HxWxD)	mm		1690x990x780	1690x990x780	1690x990x780	1690x990x780	1690x1290x780	1690x1290x780	1690x1290x780	1690x1290x780	1690x1290x780
Weight	kg		228	228	228	228	312	312	334	356	356
Compressor type			Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Triple Rotary	Hermetic Triple Rotary	Hermetic Triple Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R410A	kg		6	6	6	6	9	9	9	9	9
	TCO2eq		13	13	13	13	19	19	19	19	19
Gas line type - diameter			Brazed - 3/4"	Brazed - 7/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-3/8"
Liquid line type - diameter			Brazed - 1/2"	Brazed - 1/2"	Brazed - 1/2"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 5/8"	Brazed - 3/4"	Brazed - 3/4"
Farthest piping equivalent length	m		250	250	250	250	250	250	250	250	250
Farthest piping actual length	m		210	210	210	210	210	210	210	210	210
Maximum pipe length2	m		500	500	500	500	500	500	500	500	500
Maximum lift (indoor unit above/below)[3]	m		70/40	70/40	70/40	70/40	70/40	70/40	70/40	70/40	70/40
Operating range - db[4,5]	°C	C	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52
Operating range - wb[6,7]	°C	H	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5
Power supply	V-ph-Hz		380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50

1) if outdoor units are combined, refer to the installation manual. 2) Less than 34HP: 300m. Total charging refrigerant is 140kg or less. 3) Indoor above condition:If the height difference between indoor units exceeds 3 m, set 30 m or less. Indoor below condition: If the height difference between indoor units exceeds 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 4) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. Consider installation location/surroundings and system design when expected to operate below -5°C. On single outdoor unit only. No height difference between units. 5) Low ambient cooling (-5 deg C or less) is limited to application. 6) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C. 7) Low ambient heating (-20degC or less) for extended periods of time is not allowed.
C: cooling mode
H: heating mode

MMY-MUP0801HT8JP-E	Anti Heavy Corrosion	MMY-MUP1601HT8JP-E	Anti Heavy Corrosion	MMY-MUP2001HT8JP-E	Anti Heavy Corrosion
MMY-MUP1001HT8JP-E	Anti Heavy Corrosion	MMY-MUP1401HT8JP-E	Anti Heavy Corrosion	MMY-MUP2201HT8JP-E	Anti Heavy Corrosion
MMY-MUP1201HT8JP-E	Anti Heavy Corrosion	MMY-MUP1801HT8JP-E	Anti Heavy Corrosion	MMY-MUP2401HT8JP-E1	Anti Heavy Corrosion

SMMS-u Capacity table - Standard model

Capacity HP	Capacity Cooling/Heating in kW	Combination	Modèle	EER/SEER	COP/SCOP	Max indoor connectivity
8	22.4/22.4	8	MMY-MUP0801HT8P-E	3.97/7.44	4.24/4.5	18
10	28/28	10	MMY-MUP1001HT8P-E	3.35/7.73	3.89/4.78	22
12	33.5/33.5	12	MMY-MUP1201HT8P-E	3.24/7.32	4.31/4.75	27
14	40/40	14	MMY-MUP1401HT8P-E	2.75/7.05	4/4.6	31
16	45/45	16	MMY-MUP1601HT8P-E	3.2/7.71	3.77/4.79	36
18	50.4/40.5	18	MMY-MUP1801HT8P-E	3.17/7.68	4.02/4.75	40
20	56/56	20	MMY-MUP2001HT8P-E	3.11/7.62	3.75/4.43	45
22	61.5/61.5	22	MMY-MUP2201HT8P-E	3.01/7.23	3.8/4.44	49
24	67/67	24	MMY-MUP2401HT8P-E	2.77/6.87	3.53/4.17	52
26	73.5/73.5	14 + 12	MMY-UP2611HT8P-E	2.95/4.17	4.14/4.67	58
28	80/80	14 + 14	MMY-UP2811HT8P-E	2.75/7.05	4/4.6	63
30	83.9/83.9	18 + 12	MMY-UP3011HT8P-E	3.2/7.52	4.13/4.75	64
32	89.5/89.5	20 + 12	MMY-UP3211HT8P-E	3.16/7.5	3.94/4.55	65
34	96/96	20 + 14	MMY-UP3411HT8P-E	2.95/7.35	3.85/4.5	66
36	100.5/100.5	24 + 12	MMY-UP3611HT8P-E	2.91/7.01	3.76/4.38	67
38	107/107	24 + 14	MMY-UP3811HT8P-E	2.76/6.93	3.69/4.33	68
40	112/112	20 + 20	MMY-UP4011HT8P-E	3.11/7.62	3.75/4.43	69
42	117.4/117.4	24 + 18	MMY-UP4211HT8P-E	2.93/7.22	3.72/4.43	70
44	123/123	24 + 20	MMY-UP4411HT8P-E	2.91/7.21	3.63/4.3	71
46	128.5/128.5	24 + 22	MMY-UP4611HT8P-E	2.88/7.04	3.65/4.31	72
48	134/134	24 + 24	MMY-UP4811HT8P-E	2.77/6.87	3.53/4.17	73
50	140.5/140.5	24 + 14 + 12	MMY-UP5011HT8P-E	2.86/7.02	3.82/4.44	74
52	147/147	24 + 14 + 14	MMY-UP5211HT8P-E	2.76/6.96	3.77/4.41	75
54	152/152	20 + 20 + 14	MMY-UP5411HT8P-E	3.01/7.49	3.81/4.47	76
56	156.5/156.5	24 + 20 + 12	MMY-UP5611HT8P-E	2.98/7.23	3.75/4.41	77
58	163/163	24 + 20 + 14	MMY-UP5811HT8P-E	2.87/7.19	3.71/4.37	78
60	167.5/167.5	24 + 24 + 12	MMY-UP6011HT8P-E	2.85/6.95	3.66/4.3	79
62	174/174	24 + 24 + 14	MMY-UP6211HT8P-E	2.76/6.92	3.63/4.27	80
64	179/179	24 + 20 + 20	MMY-UP6411HT8P-E	2.97/7.34	3.67/4.34	81
66	184.5/184.5	24 + 22 + 20	MMY-UP6611HT8P-E	2.95/7.21	3.68/4.35	82
68	190/190	24 + 24 + 20	MMY-UP6811HT8P-E	2.86/7.09	3.59/4.26	83
70	195.5/195.5	24 + 24 + 22	MMY-UP7011HT8P-E	2.84/6.98	3.61/4.26	84
72	201/201	24 + 24 + 24	MMY-UP7211HT8P-E	2.77/6.87	3.53/4.17	85
74	207.5/207.5	24 + 24 + 14 + 12	MMY-UP7411HT8P-E	2.83/6.97	3.72/4.36	86
76	214/214	24 + 24 + 14 + 14	MMY-UP7611HT8P-E	2.76/6.93	3.69/4.33	87
78	219/219	24 + 20 + 20 + 14	MMY-UP7811HT8P-E	2.93/7.3	3.72/4.39	88
80	223.5/223.5	24 + 24 + 20 + 12	MMY-UP8011HT8P-E	2.91/7.14	3.68/4.34	90
82	230/230	24 + 24 + 20 + 14	MMY-UP8211HT8P-E	2.84/7.1	3.66/4.32	92
84	234.5/234.5	24 + 24 + 24 + 12	MMY-UP8411HT8P-E	2.83/6.95	3.62/4.26	94
86	241/241	24 + 24 + 24 + 14	MMY-UP8611HT8P-E	2.77/6.91	3.6/4.25	96
88	246/246	24 + 24 + 20 + 20	MMY-UP8811HT8P-E	2.91/7.21	3.63/4.3	98
90	251.5/251.5	24 + 24 + 22 + 20	MMY-UP9011HT8P-E	2.9/7.12	3.64/4.3	100
92	257/257	24 + 24 + 24 + 20	MMY-UP9211HT8P-E	2.84/7.03	3.58/4.24	102
94	262.5/262.5	24 + 24 + 24 + 22	MMY-UP9411HT8P-E	2.82/6.95	3.59/4.24	104
96	268/268	24 + 24 + 24 + 24	MMY-UP9611HT8P-E	2.77/6.87	3.53/4.17	106
98	274.5/274.5	24 + 24 + 24 + 14 + 12	MMY-UP9811HT8P-E	2.82/6.95	3.67/4.31	108
100	281/281	24 + 24 + 24 + 14 + 14	MMY-UP10011HT8P-E	2.76/6.94	3.65/4.3	110
102	286/286	24 + 24 + 20 + 20 + 14	MMY-UP10211HT8P-E	2.89/7.2	3.68/4.34	112
104	290.5/290.5	24 + 24 + 24 + 20 + 12	MMY-UP10411HT8P-E	2.88/7.08	3.65/4.3	114
106	297/297	24 + 24 + 24 + 20 + 14	MMY-UP10611HT8P-E	2.83/7.04	3.63/4.29	116
108	301.5/301.5	24 + 24 + 24 + 24 + 12	MMY-UP10811HT8P-E	2.82/6.93	3.6/4.24	118
110	308/308	24 + 24 + 24 + 24 + 14	MMY-UP11011HT8P-E	2.77/6.9	3.58/4.23	120
112	313/313	24 + 24 + 24 + 20 + 20	MMY-UP11211HT8P-E	2.88/7.13	3.61/4.28	122
114	318.5/318.5	24 + 24 + 24 + 22 + 20	MMY-UP11411HT8P-E	2.87/7.07	3.62/4.28	124
116	324/324	24 + 24 + 24 + 24 + 20	MMY-UP11611HT8P-E	2.82/7	3.57/4.22	126
118	329.5/329.5	24 + 24 + 24 + 24 + 22	MMY-UP11811HT8P-E	2.81/6.93	3.58/4.23	128
120	335/335	24 + 24 + 24 + 24 + 24	MMY-UP12011HT8P-E	2.77/6.87	3.53/4.17	128

MMY-SUG_1MT8P
SHRM Advance

NEW

Using the same chassis as of SMMS-u, SHRM Advance is the latest generation of Toshiba VRF. It pushes the boundaries of VRF system featuring low environmental profile, wide flexibility and top-class efficiency as always.

SCOP MAX	CAPACITY	OPERATION
4.67	8HP > 24HP	-25°C > +50°C

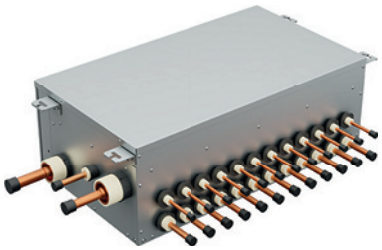
Advanced concept
• Anticipate the future and move your projects to low GWP refrigerant VRF systems.
• Make your life easier with Toshiba's VRF packaged solutions!
One product two possibilities:
2-pipe heating or cooling (8, 10 & 12HP).
3-pipe heating & cooling with heat recovery.

Advanced specification
• Up to 24HP in a single module, never experienced before with R32 refrigerant!
• Up to 54 indoor units per system for maximum flexibility.
• Up to 12 output flow selectors opening new piping design perspectives.
• Low footprint chassis that gives the possibility to install the outdoor unit either on the roof, on the ground or inside the building (80PA available pressure).

Advanced features
• Super efficient heat exchanger covering full product height to maximize energy exchange.
• Intelligent VRF control ensuring exact quantity of refrigerant to be delivered to the indoor units to avoid waste of energy.
• KO-BE-TSU and Renkey new defrost solution for constant comfort level.

Advanced service
• Easy commissioning and maintenance with direct USB connection, Wave Tool advance and Link adaptor.
• Trust the TU2C link protocol that offers faster and stronger data transfers.

Increased integration flexibility with the new generation of flow selectors 1, 4,8 or 12 outputs, with embedded shut-off valves.



R32 REFRIGERANT

SHRM Advance Performances

Outdoor unit		MMY-HP	SUG0801MT8P-E 8	SUG1001MT8P-E 10	SUG1201MT8P-E 12	SUG1401MT8P-E 14	SUG1601MT8P-E 16	SUG1801MT8P-E 18	SUG2001MT8P-E 20	SUG2201MT8P-E 22	SUG2401MT8P-E 24
Cooling capacity	**kW**		**22.4**	**28.0**	**33.5**	**40.0**	**45.0**	**50.4**	**56.0**	**61.5**	**67.0**
Power input	kW	C	5.13	6.83	8.88	12.04	12.16	14.78	15.47	18.19	24.27
EER	W/W		4.37	4.10	3.77	3.32	3.70	3.41	3.62	3.38	2.76
EthasC/SEER	W/W		353.0%/8.90	344.6%/8.69	326.2%/8.23	320.2%/8.08	342.6%/8.64	329.8%/8.32	328.6%/8.29	312.2%/7.88	263.4%/6.66
Running current	A	C	9.14	11.50	14.20	18.90	21.10	24.80	25.40	29.20	38.10
Heating capacity rated/max	**kW**		**22.4/25.0**	**28.0/31.5**	**33.5/37.5**	**40.0/45.0**	**45.0/50**	**50.4/56.0**	**56.0/63.0**	**61.5/69.0**	**67.0/70.0**
Power input (rated)	kW	H	4.96	6.22	7.64	10.28	11.06	14.00	14.25	16.10	19.48
COP	W/W		4.52	4.50	4.38	3.89	4.07	3.60	3.93	3.82	3.44
EthasH/SCOP			174.6%/4.44	183.8%/4.67	181.8%/4.62	169%/4.30	183%/4.65	176.6%/4.49	168.6%/4.29	167.4%/4.26	158.6%/4.04
Running current	A	H	8.95	10.60	12.50	16.30	19.90	23.80	23.60	26.10	30.90
Maximum overcurrent protection	A		20.0	32.0	32.0	40.0	40.0	50.0	50.0	63.0	80.0

SHRM Advance

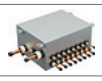
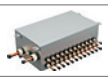
SHRM Advance Physical data

Outdoor unit		MMY-	SUG0801MT8P-E	SUG1001MT8P-E	SUG1201MT8P-E	SUG1401MT8P-E	SUG1601MT8P-E	SUG1801MT8P-E	SUG2001MT8P-E	SUG2201MT8P-E	SUG2401MT8P-E
Air Flow	m^3/h		9900	10500	11700	11880	15300	16800	15900	16500	16800
Sound Power Level	dB(A)	H	77	78	82	84	87	89	89	90	91
Sound pressure level	dB(A)	H	56	58	62	63	64	67	67	67	69
Sound Power Level	dB(A)	C	74	75	79	79	83	84	85	86	86
Sound pressure level	dB(A)	C	53	55	58	58	60	61	63	64	64
External Static pressure available	Pa		80	80	80	80	80	80	80	80	80
Dimensions (HxWxD)	mm		1690x990x780	1690x990x780	1690x990x780	1690x990x780	1690x1290x780	1690x1290x780	1690x1290x780	1690x1290x780	1690x1290x780
Weight	kg		232	232	232	232	329	329	361	361	361
Compressor type			Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary	Hermetic Twin Rotary
Refrigerant charge R32	kg		6.0	6.0	6.0	6.0	9.0	9.0	9.0	9.0	9.0
	TCO2eq		4.1	4.1	4.1	4.1	6.1	6.1	6.1	6.1	6.1
Gas line type - diameter for 2-pipe			φ19.1	φ22.2	φ22.2	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6
Liquid line type - diameter for 2-pipe			φ12.7	φ12.7	φ12.7	φ12.7	φ15.9	φ15.9	φ15.9	φ15.9	φ15.9
Suction line type - Diameter for 3-pipe			φ19.1	φ22.2	φ22.2	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6
LP/HP gas line type - Diameter for 3-pipe			φ15.9	φ19.1	φ19.1	φ19.1	φ22.2	φ22.2	φ22.2	φ22.2	φ22.2
Liquid line type - diameter for 3-pipe			φ12.7	φ12.7	φ12.7	φ12.7	φ15.9	φ15.9	φ15.9	φ15.9	φ15.9
Farthest piping equivalent length for 2-pipe	m		215	215	215	215	215	215	215	215	215
Farthest piping actual length for 2-pipe	m		190	190	190	190	190	190	190	190	190
Farthest piping equivalent length for 3-pipe	m		190	190	190	190	190	190	190	190	190
Farthest piping actual length for 3-pipe	m		165	165	165	165	165	165	165	165	165
Maximum pipe length[1]	m		500	500	500	500	500	500	500	500	500
Maximum lift for 3-pipe (indoor unit above/below)[2]	m		40/90	40/90	40/90	40/90	40/90	40/90	40/90	40/90	40/90
Operating range - db[3]	°C	C	-15 to 50	-15 to 50	-15 to 50	-15 to 50	-15 to 50	-15 to 50	-15 to 50	-15 to 50	-15 to 50
Operating range - wb[4,5]	°C	H	-25 to 15.5	-25 to 15.5	-25 to 15.5	-25 to 15.5	-25 to 15.5	-25 to 15.5	-25 to 15.5	-25 to 15.5	-25 to 15.5
Power supply	V-ph-Hz		380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50

1) The total amount of system refrigerant should be 63.8kg or less. 2) Indoor below condition: If the height difference between indoor units exceeds 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 3) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. Consider installation location/surroundings and system design when expected to operate below -5°C. On single outdoor unit only. No height difference between units. 4) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C. 5) Low ambient heating (-20degC or less) for extended periods of time is not allowed.
C: cooling mode
H: heating mode

MMY-SUG0801MT8JP-E	Anti Heavy Corrosion	MMY-SUG1401MT8JP-E	Anti Heavy Corrosion	MMY-SUG2001MT8JP-E	Anti Heavy Corrosion
MMY-SUG1001MT8JP-E	Anti Heavy Corrosion	MMY-SUG1601MT8JP-E	Anti Heavy Corrosion	MMY-SUG2201MT8JP-E	Anti Heavy Corrosion
MMY-SUG1201MT8JP-E	Anti Heavy Corrosion	MMY-SUG1801MT8JP-E	Anti Heavy Corrosion	MMY-SUG2401MT8JP-E	Anti Heavy Corrosion

SHRM Advance FS Boxes

Model name	Specification	Picture	Number of outputs	Max piping lenght FSBox/IDU	Max nb of IDUs per port	Max capacity per port	Dimensions (HxWxD)	Weight	Power supply	Comment
RBM-Y1121FUPE	Single port flow selector box		1	50m	6	<4HP	206 x 385 x 282	11	Separate	Embedded shut off valve
RBM-Y1801FUPE			1	50m	10	4HP≤ P <6.4HP		11	Separate	
RBM-Y2801FUPE			1	50m	10	6.4HP≤ P <10HP		11	Separate	
RBM-Y1801FU4PE	Multi port flow selector box		4	120m	10	<6.4HP	293 x 338 x 468	22	Separate	
RBM-Y1801FU8PE			8	180m	10		293 x 578 x 468	36	Separate	
RBM-Y1801F12PE			12	180m	10		293 x 818 x 468	50	Separate	

SHRM Advance Shut off valve box

Model name	Specification	Picture	Number of outputs	Max capacity per port	Dimensions (HxWxD)	Weight	Power supply	Comment
RBM-SV1121HUPE	Shut of valve kit		1	<4HP	206 x 385 x 282	10	Separate	Dedicated for 2 pipes applications (8, 10 & 12HP)
RBM-SV1801HUPE			1	4HP≤ P <6.4HP	206 x 385 x 282	10	Separate	
RBM-SV6701HUPE			1		216 x 385 x 282	12	Separate	

SHRM Advance Leak detection

Model name	Specification	Picture	Dimensions (HxWxD)	Weight	Power supply	Comment
TCB-LD1UPE	Leak sensor		120 x 86 x 30	80g	Powered by the remote	For R32 VRF

SHRM Advance Other accessories

Model name	Specification	Picture	Dimensions (HxWxD)	Weight	Power supply	Comment
TCB-BT1UPE	Battery kit for flow selector and shuf off valve		51 x 176 x 72	0.7kg	Using Fsbox/Shut off valve box power supply	For FS Boxes and shut of valves

BUSINESS

MMY-MAP_FT8P
SHRM-e

The SHRM-e, full Inverter heat recovery 3-pipe VRF, is the ultimate simultaneous heating & cooling solution for business applications.

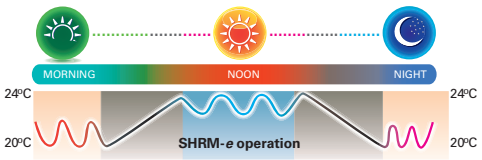
Excellence
• Toshiba Air Conditioning's in-house designed DC twin rotary compressor with outstanding capacity under partial load driven to improve efficiency and comfort.
• Incorporating Toshiba's latest inverter control, enables the precise modulation of the compressor, ensuring maximum performance and energy savings.
• 2 heat exchangers: outstanding 4-side heat exchanger + sub cooling heat exchanger to optimized efficiency.
• Precise refrigerant control ensures each indoor unit receives the right amount of refrigerant.

Expansion
• A complete range of indoor unit styles and capacity ranges, meets the demands of the customer and the room configuration.
• 7 outdoor unit model line-up from 8 to 20HP that can be installed in a variety of combinations, of up to a capacity of 54HP.

Enhancement
• With up to 1km of total pipe work, an equivalent piping length of 200m, and a maximum height separation of up to 70m, results in a system that is fully adaptable for all types of projects.
• Revolutionary hands-free Wave Tool technology that allows contactless commissioning and diagnoses to be carried out using a smartphone application.

SCOP MAX	CAPACITY	OPERATION
3.71	**8**HP > **54**HP	**-25**°C > **+46**°C

The Dual Set Point increases the system's energy efficiency and reduces overall running costs, with longer periods of time in thermal off mode. Heating and cooling temperatures at which the indoor unit will begin to operate can now be individually selected giving maximum flexibility to the user.



SHRM-e Performances

Outdoor unit		MMY-	MAP0806FT8P-E	MAP1006FT8P-E	MAP1206FT8P-E	MAP1406FT8P-E	MAP1606FT8P-E	MAP1806FT8P-E	MAP2006FT8P-E
	HP		8	10	12	14	16	18	20
Cooling capacity	**kW**		**22.4**	**28.0**	**33.5**	**40.0**	**45.0**	**50.4**	**56.0**
Power input	kW	C	5.95	7.95	9.75	12.70	13.90	16.00	18.60
EER	W/W		3.76	3.51	3.43	3.14	3.23	3.15	3.01
EthasC/SEER	W/W		239.8% / 6.07	238.2% / 6.03	234.6% / 5.94	221.4% / 5.61	225.8% / 5.72	232.6% / 5.89	222.6% / 5.64
Running current	A	C	9.44	12.49	15.46	19.92	21.81	25.10	29.18
Heating capacity	**kW**		**22.4**	**28.0**	**33.5**	**40.0**	**45.0**	**50.4**	**56.0**
Power input	kW	H	5.40	7.05	8.70	10.50	12.20	13.70	15.90
COP	W/W		4.14	3.97	3.85	3.80	3.68	3.67	3.52
EthasH/SCOP			142.6% / 3.64	138.2% / 3.53	145.4% / 3.71	139.8% / 3.57	137.0% / 3.5	140.6% / 3.59	140.6% / 3.59
Running current	A	H	8.57	11.06	13.80	16.47	19.14	21.49	24.68
Maximum overcurrent protection	A		25.0	31.5	37.5	45.0	50.0	56.5	58.0

SHRM-e Physical data

Outdoor unit	HP	MMY-	MAP0806FT8P-E	MAP1006FT8P-E	MAP1206FT8P-E	MAP1406FT8P-E	MAP1606FT8P-E	MAP1806FT8P-E	MAP2006FT8P-E
Air flow	m³/h		9 700	9 700	12 200	12 200	17 300	17 300	17 900
Air flow	l/s		2 694	2 694	3 389	3 389	4 806	4 806	4 972
Sound Power Level	dB(A)	H	82.0	82.0	82.0	83.0	84	84	84
Sound pressure level	dB(A)	H	61.0	61.0	62.0	64.0	62	62	62
Sound Power Level	dB(A)	C	80.0	80.0	80.0	81.0	83	83	83
Sound pressure level	dB(A)	C	59.0	59.0	60.0	62.0	61	61	61
External Static pressure available	Pa		60	50	50	40	40	40	40
Dimensions (HxWxD)	mm		1830x990x780	1830x990x780	1830x1210x780	1830x1210x780	1830x1600x780	1830x1600x780	1830x1600x780
Weight	kg		263	263	316	316	377	377	377
Compressor type			Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary
Refrigerant charge R410A	kg/TCO2eq		11 / 23	11 / 23	11 / 23	11 / 23	11 / 23	11 / 23	11 / 23
Suction line type - diameter			Brazed - 7/8"	Brazed - 7/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"
Liquid line type - diameter			Flare - 1/2"	Flare - 1/2"	Flare - 1/2"	Flare - 5/8"	Flare - 3/4"	Flare - 3/4"	Flare - 3/4"
Discharge line connection type - diameter			Flare - 3/4"	Flare - 3/4"	Flare - 3/4"	Flare - 7/8"	Flare - 7/8"	Flare - 7/8"	Flare - 7/8"
Farthest piping equivalent length[1]	m		200	200	200	200	200	200	200
Farthest piping actual length	m		180	180	180	180	180	180	180
Maximum pipe length[2]	m		1000	1000	1000	1000	1000	1000	1000
Maximum lift (indoor unit above/below)[3]	m		30/70	30/70	30/70	30/70	30/70	30/70	30/70
Operating range - db[4]	°C	C	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46
Operating range - wb[5]	°C	H	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5	-25/15.5
Power supply	V-ph-Hz		380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50	380/415-3-50

1) Allowable values for length equivalent to furthest pipe are shown following and they vary according to performance rank of outdoor unit. (22.4 to 56.0: 180m, 61.5 to 112:195m, 120:200m). 2) Less than 34HP: 300m. Total charging refrigerant is 140 kg or less. 3) Indoor above condition: 40m is possible for a system that uses only the flow selector unit (single port long piping type and multi port type), whose all the indoor units are 3HP or higher, and working ambient temperature is 0°C or higher. Indoor below condition: If the height difference between indoor units exceed 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 4) Low ambient cooling (-5degC or less) 1. Not suitable for applications, which require precise room temperature control, due to increased risk of indoor ON/OFF control and potential low air off temperatures. 2. For areas that do demand a precise room temperature control, we would recommend the installation of a secondary system, which has been designed solely for the purpose of low ambient cooling. 5) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C.
C: cooling mode
H: heating mode

MMY-MAP0806FT8JP-E	Anti Heavy Corrosion	MMY-MAP1606FT8JP-E	Anti Heavy Corrosion
MMY-MAP1006FT8JP-E	Anti Heavy Corrosion	MMY-MAP1806FT8JP-E	Anti Heavy Corrosion
MMY-MAP1206FT8JP-E	Anti Heavy Corrosion	MMY-MAP2006FT8JP-E	Anti Heavy Corrosion
MMY-MAP1406FT8JP-E	Anti Heavy Corrosion		

SHRM-e Capacity table - Standard model

Capacity	Combination	Modèle	Cooling capacity	Heating capacity	EER	SEER	COP	SCOP	Max indoor connectivity
8 HP	8	MMY-MAP0806FT8P-E	22.4	25	3.76	6,07	4.14	3.64	18
10 HP	10	MMY-MAP1006FT8P-E	28	31.5	3.51	6,03 5,94	3.97	3.53	22
12 HP	12	MMY-MAP1206FT8P-E	33.5	37.5	3.43	5,61	3.85	3.71	27
14 HP	14	MMY-MAP1406FT8P-E	40	45	3.14	5,72 5,89	3.80	3.57	31
16 HP	16	MMY-MAP1606FT8P-E	45	50	3.23	5,64	3.68	3.50	36
18 HP	18	MMY-MAP1806FT8P-E	50.4	565	3.15	5.89	3.67	3.59	40
20 HP	20	MMY-MAP2006FT8P-E	56	58	3.01	5.64	3.52	3.59	41
22 HP	12 + 10	MMY-AP2216FT8P-E	61.5	69	3.47	6.07	3.90	3.64	49
24 HP	14 + 10	MMY-AP2416FT8P-E	68	76.5	3.29	5.88	3.87	3.56	54
26 HP	14 + 12	MMY-AP2616FT8P-E	73.5	82.5	3.27	5.84	3.83	3.64	58
28 HP	14 + 14	MMY-AP2816FT8P-E	80	90	3.15	5.67	3.81	3.57	63
30 HP	16 + 14	MMY-AP3016FT8P-E	85	95	3.20	5.72	3.74	3.54	64
32 HP	18 + 14	MMY-AP3216FT8P-E	90.4	101.5	3.15	5.82	3.70	3.59	64
34 HP	18 + 16	MMY-AP3416FT8P-E	95.4	106.5	3.19	5.86	3.68	3.55	64
36 HP	18 + 18	MMY-AP3616FT8P-E	100.8	113	3.15	5.94	3.68	3.59	64
38 HP	20 + 18	MMY-AP3816FT8P-E	106.4	114.5	3.08	5.81	3.59	3.60	64
40 HP	20 + 20	MMY-AP4016FT8P-E	112	116	3.01	5.68	3.52	3.60	64
42 HP	14 + 14 + 14	MMY-AP4216FT8P-E	120	135	3.15	5.67	3.81	3.57	64
44 HP	16 + 14 + 14	MMY-AP4416FT8P-E	125	140	3.18	5.71	3.77	3.55	64
46 HP	18 + 14 + 14	MMY-AP4616FT8P-E	130.4	146.5	3.15	5.78	3.76	3.58	64
48 HP	18 + 16 + 14	MMY-AP4816FT8P-E	135.4	151.5	3.25	5.83	3.70	3.57	64
50 HP	18 + 18 + 14	MMY-AP5016FT8P-E	140.8	158	3.15	5.88	3.70	3.59	64
52 HP	18 + 18 + 16	MMY-AP5216FT8P-E	145.8	163	3.18	5.89	3.68	3.57	64
54 HP	18 + 18 + 18	MMY-AP5416FT8P-E	152.1	169.5	3.15	5.94	3.68	3.59	64

MMY-MAP_FT8P
SHRM-e

The SHRM-e, full Inverter heat recovery 3-pipe VRF, is the ultimate simultaneous heating & cooling solution for business applications.

Excellence
• In-house designed DC twin rotary compressor with outstanding capacity under partial load driven to improve efficiency and comfort.
• Incorporating Toshiba's latest inverter control, enables the precise modulation of the compressor, ensuring maximum performance and energy savings.
• 2 heatexchangers: outstanding 4-side heat exchanger + sub cooling heat exchanger to optimized efficiency.
• Precise refrigerant control ensures each indoor unit receives precisely the right amount of refrigerant.

Expansion
• 7 outdoor unit model line-up from 8 to 20HP that can be installed in a variety of combinations, of up to a capacity of 42HP.
• A complete range of indoor unit styles and capacity ranges, meets the demands of the customer and the room configuration.

Enhancement
• Up to 1km total piping length; 200m in equivalent length and 70m of height difference.
• Revolutionary hands-free Wave Tool technology that allows contactless commissioning and diagnoses to be carried out using a smartphone application.

SCOP MAX	CAPACITY	OPERATION
3.71	**8**HP > **42**HP	**-25**°C > **+46**°C

In addition to the existing 3 series and new 4 series single port flow selector, Toshiba Air Conditioning is proud to release the all new 4 and 6 port multi box, that enables multiple indoor unit connection, increasing the design flexibility and ease of installation.

SHRM-e Performances

Outdoor unit		MMY-	MAP0806FT8P-UK	MAP1006FT8P-UK	MAP1206FT8P-UK	MAP1406FT8P-UK	MAP1606FT8P-UK	MAP1806FT8P-UK	MAP2006FT8P-UK
	HP		8	10	12	14	16	18	20
Cooling capacity[1]	kW		**22.4**	**28.0**	**33.5**	**40.0**	**45.0**	**50.4**	**56.0**
Power input	kW	C	5.95	7.96	9.75	12.70	13.90	16.00	18.60
EER	W/W		3.76	3.51	3.43	3.14	3.23	3.15	3.01
EthasC/SEER	W/W		239.8% / 6.07	238.2% / 6.03	234.6% / 5.94	221.4% / 5.61	225.8% / 5.72	232.6% / 5.89	222.6% / 5.64
Running current	A	C	9.44	12.49	15.46	19.92	21.81	25.10	29.18
Heating capacity[2]	kW		**22.4**	**28.0**	**33.5**	**40.0**	**45.0**	**50.4**	**56.0**
Power input	kW	H	5.40	7.05	8.70	10.50	12.20	13.70	15.90
COP	W/W		4.14	3.97	3.85	3.80	3.68	3.67	3.52
EthasH/SCOP			142.6% / 3.64	138.2% / 3.53	145.4% / 3.71	139.8% / 3.57	137% / 3.5	140.6% / 3.59	140.6% / 3.59
Running current	A	H	8.57	11.06	13.80	16.47	19.14	21.49	24.68
Maximum overcurrent protection[3]	A		25.0	32.0	40.0	50.0	50.0	50.0	63.0

SHRM-e Physical data

Outdoor unit		MMY-	MAP0806FT8P-UK	MAP1006FT8P-UK	MAP1206FT8P-UK	MAP1406FT8P-UK	MAP1606FT8P-UK	MAP1806FT8P-UK	MAP2006FT8P-UK
Air flow	m^3/h		9 700	9 700	12 200	12 200	17 300	17 300	17 900
Air flow	l/s		2 694	2 694	3 389	3 389	4 806	4 806	4 972
Sound Power Level	dB(A)	H	82.0	82.0	82.0	83.0	84	84	84
Sound pressure level	dB(A)	H	61.0	61.0	62.0	64.0	62	62	62
Sound Power Level	dB(A)	C	80.0	80.0	80.0	81.0	83	83	83
Sound pressure level	dB(A)	C	59.0	59.0	60.0	62.0	61	61	61
External Static pressure available	Pa		60	50	50	40	40	40	40
Dimensions (HxWxD)	mm		1830 x 990 x 780	1830 x 990 x 780	1830 x 1210 x 780	1830 x 1210 x 780	1830 x 1600 x 780	1830 x 1600 x 780	1830 x 1600 x 780
Weight	kg		263	263	316	316	377	377	377
Compressor type			Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary	Hermectic Twin Rotary
Refrigerant charge R410A	kg/TCO2eq		11 / 23	11 / 23	11 / 23	11 / 23	11 / 23	11 / 23	11 / 23
Suction line type - diameter			Brazed - 7/8"	Brazed - 7/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"	Brazed -1-1/8"
Liquid line type - diameter			Flare - 1/2"	Flare - 1/2"	Flare - 1/2"	Flare - 5/8"	Flare - 3/4"	Flare - 3/4"	Flare - 3/4"
Discharge line connection type - diameter			Flare - 3/4"	Flare - 3/4"	Flare - 3/4"	Flare - 7/8"	Flare - 7/8"	Flare - 7/8"	Flare - 7/8"
Farthest piping equivalent length[4]	m		200	200	200	200	200	200	200
Farthest piping actual length	m		180	180	180	180	180	180	180
Maximum pipe length[5]	m		1000	1000	1000	1000	1000	1000	1000
Maximum lift (indoor unit above/below)[6]	m		30/70	30/70	30/70	30/70	30/70	30/70	30/70
Operating range - db[7]	°C	C	-10 / 46	-10 / 46	-10 / 46	-10 / 46	-10 / 46	-10 / 46	-10 / 46
Operating range - wb[8]	°C	H	-25 / 15.5	-25 / 15.5	-25 / 15.5	-25 / 15.5	-25 / 15.5	-25 / 15.5	-25 / 15.5
Power supply	V-ph-Hz		380 / 415-3-50	380 / 415-3-50	380 / 415-3-50	380 / 415-3-50	380 / 415-3-50	380 / 415-3-50	380 / 415-3-50

1) based on an indoor air temperature of 27°C db/19°C wb and an outdoor air temperature of 35°db. 2) based on an indoor air temperature of 20°C db and an outdoor air temperature of 7°db/6°C wb. 3) If outdoor units are combined, refer to the installation manual. 4) Allowable values for length equivalent to furthest pipe are shown following and they vary according to performance rank of outdoor unit. (22.4 to 56.0: 180m, 61.5 to 112:195m, 120:200m.). 5) Less than 34HP: 300m. Total charging refrigerant is 140 kg or less. 6) Indoor above condition: 40m is possible for a system that uses only the flow selector unit (single port long piping type and multi port type), whose all the indoor units are 3HP or higher, and working ambient temperature is 0°C or higher. Indoor below condition: If the height difference between indoor units exceed 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 7) Low ambient cooling (-5degC or less).
1. Not suitable for applications, which require precise room temperature control, due to increased risk of indoor ON/OFF control and potential low air off temperatures.
2. For areas that do demand a precise room temperature control, we would recommend the installation of a secondary system, which has been designed solely for the purpose of low ambient cooling.
8) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C.
C: cooling mode
H: heating mode

SHRM-e Capacity table - Standard model

Capacity	Combination	Modèle	Cooling capacity	Heating capacity	EER	SEER	COP	SCOP	Max indoor connectivity
8 HP	8	MMY-MAP0806FT8P-UK	22.4	25	3.76	6.19	4.14	3.64	18
10 HP	10	MMY-MAP1006FT8P-UK	28	31.5	3.51	6.13	3.97	3.54	22
12 HP	12	MMY-MAP1206FT8P-UK	33.5	37.5	3.43	6.02	3.85	3.71	27
14 HP	14	MMY-MAP1406FT8P-UK	40	45	3.14	5.67	3.8	3.57	31
16 HP	16	MMY-MAP1606FT8P-UK	45	50	3.26	5.78	3.68	3.51	36
18 HP	18	MMY-MAP1806FT8P-UK	50.4	565	3.15	5.94	3.67	3.59	40
20 HP	20	MMY-MAP2006FT8P-UK	56	58	3.01	5.68	6.52	3.6	41
22 HP	12 + 10	MMY-AP2216FT8P-UK	61.5	69	3.47	6.07	3.9	3.64	49
24 HP	14 + 10	MMY-AP2416FT8P-UK	68	76.5	3.29	5.88	3.8	3.56	51
26 HP	14 + 12	MMY-AP2616FT8P-UK	73.5	82.5	3.27	5.84	3.83	3.64	58
28 HP	14 + 14	MMY-AP2816FT8P-UK	80	90	3.15	5.67	3.81	3.57	63
30 HP	16 + 14	MMY-AP3016FT8P-UK	85	95	3.2	5.72	3.74	3.54	64
32 HP	18 + 14	MMY-AP3216FT8P-UK	90.4	101.5	3.15	5.82	3.1	3.59	64
34 HP	18 + 16	MMY-AP3416FT8P-UK	95.4	106.5	3.19	5.86	3.68	3.55	64
36 HP	18 + 18	MMY-AP3616FT8P-UK	100.8	113	3.15	5.94	3.68	3.59	64
38 HP	20 + 18	MMY-AP3816FT8P-UK	106.4	114.5	3.08	5.81	3.59	3.6	64
40 HP	20 + 20	MMY-AP4016FT8P-UK	112	116	3.01	5.68	3.52	3.6	64
42 HP	14 + 14 + 14	MMY-AP4216FT8P-UK	120	135	3.15	5.67	3.81	3.57	64
34 HP	18 + 16	MMY-AP3416FT8P-UK	95.4	106.5	7.95	3.19	3.68	5.14	64
36 HP	18 + 18	MMY-AP3616FT8P-UK	100.8	113	7.86	3.15	3.68	5.4	64
38 HP	20 + 18	MMY-AP3816FT8P-UK	106.4	114.5	7.35	3.08	3.59	4.88	64
40 HP	20 + 20	MMY-AP4016FT8P-UK	112	116	7.1	3.01	3.52	4.78	64
42 HP	14 + 14 + 14	MMY-AP4216FT8P-UK	120	135	7.3	3.15	3.81	5.61	64

CHOOSE YOUR ADAPTED SYSTEM SOLUTION

INDOOR UNITS, HOT WATER & FRESH AIR SOLUTIONS

FOR EUROPE

Model type		Basic specifications																	R32 compatibility
	Class	003	005	007	009	012	015	018	024	027	030	036	048	056	072	096	112	128	
	Cooling/Heating capacity in kW	0.9 /1.1	1.7 /1.9	2.2 /2.5	2.8 /3.2	3.6 /4	4.5 /5	5.6 /6.3	7.1 /8	8.0 /9	9.0 /10	11.2 / 12.5	14.0 /16	16.0 /18	22.4 / 25	28.0 / 31.5	33.5 / 20.8	40 / 25.2	
	Cooling/Heating capacity in HP	0.3	0.6	0.8	1	1.25	1.7	2	2.5	3	3.2	4	5	6	8	10	12	14	
Smart 4-way Cassette	MMU-UP***1H-E				●	●	●	●	●	●	●	●	●	●					●
Standard 4-way Cassette	MMU-UP***1HP-E				●	●	●	●	●	●	●	●	●	●					●
Compact 4-way Cassette	MMU-UP***1MHP-E		●	●	●	●	●	●											●
Compact 1-way Cassette	MMU-UP***1YHP-E	●	●	●	●	●	●	●	●	●									●
2-way Cassette	MMU-UP***1WH-E			●	●	●	●	●	●	●	●	●	●	●					●
Standard Duct	MMD-UP***1BHP-E		●	●	●	●	●	●	●	●	●	●	●	●					●
Slim duct	MMD-UP***1SPHY-E	●	●	●	●	●	●	●	●	●									●
High-Static Pressure Duct	MMD-UP***1HP-E(1)							●	●	●		●	●	●	●	●			●
High-Wall (With & without PMV)	MMK-UP***1HP-E	●	●	●	●	●	●	●	●	●	●	●							●
	MMK-UP***1HPL-E	●	●	●	●	●	●	●	●										●
Haori	MMK-UP***DHPL-E		●	●	●	●	●	●											●
Ceiling	MMC-UP***1HP-E						●	●	●	●		●	●	●					●
Bi-flow console	MML-UP***1NHP-E			●	●	●	●	●											
Console	MML-UP***1H-E			●	●	●	●	●	●										
Console concealed	MML-UP***1BH-E			●	●	●	●	●	●										
Floor standing	MMF-UP***1H-E						●	●	●	●		●	●	●					
Fresh Air Duct	MMD-UP***1HFP-E(1)												●		●	●	●	●	
Mid temperature Hot Water module	MMW-UP**1LQ-E									●				●					
High temperature Hot Water module	MMW-AP**1CHQ-E												●						
DX kit	TCB-IFDM*01UP-E	From 8 to 120HP capacity																	
	RBM-A*01UPVA-E																		

AIR TO AIR HEAT EXCHANGER

FOR EUROPE

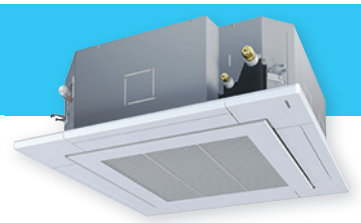
Model type	Air flow in m³/h	Basic specifications								
		150	250	350	500	650	800	1000	1500	2000
	Cooling/Heating capacity in kW for models with DX coil				4.5/5		6.5/8.6	8.2/10.9		
Air-to-air heat exchanger	VN-U***1SY-E & VN-M**0HE	●	●	●	●	●	●	●	●	●
A2A heat exchanger + DXcoil or + Dxcoil & Humidifier	MMD-VN***2HEXE MMD-VNK***2HEXE				●		●	●		

● :Available combination

TOSHIBA

MMU-UP_H

SMART 4-WAY CASSETTE



The 4-way cassette is designed to provide uniform air distribution and total user comfort making this unit the ideal solution for small commercial applications. Combining all the expertise of Toshiba Air Conditioning, the Smart Cassette is the perfect mix between comfort, elegance and efficiency.

Comfort

- Unique flap design for optimal air distribution.
- Louvre position individual setting: 3 different swing modes from standard, diagonally, opposite to turn around.
- 5-step fan to precisely control the air flow.
- Low noise level thanks to large air suction opening.

Reliability

- Built-in high-lift drain pump.

Savings

- Optional motion sensor for automatic operation.
- High efficiency DC fan motor to maximize heat exchange with limited power consumption.

CAPACITY

2.8kW > **18**kW

SOUND PRESSURE LEVEL

26dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM Advance

SHRM-e

LOCAL CONTROLS

RBC-AXU41U-E /TR
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

SMART 4-WAY CASSETTE Performances

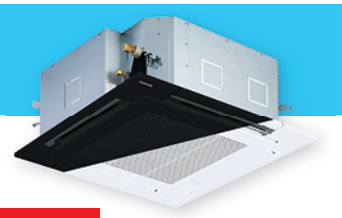
Indoor unit	MMU-HP	UP0091H-E 1	UP0121H-E 1.25	UP0151H-E 1.7	UP0181H-E 2	UP0241H-E 2.5	UP0271H-E 3	UP0301H-E 3.2	UP0361H-E 4	UP0481H-E 5	UP0561H-E 6
Cooling capacity	kW	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Running current		0.18	0.18	0.2	0.26	0.38	0.48	0.6	0.94	0.96	0.97
Power consuption	W	20	20	18	26	42	54	68	125	135	137
Starting current	A	0.27	0.27	0.30	0.39	0.57	0.72	0.90	1.41	1.44	1.46

SMART 4-WAY CASSETTE Physical data

Indoor unit	MMU-	UP0091H-E	UP0121H-E	UP0151H-E	UP0181H-E	UP0241H-E	UP0271H-E	UP0301H-E	UP0361H-E	UP0481H-E	UP0561H-E
Air flow (h/m+/m/l+/l)	m^3/h	846/792/768/738/708	846/792/768/738/708	1060/960/920/860/800	1260/1160/1100/1040/940	1580/1440/1300/1210/1120	1770/1590/1380/1320/1250	1940/1770/1520/1450/1400	2184/1848/1596/1356/1260	2262/1998/1740/1470/1368	2262/2034/1782/1512/1404
Sound pressure level (h/m+/m/l+/l)	dB(A)	30/29/28/27/26	30/29/28/27/26	32/30/30/29/28	36/34/33/32/31	41/39/37/35/35	42/40/37/36/35	44/42/3938/37	45/41/38/36/32	46/43/39/37/33	46/43/40/38/35
Sound power level (h/m+/m/l+/l)	dB(A)	45/44/43/42/42	45/44/43/42/42	46/45/44/43/42	50/48/47/46/45	55/53/51/49/48	56/54/51/50/49	58/56/53/52/51	60/56/53/50/48	61/57/54/52/49	61/58/55/53/51
Appearance		Heat-insulating material attached Zinc hot dipping steel plate									
Dimensions (HxWxD)	mm	256x840x840	256x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840
Weight	kg	18	18	25	25	25	25	25	25	25	25
Panel		RBC-U41PG(W)-E									
Panel color		Gran White (Mansell 5PB9/1)									
Panel Dimensions (HxWxD)	mm	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950	30x950x950
Panel weight	kg	5	5	5	5	5	5	5	5	5	5
Connecting pipe, gas	in	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Drain port diameter	mm	25 (Polyvinyl chloride tube)									
Power supply		1 phase 50Hz 230V(220V-240V) - Separate power supply for indoor units is required.									

MMU-UP_HP

STANDARD 4-WAY CASSETTE



> BLACK COLOR PANEL

The 4-way cassette is designed to provide uniform air distribution and total user comfort making this unit the ideal solution for small commercial applications.

Comfort
- Possibility to set three different swing modes providing individual control to maximise end user comfort.
- Wide air flow in all directions.
- Optimal air diffusion up to 4.6m ceiling height!
- Automatic operation by using optional motion sensor.
- PM2.5 filter available as an option (TCB-PLFC1UP80-PE & TCB-PLFC2UP120-PE).

Reliability
- Heat exchanger self-cleaning function.
- Built-in high-lift drain pump.

Easy to install
- Compact chassis with only 256mm height (up to size 30).
- Lightweight unit, for easy and quick installation.

CAPACITY

2.8kW > **18**kW

SOUND PRESSURE LEVEL

27dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM Advance

SHRM-e

LOCAL CONTROLS

RBC-AXU33UP-E (White)
RBC-AXU33UPB-E (Black)
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

STANDARD 4-WAY CASSETTE Performances

Indoor unit	MMU-HP	UP0091HP-E 1	UP0121HP-E 1.25	UP0151HP-E 1.7	UP0181HP-E 2	UP0241HP-E 2.5	UP0271HP-E 3	UP0301HP-E 3.2	UP0361HP-E 4	UP0481HP-E 5	UP0561HP-E 6
Cooling capacity	kW	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.021	0.021	0.023	0.026	0.036	0.036	0.043	0.088	0.112	0.112
Running current	A	0.23	0.23	0.28	0.29	0.38	0.38	0.43	0.73	0.88	0.88
Starting current	A	0.30	0.30	0.33	0.36	0.42	0.42	0.59	0.87	1.23	1.26

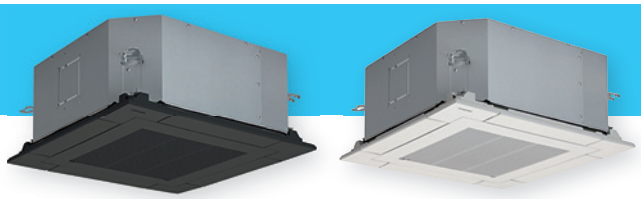
STANDARD 4-WAY CASSETTE Physical data

Indoor unit	MMU-	UP0091HP-E	UP0121HP-E	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0301HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E
Air Flow (h/m/l)	m³/h	800/730/680	800/730/680	930/830/790	1050/920/800	1290/920/800	1290/920/800	1320/1100/850	1970/1430/1070	2130/1430/1130	2130/1520/1230
Air Flow (h/m/l)	l/s	222/203/189	222/203/189	258/231/219	292/256/222	358/256/222	358/256/222	367/306/236	547/397/297	592/397/314	592/422/342
Sound pressure level (h/m/l)	dB(A)	30/29/27	30/29/27	31/29/27	32/29/27	35/31/28	35/31/28	38/33/30	43/38/32	46/38/33	46/40/33
Sound power level (h)	dB(A)	45	45	46	47	50	50	53	58	61	61
Dimensions (HxWxD)	mm	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	256 x 840 x 840	319 x 840 x 840	319 x 840 x 840	319 x 840 x 840
Weight	kg	18	18	20	20	20	20	20	25	25	25
Panel		RBC-U33P-E (white) / RBC-U33PB-E (black)									
Panel dimensions (HxWxD)	mm	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Panel weight	kg	4	4	4	4	4	4	4	4	4	4
Connecting pipe, gas	in	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Drain port diameter	mm	25	25	25	25	25	25	25	25	25	25
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

TOSHIBA

MMU-UP_MHP

COMPACT 4-WAY CASSETTE



BLACK COLOR PANEL

The compact 4-way cassette has been especially designed for business office applications, where a compact and efficient solution is required.

Design
- Smart flat-panel design with clean lines that will complement any decorative style.
- Fit within the T-bar of grid ceiling: 620mm X 620mm.

Comfort
- A user programmable 5-step flow with individual louvre swing control, plus a new "cycle-swing" harmonised louvre setting
- The occupancy motion sensor can be configured to switch the unit into standby mode or completely switched off, when no movement is detected, minimising the energy usage of the system.

Easy to install
- Only 256mm height, this compact chassis is perfectly suited to confined spaces.
- Built-in high-lift drain pump.
- Lightweight unit, for easy and quick installation.

CAPACITY

1.7kW > **6.3**kW

SOUND PRESSURE LEVEL

29dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM Advance

SHRM-e

LOCAL CONTROLS

RBC-AXU31UMP-E (White)
RBC-AXU31UMPB-E (Black)
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

COMPACT 4-WAY CASSETTE Performances

Indoor unit	MMU-HP	UP0051MHP-E 0.6	UP0071MHP-E 0.8	UP0091MHP-E 1	UP0121MHP-E 1.25	UP0151MHP-E 1.7	UP0181MHP-E 2
Cooling capacity	kW	1.7	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	1.9	2.5	3.2	4.0	5.0	6.3
Power consumption	kW	0.015/0.015	0.016/0.016	0.17/0.17	0.17/0.17	0.024/0.024	0.040/0.040
Running current	A	0.20/0.19	0.21/0.20	0.21/0.21	0.21/0.21	0.27/0.27	0.40/0.39
Starting current	A	0.24/0.23	0.25/0.24	0.25/0.25	0.25/0.25	0.33/0.33	0.49/0.47

COMPACT 4-WAY CASSETTE Physical data

Indoor unit	MMU-	UP0051MHP-E	UP0071MHP-E	UP0091MHP-E	UP0121MHP-E	UP0151MHP-E	UP0181MHP-E
Air Flow (h/m/l)	m^3/h	430/370/300	450/380/300	470/390/300	470/410 /340	590 /490/395	760/630 /490
Air Flow (h/m/l)	l/s	119/103/83	125/106/83	131/108/83	131/114/94	164/136/110	211/175/136
Sound pressure level (h/m/l)	dB(A)	31/28/26	32/29/26	33/ 30/26	33/ 30 /27	37/33/29	43/38/33
Dimensions (HxWxD)	mm	244x575x575	244x575x575	244x575x575	244x575x575	244x575x575	244x575x575
Weight	kg	16	16	16	16	16	16
Panel		RBC-UM21P-E (white) / RBC-UM21PB-E (black)					
Panel Dimensions (HxWxD)	mm	12x620x620	12x620x620	12x620x620	12x620x620	12x620x620	12x620x620
Panel weight	kg	2.5	2.5	2.5	2.5	2.5	2.5
Connecting pipe, gas	in	3/8"	3/8"	3/8"	3/8"	9.52	9.52
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	6.35	6.35
Drain port diameter	mm	32					
Power supply	V-ph-Hz	1 Ph.. 220-240V. 50 Hz / 208-230V. 60 Hz					

MMU-UP_YHP

COMPACT 1-WAY CASSETTE

Toshiba Air Conditioning's innovative slim line 1-way cassette is simple to install and suitable for small areas, such as hotels, offices and reception rooms.

Design
- White elegant panel design to match all types of.

Flexibility
- 150mm chassis height adapted to low suspended ceilings conditions.
- Capacity from 0.3HP for high efficiency buildings.

Comfort
- Low noise level down to 25 dB(A) for quiet operation.
- 5-speed fan operation for perfect air flow management.
- Air purifier available as an option to keep a fresh and clean environment.

CAPACITY

0.9kW > **8**kW

SOUND PRESSURE LEVEL

25dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM Advance

SHRM-e

LOCAL CONTROLS

RBC-AX33UYP-E
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

COMPACT 1-WAY CASSETTE Performances

Indoor unit	MMU-	UP0031YHP-E	UP0051YHP-E	UP0071YHP-E	UP0091YHP-E	UP0121YHP-E	UP0151YHP-E	UP0181YHP-E	UP0241YHP-E	UP0271YHP-E
	HP	0.3	0.5	0.8	1	1.25	1.7	2	2.5	3
Cooling capacity	kW	0.9	1.7	2.2	2.8	3.6	4.5	5.6	7.1	8
Heating capacity	kW	1.3	1.9	2.5	3.2	4	5	6.3	8	9
Power consumption	kW	0.015	0.015	0.017	0.018	0.018	0.025	0.027	0.042	0.050
Running current	A	0.15	0.15	0.18	0.19	0.2	0.24	0.26	0.34	0.41
Starting current	A	0.20	0.20	0.22	0.23	0.24	0.28	0.3	0.38	0.45

COMPACT 1-WAY CASSETTE Physical data

Indoor unit	MMU-	UP0031YHP-E	UP0051YHP-E	UP0071YHP-E	UP0091YHP-E	UP0121YHP-E	UP0151YHP-E	UP0181YHP-E	UP0241YHP-E	UP0271YHP-E
Air flow (h/l)	m^3/h	480/370/270	480/370/270	500/390/270	520/410/290	540/420/290	750/630/500	800/650/500	940/760/600	1000/860/720
Air flow (h/l)	l/s	133/103/75	133/103/75	150/133/117	150/133/117	150/133/117	208/175/139	222/181/139	261/211/167	278/239/200
Sound pressure level (h/m/l)	dB(A)	37/33/25	37/33/25	38/34/25	39/35/26	40/36/26	39/36/33	40/37/33	46/42/37	47/44/41
Dimensions (HxWxD)	mm	150x990x450	150x990x450	150x990x450	150x990x450	150x990x450	150x1180x450	150x1180x450	150x1180x450	150x1180x450
Weight	kg	14	14	14	14	14	15	15	16	16
Panel				RBC-UY32P-E				RBC-UY42P-E		
Panel dimensions (HxWxD)	mm	30x1220x530	30x1220x530	30x1220x530	30x1220x530	30x1220x530	30x1410x530	30x1410x530	30x1410x530	30x1410x530
Panel weight	kg	4	4	4	4	4				
Connecting pipe, gas	in	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"
Drain port diameter	mm	25	25	25	25	25	25	25	25	25
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

TOSHIBA

MMU-UP_WH
2-WAY CASSETTE

Slim, compact and lightweight, the 2-way cassette has been designed to fit easily and discretely into any room interior.

Comfort
- Unique air flow control, provides a balanced flow of air in two opposite directions, maximising air flow distribution. This feature when combined with the units fresh air intake ability helps to provide a perfect solution all year round.
- Enhanced indoor air quality with standard long-life filters with a wide bended surface to effectively collect dust particles.

Design
- The elegant white decoration panel allows the unit to be installed seamlessly into any room.

Easy to install
- Minimal weight (19kg) for units up to 4.5kw.
- Compact dimensions (height 295mm).
- Built-in drain pump.

CAPACITY

2.2kW > **18**kW

SOUND PRESSURE LEVEL

30dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM-Advance

SHRM-e

LOCAL CONTROLS

TCB-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

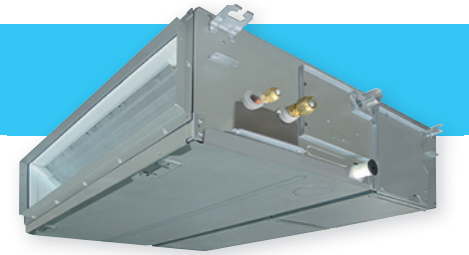
2-WAY CASSETTE Performances

Indoor unit	MMU-	UP0071WH-E	UP0091WH-E	UP0121WH-E	UP0151WH-E	UP0181WH-E	UP0241WH-E	UP0271WH-E	UP0301WH-E	UP0361WH-E	UP0481WH-E	UP0561WH-E
	HP	0.8	1	1.25	1.7	2	2.5	3	3.2	4	5	6
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.024/0.024	0.024/0.024	0.024/0.024	0.026/0.026	0.034/0.034	0.045/0.045	0.045/0.045	0.055/0.055	0.081/0.081	0.091/0.091	0.131/0.131
Running current	A	0.21/0.22	0.21/0.22	0.21/0.22	0.22/0.23	0.28/0.29	0.37/0.39	0.37/0.39	0.43/0.46	0.50/0.53	0.57/0.59	0.77/0.81
Starting current	A	0.31/0.32	0.31/0.32	0.31/0.32	0.33/0.35	0.42/0.44	0.57/0.60	0.57/0.60	0.65/0.68	0.76/0.79	0.85/0.89	1.17/1.22

2-WAY CASSETTE Physical data

Indoor unit	MMU-	UP0071WH-E	UP0091WH-E	UP0121WH-E	UP0151WH-E	UP0181WH-E	UP0241WH-E	UP0271WH-E	UP0301WH-E	UP0361WH-E	UP0481WH-E	UP0561WH-E
Air Flow (h/m+/m/l+/l)	m^3/h	558/516/498/468/450	558/516/498/468/450	558/516/498/468/450	600/552/534/480/450	900/810/750/678/618	1050/942/840/780/738	1050/942/840/780/738	1260/1062/900/840/780	1740/1530/1434/1260/1182	1800/1608/1482/1320/1230	2040/1770/1578/1410/1320
Air Flow (h/m+/m/l+/l)	l/s	155/143/138/130/125	155/143/138/130/125	155/143/138/130/125	167/153/148/133/125	250/225/208/188/172	292/262/233/217/205	292/262/233/217/205	350/295/250/233/217	483/425/398/350/328	500/447/412/367/342	567/492/438/392/367
Sound pressure level (h/m+/m/l+/l)	dB(A)	34/33/32/31/30	34/33/32/31/30	34/33/32/31/30	35/34/33/31/30	35/34/33/31/30	38/37/35/34/33	38/37/35/34/33	40/38/37/35/34	42/41/39/37/36	43/42/40/38/37	46/44/42/40/39
Sound power level (h)	dB(A)	49	49	49	50	50	53	53	55	57	58	61
Dimensions (HxWxD)	mm	295x815x570	295x815x570	295x815x570	295x815x570	345x1180x570	345x1180x570	345x1180x570	345x1180x570	345x1600x570	345x1600x570	345x1600x570
Weight	kg	19	19	19	19	26	26	26	26	36	36	36
Panel		RBC-UW283PG(W)-E					RBC-UW803PG(W)-E			RBC-UW1403PG(W)-E		
Panel Dimensions (HxWxD)	mm	20x1050x680	20x1050x680	20x1050x680	20x1050x680	20x1415x680	20x1415x680	20x1415x680	20x1415x680	20x1835x680	20x1835x680	20x1835x680
Panel weight	kg	10	10	10	10	14	14	14	14	14	14	14
Connecting pipe, gas	in	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Drain port diameter	mm	25										
Power supply	V-ph-Hz	220/240-1-50										

MMD-UP_BHP
STANDARD DUCT



Whatever the shape of the room, this flexible model ensures a uniform temperature and air distribution for optimal end user comfort.

Hidden

- Slim line design, with a depth of just 275mm helps to simply the installation, even when space is limited.
- Superior low noise operation. Noise output at low fan equates to just 23 dB(A).

Customizable

- External static pressure can be raised up to 150 Pa for extensive ducting.
- Possible to connect a fresh air inlet duct to the unit, to maximise air quality and room air quality.
- Flexible design, allows the inlet air configuration to be configured between the standard rear inlet design or, from the underside of the unit.
- Built-in high-lift drain pump.
- Air discharge spigot available as an option (TCB-SF***C6BPE).

CAPACITY

1.7kW > **18**kW

SOUND PRESSURE LEVEL

23dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM-Advance

SHRM-e

LOCAL CONTROLS

RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E
RBC-AS41E

STANDARD DUCT Performances

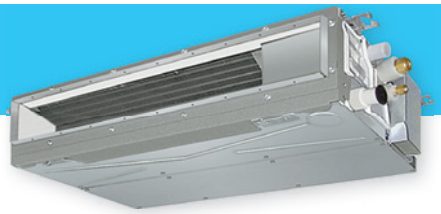
Indoor unit	MMD-	UP0051BHP-E	UP0071BHP-E	UP0091BHP-E	UP0121BHP-E	UP0151BHP-E	UP0181BHP-E	UP0241BHP-E	UP0271BHP-E	UP0301BHP-E	UP0361BHP-E	UP0481BHP-E	UP0561BHP-E
	HP	0.6	0.8	1	1.25	1.7	2	2.5	3	3.2	4	5	6
Cooling capacity	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0
Heating capacity	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	18.0
Power consumption	kW	0.055	0.055	0.060	0.060	0.110	0.110	0.135	0.135	0.160	0.220	0.290	0.290
Running current	A	0.35	0.35	0.38	0.38	0.70	0.70	0.80	0.80	0.95	1.29	1.70	1.70
Starting current	A	0.55	0.55	0.58	0.58	1.10	1.10	1.20	1.20	1.35	2.09	2.50	2.50

STANDARD DUCT Physical data

Indoor unit	MMD-	UP0051BHP-E	UP0071BHP-E	UP0091BHP-E	UP0121BHP-E	UP0151BHP-E	UP0181BHP-E	UP0241BHP-E	UP0271BHP-E	UP0301BHP-E	UP0361BHP-E	UP0481BHP-E	UP0561BHP-E
Air Flow (h/m/l)	m^3/h	540/450/360	540/450/360	570/480/390	570/480/390	920/660/540	920/660/540	1320/1090/870	1320/1090/870	1450/1200/960	1920/1620/1380	2350/1920/1500	2350/1920/1500
Air Flow (h/m/l)	l/s	150/125/100	150/125/100	158/133/108	158/133/108	256/183/150	256/183/150	367/303/242	367/303/242	403/333/267	533/450/383	653/533/417	653/533/417
Sound pressure level (h/m/l)	dB(A)	29/26/23	29/26/23	30/26/23	30/26/23	33/29/25	33/29/25	33/30/27	33/30/27	36/31/27	36/34/31	40/36/33	40/36/33
Sound power level (h)	dB(A)	51	51	52	52	55	55	58	58	58	63	63	63
Dimensions (HxWxD)	mm	275x700x750	275x700x750	275x700x750	275x700x750	275x700x750	275x700x750	275x1000x750	275x1000x750	275x1000x750	275x1400x750	275x1400x750	275x1400x750
Weight	kg	23	23	23	23	23	23	30	30	30	40	40	40
External static pressure	Pa	30	30	30	30	30	30	40	40	40	50	50	50
Max external static pressure	Pa	150	150	150	150	150	150	150	150	150	150	150	150
Connecting pipe, gas	in	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Drain port diameter	mm	25	25	25	25	25	25	25	25	25	25	25	25
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

TOSHIBA

MMD-UP_SPHY
SLIM DUCT



Whatever installed in a ceiling void or suspended ceiling, the Slim Duct unit offers the best compromise between sound level, air flow and chassis dimensions.

Flexibility
- Compact chassis with 210mm height and 450mm depth whatever the capacity, for integration in most projects.
- Capacity from 0.3HP for high efficiency buildings.
- Static pressure up to 50Pa set directly on the duct or by using a wired remote controller.

Comfort
- Quiet operation with a noise level down to 25 dB(A) perfect for bedrooms.
- 5-speed fan operation for perfect air flow adaptation.

Easy installation
- Built-in drain pump.
- Air suction from rear or bottom.

CAPACITY

0.9kW > **8**kW

SOUND PRESSURE LEVEL

25dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM-Advance

SHRM-e

LOCAL CONTROLS

RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

SLIM DUCT Performances

Indoor unit		MMD-	UP0031SPHY-E/TR	UP0051SPHY-E/TR	UP0071SPHY-E/TR	UP0091SPHY-E/TR	UP0121SPHY-E/TR	UP0151SPHY-E/TR	UP0181SPHY-E/TR	UP0241SPHY-E/TR	UP0271SPHY-E/TR
		HP	0.3	0.6	0.8	1	1.25	1.7	2	2.5	3
Cooling capacity		kW	0.9	1.7	2.2	2.8	3.6	4.5	5.6	7.1	8.0
Heating capacity		kW	1	1.9	2.5	3.2	4.0	5.0	6.3	8.0	9.0
Factory setting	Power consumption	kW	0.018 / 0.018	0.020 / 0.020	0.026 / 0.026	0.029 / 0.029	0.031 / 0.031	0.035 / 0.035	0.044 / 0.044	0.067 / 0.067	0.072 / 0.072
	Running current	A	0.34 / 0.36	0.36 / 0.37	0.40 / 0.42	0.42 / 0.44	0.44 / 0.46	0.47 / 0.49	0.53 / 0.56	0.69 / 0.73	0.74 / 0.78
	Starting current	A	0.60 / 0.63	0.62 / 0.65	0.69 / 0.73	0.73 / 0.77	0.77 / 0.81	0.82 / 0.86	0.92 / 0.97	1.21 / 1.27	1.30 / 1.36
Standard ESP UP003~018:30Pa, UP024~027:40Pa	Power consumption	kW	0.024 / 0.024	0.026 / 0.026	0.035 / 0.035	0.038 / 0.038	0.043 / 0.043	0.046 / 0.046	0.054 / 0.054	0.086 / 0.086	0.092 / 0.092
	Running current	A	0.37 / 0.39	0.40 / 0.41	0.46 / 0.48	0.48 / 0.50	0.52 / 0.54	0.54 / 0.57	0.60 / 0.63	0.83 / 0.87	0.88 / 0.93
	Starting current	A	0.65 / 0.69	0.69 / 0.73	0.81 / 0.85	0.84 / 0.88	0.90 / 0.95	0.95 / 0.99	1.04 / 1.10	1.45 / 1.53	1.54 / 1.62

SLIM DUCT Physical data

Indoor unit	MMD-	UP0031SPHY-E/TR	UP0051SPHY-E/TR	UP0071SPHY-E/TR	UP0091SPHY-E/TR	UP0121SPHY-E/TR	UP0151SPHY-E/TR	UP0181SPHY-E/TR	UP0241SPHY-E/TR	UP0271SPHY-E/TR
Air Flow (h/m+/m/l+/l)	m^3/h	410/390/370/360/350	450/430/410/390/380	540/500/460/430/400	570/530/500/460/420	600/550/520/470/440	690/660/640/590/550	780/760/730/690/650	1080/1010/950/900/860	1140/1060/980/940/910
Air Flow (h/m+/m/l+/l)	l/s	114/108/103/100/97	125/119/114/108/106	150/139/128/119/111	158/147/139/128/117	167/153/144/131/122	192/183/178/164/153	217/211/203/192/181	300/281/264/250/239	317/294/272/261/253
Sound pressure level*, rear suction (h/m+/m/l+/l)	dB(A)	29/28/27/26/25	30/29/28/27/26	31/30/29/28/26	32/31/29/28/26	33/32/30/29/27	33/31/30/29/28	34/33/32/31/29	36/35/33/32/30	37/36/34/33/32
Sound pressure level*, bottom suction (h/m+/m/l+/l)	dB(A)	37/36/35/34/32	39/38/37/35/34	41/40/39/38/35	42/41/40/38/36	44/42/40/39/37	42/40/39/38/37	44/43/42/41/39	47/46/44/43/41	48/47/45/44/43
Sound power level* (h/m+/m/l+/l)		46/45/44/43/42	49/47/46/45/44	52/51/49/47/45	54/52/50/48/46	54/51/50/48/46	52/51/50/49/46	56/55/54/52/51	60/58/56/55/53	61/59/58/56/55
Dimensions (HxWxD)	mm	210 x 700 x 450					210 x 900 x 450		210 x 1110 x 450	
Weight	kg	15					18		21	
External static pressure	Pa	10	10	10	10	10	10	10	10	10
Max external static pressure	Pa	50	50	50	50	50	50	50	50	50
Connecting pipe, gas	in	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"
Drain port diameter	mm	25	25	25	25	25	25	25	25	25
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

* Factory setting (10Pa)

MMD-UP_HP
HIGH-STATIC PRESSURE DUCT


sizes 18 to 56


sizes 72 & 96

This is Toshiba Air Conditioning's most powerful duct unit delivering air flows up to 4 800 m3/h with an external static pressure up to 250 Pa.

Comfort
- This ultra-flexible, invisible and silent unit creates a pleasant and comfortable environment for a wide range of applications, such as hotels, offices and shops.
- Diffuser design flexibility to select the right layout for the room shape and end user requirements.

Adaptability
- Unobtrusive, flexible and compact (298mm depth), it can be installed easily and discretely into any interior, making it the ideal solution for both new and refurbishing projects.
- Static pressure can be set to 7 levels from 50 to 250Pa.

Healthy
- Renewal of indoor ambient air with the constant fresh air supply via the field installed fresh air intake connection.
- Long-life filter and air discharge spigot available as an option.
- Built-in high-lift drain pump (sizes 18 to 56).

CAPACITY

5.6kW **>31.5**kW

SOUND PRESSURE LEVEL

37dB(A)

OUTDOOR UNITS


Side Blow
& MiNi SMMS-e


SMMS-u
& SHRM-Advance


SHRM-e

LOCAL CONTROLS

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31
RBC-ASCU11-E/TR
RBC-AS41E

HIGH-STATIC PRESSURE DUCT Performances

Indoor unit	MMD-HP	UP0181HP-E/TR 2	UP0241HP-E/TR 2.5	UP0271HP-E/TR 3	UP0361HP-E/TR 4	UP0481HP-E/TR 5	UP0561HP-E/TR 6	UP0721HP-E1/TR1 8	UP0961HP-E1/TR1 10
Cooling capacity	kW	5.6	7.1	8.0	11.2	14.0	16.0	22.4	28.0
Heating capacity	kW	6.3	8.0	9.0	12.5	16.0	18.0	25.0	31.5
Power consumption	kW	0.125	0.140	0.190	0.230	0.300	0.400	0.540	0.790
Running current	A	0.82	0.92	1.16	1.39	1.81	2.48	2.83	3.77
Starting current	A	1.12	1.22	1.46	1.89	2.41	3.08	7.80	7.80

HIGH-STATIC PRESSURE DUCT Physical data

Indoor unit	MMD-	UP0181HP-E/TR	UP0241HP-E/TR	UP0271HP-E/TR	UP0361HP-E/TR	UP0481HP-E/TR	UP0561HP-E/TR	UP0721HP-E1/TR1	UP0961HP-E1/TR1
Air Flow (h/m/l)	m3/h	1100/990/900	1200/1050/960	1500/1350/1200	1920/1560/1340	2340/1980/1695	2760/2340/1920	3800/3200/2500	4800/4200/3500
Air Flow (h/m/l)	l/s	306/275/250	333/292/267	417/375/333	533/433/372	650/550/471	767/650/533	1056/889/694	1333/1167/972
Sound pressure level (h/m/l)	dB(A)	37/33/31	38/34/32	43/41/38	41/37/34	44/41/38	46/44/41	44/40/36	46/42/38
Sound power level (h/m/l)	dB(A)	60/54/50	60/55/51	60/55/51	62/57/53	65/62/54	68/64/56	79	81
Dimensions (HxWxD)	mm	298x1000x750	298x1000x750	298x1000x750	298x1400x750	298x1400x750	298x1400x750	448x1400x900	448x1400x900
Weight	kg	34	34	34	43	43	43	97	97
External static pressure	Pa	100	100	100	100	100	100	150	150
Max external static pressure	Pa	200	200	200	200	200	200	250	250
Connecting pipe, gas	in	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"
Connecting pipe, liquid	in	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"
Drain port diameter	mm	25	25	25	25	25	25	25	25
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

3DW DIFFUSOR FOR SLIM DUCT

Enhanced your Slim Duct installation with Toshiba's motorized 3DW diffusor for a nice design and an optimized air diffusion.

Increased comfort

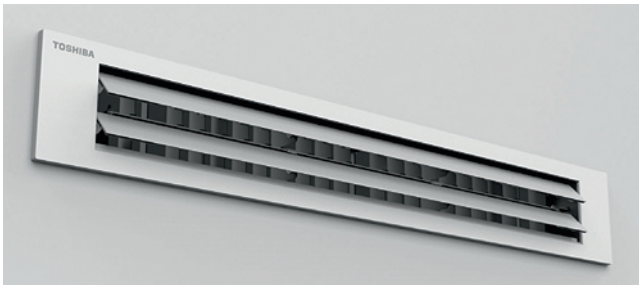
- Motorized horizontal and vertical louvers to perfectly orientate the air flow.
- Optimized air diffusion with swing mode.
- 5Pa pressure drop to not disturb the air flow.

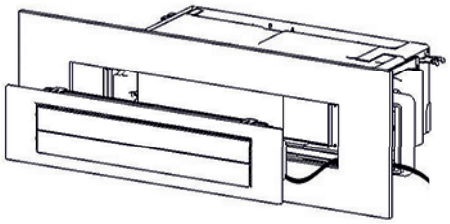
Elegant

- A color that perfectly fits any type of interiors.
- A sleek design with 2 louvers for sophisticated interiors.

Adaptable

- 3 sizes to cover the full slim duct lineup.
- Maximum 1m duct between the louver and the unit for full adaption to every installation conditions.
- Directly wired to indoor units.





3DW DIFFUSOR Physical data

Model name		TCB-TDL0141SDY-E	TCB-TDL0181SDY-E	TCB-TDL0271SDY-E
Description			Motorized horizontal louver for slim duct	
Compatible with slim duct size	MMD-UP0xxx1SPHY-E	003 to 012	015 & 018	024 & 027
Dimensions (HxWxD) *: from panel surface	mm	180x810x88 (*99)	180x1010x88 (*99)	180x1210x88 (*99)
Distance from duct to louver	min		91mm	
	max		1000mm	
Pressure lost	Pa		5	
Color	Mansell		5PB9/1	
	RAL (approximation)		250 92 05	
Remote controller needed to operate	Horizontal louvers		RBC-ASCU11-E/TR, RBC-AMTU31-E	
	Horizontal and vertical louvers		RBC-AWSU52-E, RBC-AMSU52-E	

MMC-UP_HP
CEILING

The simple, yet elegant design helps to create a pleasant and relaxing environment, quickly conditioning the room air to the desired temperature.

Comfort
- Optimum louver control: Air flow angle is automatically set to the most suitable setting according to your cooling or heating needs, and an automatic swing mode enables air flow to reach all areas in the room.
- High air flow distance up to 8m.
- Low noise levels, thanks to high diameter fan and DC motor.

Adaptability
- This design, represents the best possible solution, where there is a lack of space or absence of a ceiling void.
- The simplicity of the design and the installations of the unit, make it suited for a wide range of applications, but particularly refurbishment projects.

Reliability
- Self-cleaning function, enables the air flow to remain constant as well as fresh and reduces the frequency of service visits.
- Drain pump available as an option.

CAPACITY

4.5kW > **18**kW

SOUND PRESSURE LEVEL

28dB(A)

OUTDOOR UNITS

Side Blow,
MiNi-SMMS
& MiNi SMMS-e

SMMS-u
& SHRM Advance

SHRM-e

LOCAL CONTROLS

RBC-AXU31C-E
RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

CEILING Performances

Indoor unit	MMC-HP	UP0151HP-E/TR 1.7	UP0181HP-E/TR 2	UP0241HP-E/TR 2.5	UP0271HP-E/TR 3	UP0361HP-E/TR 4	UP0481HP-E/TR 5	UP0561HP-E/TR 6
Cooling capacity	kW	4.5	5.6	7.1	8.0	11.2	14.0	16.0
Heating capacity	kW	5.0	6.3	8.0	9.0	12.5	16.0	18.0
Power consumption	kW	0.033	0.034	0.067	0.067	0.083	0.083	0.111
Running current	A	0.35	0.36	0.65	0.65	0.77	0.77	0.99
Starting current	A	0.54	0.55	0.97	0.97	1.15	1.15	1.49

CEILING Physical data

Indoor unit	MMC-	UP0151HP-E/TR	UP0181HP-E/TR	UP0241HP-E/TR	UP0271HP-E/TR	UP0361HP-E/TR	UP0481HP-E/TR	UP0561HP-E/TR
Air Flow (h/m/l)	m^3/h	840/690/540	960/720/540	1440/1020/750	1440/1020/750	1860/1350/1020	1860/1530/1200	2040/1650/1260
Air Flow (h/m/l)	l/s	233/192/150	267/200/150	400/283/208	400/283/208	517/375/283	517/425/333	567/458/350
Sound pressure level (h/m/l)	dB(A)	36/34/28	37/35/28	41/36/29	41/36/29	44/38/32	44/41/35	46/42/36
Sound power level (h)	dB(A)	51	52	56	56	59	59	61
Dimensions (HxWxD)	mm	235x952x690	235x952x690	235x1270x690	235x1270x690	235x1586x690	235x1586x690	235x1586x690
Weight	kg	24	24	30	30	39	39	39
Connecting pipe, gas	in	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"
Drain port diameter	mm	20	20	20	20	20	20	20
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

TOSHIBA

MML-UP_NHP
BI-FLOW CONSOLE

Innovative and compact unit to be installed on the floor and in low wall applications, fits perfectly under the window sills or in a low ceiling attic.

CAPACITY

2.2kW > **6.3**kW

SOUND PRESSURE LEVEL

26dB(A)

Comfort

- Unique floor heating function to deliver a powerful flow at floor level for a uniform and comfortable room heating
- Compact and modern design in all three dimensions (60x70x22cm); single size for all range capacities.
- Bi-flow. Two outlets for complete personalized flow: flow intensity and air direction control.

Healty

- IAQ filtration system, includes extremely powerful components and deodorizing effects.
- Ultra-pure filter (818F0050) available as an option to ensure healthy and pleasant atmosphere.

Control

- Brightness level control of the display unit to reduce the led light glow.
- Wireless remote control with a pre-set function and a unique hi-power button for immediate and fast air delivery.

OUTDOOR UNITS

Side Blow
& MiNi SMMS-e

SMMS-u

SHRM-e

LOCAL CONTROLS

IR control
(included)

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

BI-FLOW CONSOLE Performances

Indoor unit	MML-HP	UP0071NHP-E/TR 0.8	UP0091NHP-E/TR 1	UP0121NHP-E/TR 1.25	UP0151NHP-E/TR 1.7	UP0181NHP-E/TR 2
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3
Power consumption	kW	0.021	0.021	0.025	0.034	0.052
Running current	A	0.17	0.17	0.19	0.25	0.36
Starting current	A	0.26	0.26	0.30	0.38	0.55

BI-FLOW CONSOLE Physical data

Indoor unit	MML-	UP0071NHP-E/TR	UP0091NHP-E/TR	UP0121NHP-E/TR	UP0151NHP-E/TR	UP0181NHP-E/TR
Air Flow (h/m/l)	m³/h	510/366/282	510/366/282	552/408/324	624/468/384	726/528/426
Air Flow (h/m/l)	l/s	142/102/78	142/102/78	153/113/90	173/130/107	202/147/118
Sound pressure level (h/m/l)	dB(A)	38/32/26	38/32/26	40/34/29	43/37/31	47/40/34
Sound power level (h/m/l)	dB(A)	53/47/41	53/47/41	55/49/44	58/52/46	62/55/49
Dimensions (HxWxD)	mm	600x700x220	600x700x220	600x700x220	600x700x220	600x700x220
Weight	kg	17	17	17	17	17
Connecting pipe, gas	in	3/8"	3/8"	3/8"	1/2"	1/2"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"
Drain port diameter	mm	16	16	16	16	16
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

MML-UP_H
CONSOLE

The simple design of this unit represents the perfect choice, for refurbishment projects, where the available space is limited, or where neither the walls nor ceiling are able to house the unit.

Comfort

• The units have as standard the ability to flow air in a horizontal direction, however with a simple change during the installation process, the unit can be configured, so that the air flow goes in the upward direction, maximising the flexibility of the design.

Adaptability

• With just one single cabinet size, for all capacity models, allows a single model range to be installed within a building, giving the installation a uniform and clean look.
• Minimum space required for installation and servicing.
• Refrigerant and drain piping with four installation possibilities: top, rear, left or right hand of the unit.

CAPACITY

2.2kW > **8**kW

SOUND PRESSURE LEVEL

35dB(A)

OUTDOOR UNITS

Side Blow
& MiNi SMMS-e

SMMS-u

SHRM-e

LOCAL CONTROLS

RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

CONSOLE Performances

Indoor unit	MML-	UP0071H-E/TR	UP0091H-E/TR	UP0121H-E/TR	UP0151H-E/TR	UP0181H-E/TR	UP0241H-E/TR
	HP	0.8	1	1.25	1.7	2	2.5
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	kW	0.056	0.056	0.092	0.092	0.102	0.102
Running current	A	0.26	0.26	0.43	0.43	0.47	0.47
Starting current	A	0.60	0.60	0.80	0.80	1.10	1.10

CONSOLE Physical data

Indoor unit	MML-	UP0071H-E/TR	UP0091H-E/TR	UP0121H-E/TR	UP0151H-E/TR	UP0181H-E/TR	UP0241H-E/TR
Air Flow (h/m/l)	m^3/h	480/420/360	480/420/360	900/780/650	900/780/650	1080/930/780	1080/930/780
Air Flow (h/m/l)	l/s	133/117/100	133/117/100	250/217/181	250/217/181	300/258/217	300/258/217
Sound pressure level (h/m/l)	dB(A)	39/37/35	39/37/35	45/41/38	45/41/38	49/44/39	49/44/39
Sound power level (h)	dB(A)	54	54	60	60	64	64
Dimensions (HxWxD)	mm	630x950x230	630x950x230	630x950x230	630x950x230	630x950x230	630x950x230
Weight	kg	35	35	35	35	38	38
Connecting pipe, gas	in	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"
Drain port diameter	mm	20	20	20	20	20	20
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

TOSHIBA

MML-UP_BH
CONCEALED CONSOLE

This unit has been designed to be fitted easily into a compact space behind a decorative panel, allowing the unit to blend into any room interior. This chassis is compact and slim, it is very easy to install and to conceal behind a decorative panel to blend with any room interior.

CAPACITY

2.2kW > **8**kW

SOUND PRESSURE LEVEL

32dB(A)

Specialized
• Not only is this unit ideal for office and other commercial buildings, it fits perfectly for specialist applications such as a library or hospital building.

Easy to hidden
• Very compact design, which can be installed under a window sill, that is only 600mm in height.
• With its limited depth of only 200mm, the unit can be installed along the wall ensuring maximum space saving.

Accessibility
• Removable split front panel with immediate access to the main components.

OUTDOOR UNITS

Side Blow
& MiNi SMMS-e

SMMS-u

SHRM-e

LOCAL CONTROLS

RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

CONCEALED CONSOLE Performances

Indoor unit	MML-	UP0071BH-E/TR	UP0091BH-E/TR	UP0121BH-E/TR	UP0151BH-E/TR	UP0181BH-E/TR	UP0241BH-E/TR
	HP	0.8	1	1.25	1.7	2	2.5
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	kW	0.056	0.056	0.056	0.090	0.090	0.095
Running current	A	0.25	0.25	0.25	0.45	0.45	0.46
Starting current	A	0.60	0.60	0.60	0.80	0.80	1.00

CONCEALED CONSOLE Physical data

Indoor unit	MML-	UP0071BH-E/TR	UP0091BH-E/TR	UP0121BH-E/TR	UP0151BH-E/TR	UP0181BH-E/TR	UP0241BH-E/TR
Air Flow (h/m/l)	m^3/h	460/400/300	460/400/300	460/400/300	740/600/490	740/600/490	950/790/640
Air Flow (h/m/l)	l/s	128/111/83	128/111/83	128/111/83	206/167/136	206/167/136	264/219/178
Sound pressure level (h/m/l)	dB(A)	36/34/32	36/34/32	36/34/32	36/34/32	36/34/32	42/37/33
Sound power level (h)	dB(A)	54	54	54	54	54	60
Dimensions (HxWxD)	mm	600x745x220	600x745x220	600x745x220	600x1045x220	600x1045x220	600x1045x220
Weight	kg	21	21	21	28	28	28
Connecting pipe, gas	in	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"
Drain port diameter	mm	20	20	20	20	20	20
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

MMF-UP_H
FLOOR STANDING

This system is particularly suitable to air condition large rooms like shops or showrooms or with low ceilings like restaurants or lofts.

CAPACITY

4.5kW > **18**kW

SOUND PRESSURE LEVEL

37dB(A)

Optimized air flow

• The unit has been designed to have particularly high air flow rates, which correspond into superior air throw values.
• The wide and automatic vertical and horizontal air distribution angles, allow the air flow distribution to reach all areas, even when installed into large rooms.
• High air flows: from 660 m³/h to 2160 m³/h.
• Wide air distribution angle: up to 150°.

Wide range

• Large capacity range: cooling capacities from 4.5 kW to 16 kW and heating capacities from 5 kW to 18 kW.

Installation everywhere

• The unit can be installed in the corner of the room, in this case the automatic swing angle can be fixed to deliver the air only where it is needed.
• Very small footprint: 0.128 m² up to 8 kW and 0.243 m² up to 16 kW.

OUTDOOR UNITS

Side Blow
& MiNi SMMS-e

SMMS-u

SHRM-e

LOCAL CONTROLS

RBC-AXU31-E

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

FLOOR STANDING Performances

Indoor unit	MMF-HP	UP0151H-E/TR 1.7	UP0181H-E/TR 2	UP0241H-E/TR 2.5	UP0271H-E/TR 3	UP0361H-E/TR 4	UP0481H-E/TR 5	UP0561H-E/TR 6
Cooling capacity	kW	4.5	5.6	7.1	8.0	11.2	14.0	16.0
Heating capacity	kW	5.0	6.3	8.0	9.0	12.5	16.0	18.0
Power consumption	kW	0.053 / 0.053	0.053 / 0.053	0.087 / 0.087	0.087 / 0.087	0.133 / 0.133	0.158 / 0.158	0.158 / 0.158
Running current	A	0.37 / 0.38	0.37 / 0.38	0.55 / 0.58	0.55 / 0.58	0.82 / 0.86	0.97 / 1.02	0.97 / 1.02
Starting current	A	0.48 / 0.50	0.48 / 0.50	0.71/ 0.75	0.71/ 0.75	1.06 / 1.11	1.27 / 1.33	1.27 / 1.33

FLOOR STANDING Physical data

Indoor unit	MMF-	UP0151H-E/TR	UP0181H-E/TR	UP0241H-E/TR	UP0271H-E/TR	UP0361H-E/TR	UP0481H-E/TR	UP0561H-E/TR
Air Flow (h/m+/m/l+/l)	m³/h	820/760/700/640/600	820/760/700/640/600	930/830/770/700/640	930/830/770/700/640	1660/1550/1420/1190/1170	1760/1630/1480/1370/1350	1760/1630/1480/1370/1350
Air Flow (h/m+/m/l+/l)	l/s	227/211/194/178/167	227/211/194/178/167	258/231/214/194/178	258/231/214/194/178	461/431/394/331/325	489/453/411/381/375	489/453/411/381/375
Sound pressure level (h/m+/m/l+/l)	dB(A)	46/44/42/40/38	46/44/42/40/38	50/47/45/43/41	50/47/45/43/41	51/49/46/44/41	53/51/48/46/45	53/51/48/46/45
Dimensions (HxWxD)	mm	1750x600x210	1750x600x210	1750x600x210	1750x600x210	1750x600x390	1750x600x390	1750x600x390
Weight	kg	46	46	47	47	61	61	61
Connecting pipe, gas	in	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Connecting pipe, liquid	in	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"
Drain port diameter	mm	20	20	20	20	20	20	20
Power supply	V-ph-Hz	220-240-1-50 / 208-230-1-60						

TOSHIBA

MMK-UP_HP(L)
HIGH-WALL (STD & WITHOUT PMV)

Particularly compact, this high-wall is perfect for limited spaces, such as offices or small shops.

Compact and design
- The unit is compact and lightweight, it is perfect for installation above the doors or in narrow corridors.
- New appearance, simple, elegant with nice led display.

Healthy
- Special fin coating for Healthy & Fresh air.
- Ultra pure filter (818F0050) available as an option to ensure healthy and pleasant atmosphere.

Easy to use
- Remote controller for easy access to the preferred setting.
- Filters for dust collection can be easily removed by lifting the front panel and can be cleaned easily washing them under running water.

CAPACITY

1.7kW > **11.2**kW

SOUND PRESSURE LEVEL

25dB(A)

OUTDOOR UNITS

Side Blow, MiNi-SMMS & MiNi SMMS-e

SMMS-u & SHRM Advance

SHRM-e

LOCAL CONTROLS

IR control (included)

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

HIGH-WALL Performances

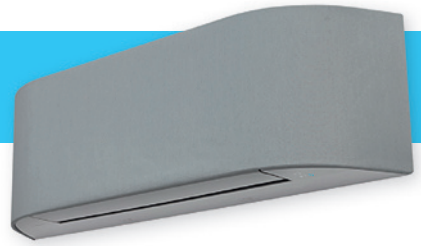
Indoor unit	With PMV / Without PMV*	MMK- / MMK-	UP0031HP-E/TR / UP0031HPL-E/TR	UP0051HP-E/TR / UP0051HPL-E/TR	UP0071HP-E/TR / UP0071HPL-E/TR	UP0091HP-E/TR / UP0091HPL-E/TR	UP0121HP-E/TR / UP0121HPL-E/TR	UP0151HP-E/TR / UP0151HPL-E/TR	UP0181HP-E/TR / UP0181HPL-E/TR	UP0241HP-E/TR / UP0241HPL-E/TR	UP0271HP-E/TR	UP0301HP-E/TR	UP0361HP-E/TR
		HP	0.3	0.6	0.8	1	1.25	1.7	2	2.5	3	3.2	4
Cooling capacity		kW	0.9	1.7	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9	10
Heating capacity		kW	1.3	1.9	2.5	3.2	4.0	5.0	6.3	8.0	9.0	10	11.2
Power consumption		kW	0.015	0.015	0.015	0.016	0.017	0.028	0.032	0.050	0.034	0.054	0.066
Running current		A	0.15	0.15	0.16	0.17	0.18	0.26	0.29	0.40	0.30	0.46	0.56
Starting current		A	0.19	0.19	0.20	0.21	0.22	0.35	0.38	0.50	0.34	0.50	0.60

HIGH-WALL Physical data

Indoor unit	With PMV / Without PMV*	MMK- / MMK-	UP0031HP-E/TR / UP0031HPL-E/TR	UP0051HP-E/TR / UP0051HPL-E/TR	UP0071HP-E/TR / UP0071HPL-E/TR	UP0091HP-E/TR / UP0091HPL-E/TR	UP0121HP-E/TR / UP0121HPL-E/TR	UP0151HP-E/TR / UP0151HPL-E/TR	UP0181HP-E/TR / UP0181HPL-E/TR	UP0241HP-E/TR / UP0241HPL-E/TR	UP0271HP-E/TR	UP0301HP-E/TR	UP0361HP-E/TR
Air Flow (h/m/l)		m^3/h	455/370/270	455/370/270	480/385/270	510/395/270	540/410/270	840/690/550	900/720/550	1200/900/600	1200/1000/800	1500/1300/1100	1650/1350/1250
Air Flow (h/m/l)		l/s	126/103/75	126/103/75	133/107/75	141/110/75	150/114/75	233/192/153	250/200/153	333/250/167	333/277/222	403/361/305	458/375/347
Sound pressure level (h/m/l)		dB(A)	33/29/25	33/29/25	35/30/25	36/31/25	37/32/25	40/36/32	41/37/32	45/39/33	44/41/39	48/44/41	50/45/43
Sound power level (h)		dB(A)	48	48	50	51	52	55	56	60	60	63	65
Dimensions (HxWxD)		mm	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230	293 x 798 x 230	320 x 1050 x 250	320 x 1050 x 250	320 x 1050 x 250	348 x 1200 x 280	348 x 1200 x 280	348 x 1200 x 280
Weight		kg	11	11	11	11	11	16	16	16	21	21	21
Connecting pipe, gas		in	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"
Connecting pipe, liquid		in	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"
Drain port diameter		mm	16	16	16	16	16	16	16	16	16	16	16
Power supply		V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

*Optional PMV-Kit needed.
Size 0.3HP compatible with SMMS-u and SHRM-Advance.

MMK-UP_DHPL
HAORI



HAORI™ brings stunning aesthetics, high efficiency, silent output and leading air quality to air conditioning systems. Discover the air conditioner that respects your universe.

Truly elegant
• Let your style be your guide with HAORI featuring a stylish fabric cover easy to peel and stick.

Year-round comfort
• Total comfort is granted, thanks to the horizontal and vertical auto-swing louvers that provide uniform air distribution.
• The sound level of the indoor unit achieves 25 dB(A) in low fan speed mode, to preserve spaces quietness.

Indoor air quality
• Ultra-Pure filter: Captures up to 94% of PM 2.5 particulates.
• Plasma ionizer: Absorbs and decomposes smoke, food smells and bad odors.
• Resin coated coil: Special coating for a coil which is as clean as new.

Easy to use
• Wireless infra-red remote control with buttons for direct management of the main operating functions.

Same as Residential Haori, VRF Haori is delivered with light and dark grey fabrics. Other colors available as an option.

CAPACITY

1.7kW > **6.3**kW

SOUND PRESSURE LEVEL

25dB(A)

OUTDOOR UNITS

Side Blow, MiNi SMMSe & MiNi-SMMS

SMMS-u & SHRM-Advance

SHRM-e

LOCAL CONTROLS

Included

RBC-AWSU52-E
RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR
RBC-AS41E

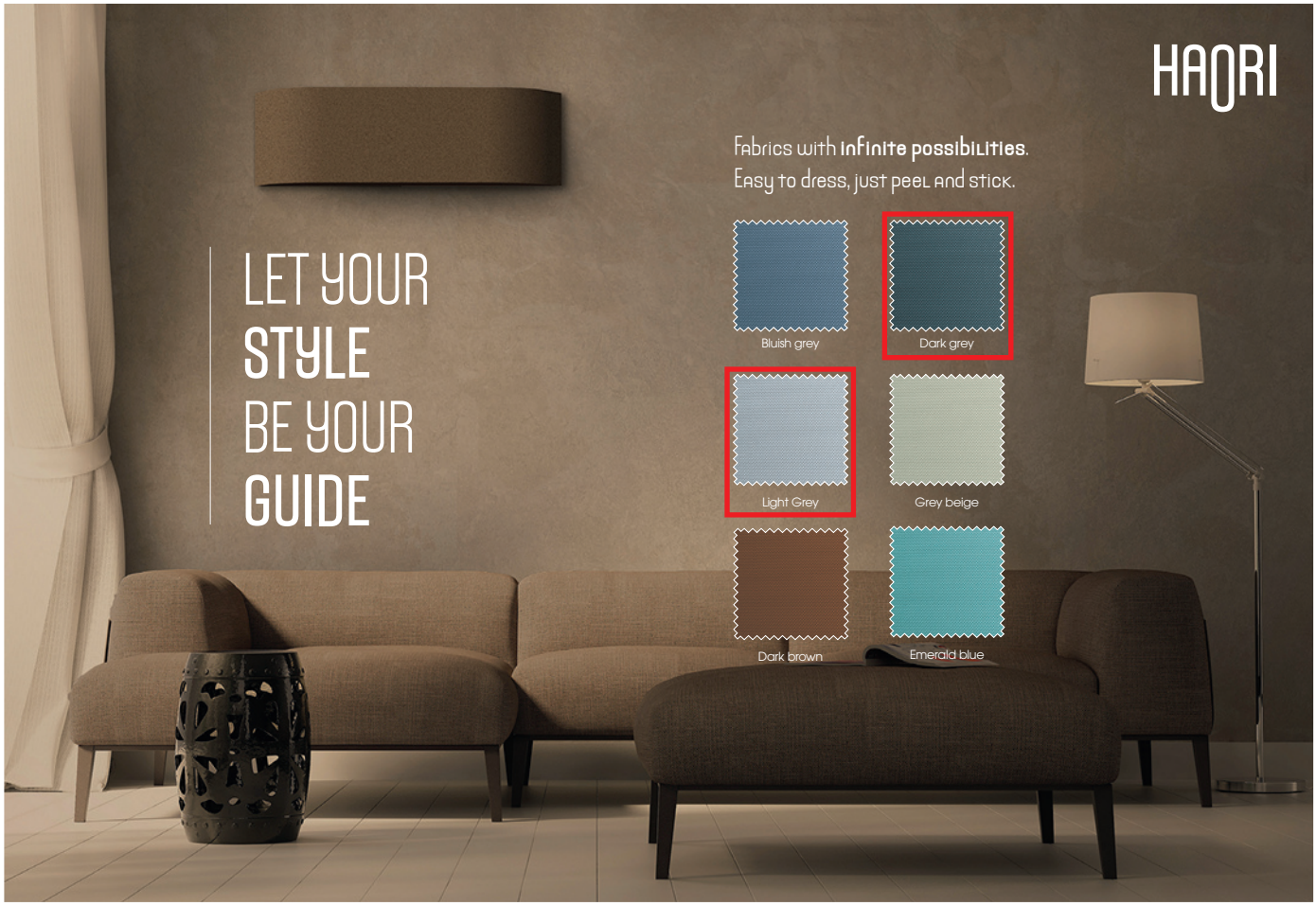
HAORI Performances

Indoor unit	MMK-HP	UP0051DHPL-E/TR 0.6	UP0071DHPL-E/TR 0.8	UP0091DHPL-E/TR 1	UP0121DHPL-E/TR 1.25	UP0151DHPL-E/TR 1.7	UP0181DHPL-E/TR 2
Cooling capacity	kW	1.7	2.2	2.8	3.6	4.5	5.6
Heating capacity	kW	1.9	2.5	3.2	4.0	5.0	6.3
Power consumption	kW	0.015	0.018	0.019	0.021	0.025	0.032
Running current	A	0.17	0.18	0.19	0.20	0.22	0.28
Starting current	A	0.22	0.23	0.24	0.25	0.27	0.33

HAORI Physical data

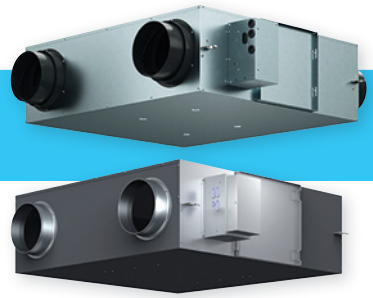
Indoor unit	MMK-	UP0051DHPL-E/TR	UP0071DHPL-E/TR	UP0091DHPL-E/TR	UP0121DHPL-E/TR	UP0151DHPL-E/TR	UP0181DHPL-E/TR
Air Flow (h/m/l)	m^3/h	455/370/300	480/385/300	510/395/300	540/410/300	580/480/380	730/600/420
Air Flow (h/m/l)	l/s	126/103/83	133/107/83	142/110/83	150/114/83	161/133/106	203/167/117
Sound pressure level (h/m+/m/l+/l)	dB(A)	33/31/29/27/25	35/33/30/28/25	36/34/31/28/25	37/35/32/28/25	40/38/35/33/30	45/42/39/36/32
Dimensions (HxWxD)	mm	300x987x210	300x987x210	300x987x210	300x987x210	300x987x210	300x987x210
Weight	kg	11	11	11	11	11	11
Connecting pipe, gas	in	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"
Connecting pipe, liquid	in	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Drain port diameter	mm	16	16	16	16	16	16
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

TOSHIBA



■: delivered with the unit

VN-U_SY & VN-M_HE
HEAT RECOVERY VENTILATION UNIT



Toshiba Air Conditioning's HRV model uses exhaust air to pre-condition the incoming air, thus reducing the cooling or heating load on the system. This allows the overall capacity size of the system to be reduced.

AIR FLOW

150m³/h > **2.000**m³/h

SOUND PRESSURE LEVEL

20dB(A)

Energy savings

- Recovers air suction heat and humidity up to 75% and transfers them to the outdoor fresh air.
- The unit has the ability to automatically change operation mode of the air flow between heat exchanger mode (energy recovery) to normal standard ventilation mode (free cooling), based on the outdoor temperatures.
- Free cooling - Provides fresh outdoor cool air to reduce the indoor air temperature, when the outdoor temperature is lower than the indoor air conditioned temperature.

Multi-application

- 9 models available with air flow ranges from 150 to 2 000 m³/h.
- Air balance volume rate can be varied to suit the usage environment and location.

Fully integrated

- Air conditioners and heat exchangers are controlled with the same main bus system.

OUTDOOR UNITS

Side Blow, MiNi-SMMS & MiNi SMMS-e

SMMS-u & SHRM Advance

SHRM-e

LOCAL CONTROLS

RBC-AMSU52-E
RBC-AWSU52-E
NRC-01HE (VN-M_HE)

HEAT RECOVERY VENTILATION UNIT

Item		Model / Fan speed	VN-U0***1SY-E/-TR 015	025	035	050	065	080	100	VN-M_HE 1500	2000
Power supply (V)			220-240V ~ 50Hz								
Power consumption (W)	Heat exchange mode	EH/H/M/L	56/43/35/28	75/57/39/29	152/92/59/39	174/105/60/51	306/176/96/55	328/196/114/62	541/291/151/74	751/708/570	1084/1032/702
	Bypass mode	EH/H/M/L	56/45/37/29	75/62/41/30	152/92/59/39	174/114/64/54	306/191/105/58	328/215/126/67	541/320/165/80	-	-
Air volume (m³/h) (*1)		EH/H/M/L	150/120/95/73	250/210/145/100	350/280/210/140	500/400/300/260	650/520/390/260	800/640/480/320	1000/800/600/400	1500 /1500 / 1200	2000 /2000 / 1400
External static pressure (Pa)	Heat exchange mode	EH/H/M/L	90/60/43/26	75/53/30/16	160/100/57/26	125/80/45/39	150/100/58/29	145/92/53/28	170/110/60/30	1305/103/112	124/92/112
	Bypass mode	EH/H/M/L	90/60/43/26	75/53/30/16	160/100/57/26	125/80/45/39	150/100/58/29	145/92/53/28	170/110/60/30	-	
Sound pressure level (dB(A)) (*2 ~ 4)	Heat exchange mode	EH/H/M/L	28/25/22/20	28/27/24/20	34/31/26/21	36/31/27/25	39/35/30/24	39/35/30/23	41/38/33/24	38/36.5/36	41/39/37
	Bypass mode	EH/H/M/L	28/26/23/21	28/27/25/21	34/31/26/21	36/32/28/26	39/36/31/25	39/36/31/24	41/39/34/25	-	-
Temperature exchange efficiency (%)	for heating	EH/H/M/L	83/83.5/84.5/85	80/80.5/82/84	81/81.5/84/87	79/79.5/80/80.5	77/77.5/78/79	78/79/84/91	78/78.5/80/87	76.5 /76.5 /79	73.5 /73.5 /77.5
	for cooling	EH/H/M/L	71/76.5/77.5/78	70/71.5/75/77	67/68.5/75/80	69/69.5/72/73.5	63/66.5/71/73	67/70/77/86	63/63.5/72/81		
Enthalpy exchange efficiency (%)	for heating	EH/H/M/L	76/80/81/82	75/76/78/81	73/76/80/84	73/74/75/76	70/72/74/76	73/74/80/88	72/73/75/83	71/71/73.5	68.5/68.5/72
	for cooling	EH/H/M/L	66/73/75/77	65/68/71/75	64/67/71/76	64/66/68/69	60/62/66/69	64/67/73/81	62/63/68/77	64/64/67	60.5/60.5/65.5
Dimensions (Length x Width x Height) (mm)			778×735×278		880×880×305	920×1020×337		1130×1230×386		810x1189x1189	810x1189x1189
Weight (kg)			29	29	40	47	47	63	63	143	143
Duct diameter - Indoor side (mm)			Φ100		Φ150	Φ200			Φ250		
Filtration efficiency grade (%)			82%							-	
Operating range (*5)		arround unit	-15 ~ +50° 80% RH or less							-10 / 40°C . RH ≤80%	
		outdoor Air (OA)	-20 ~ +52° 80% RH or less							-15 / 43°C . RH ≤80%	
		return Air (RA)	+5 ~ +40° 80% RH or less							5 / 40°C . RH ≤80%	

(*1) Air volume can be changed over to extra high (high) mode, medium mode or low mode.
(*2) Sound pressure level is measured 1.5m below the center of the unit.
(*3) Sound pressure level is the value which was measured at the acoustic room.
(*4) Actually, sound pressure levels become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
(*5) When the temperature of the outdoor air is below-10°C, the unit runs the prevent cold draft mode (the ventilator for air supply drives in low mode).
The unit cannot run when the temperature of the outdoor air is below-20°C.
The ventilator for air supply stops running and ventilator for air exhaust also stops depending on the setting

TOSHIBA

MMD-VN(K)
AIR-TO-AIR HEAT EXCHANGER WITH DX COIL

MMD-VN(K) ventilation products are using exhaust air + DX coil to pre-condition the incoming air, thus reducing the cooling or heating load and the overall size of the required air conditioning system.

CAPACITY: **4.1**kW > **10.9**kW

SOUND PRESSURE LEVEL: **34**dB(A)

AIR FLOW: **500**m³/h > **1000**m³/h

Energy savings

- Recovers incoming heat and humidity up to 75% and transfers them to the outdoor fresh air.
- Up to 10kW coil capacity to reach intake air temperature close to ambient temperature: no extra load on the heating and cooling system
- Unit has the ability to automatically change operation mode of the air flow between heat exchanger mode (energy recovery) to normal standard ventilation mode (free cooling), based on the outdoor temperatures.
- Free cooling - Provides fresh outdoor cool air to reduce the indoor air temperature, when the outdoor temperature is lower than the indoor air conditioned temperature.

Multi-application

- 9 models available with air flow ranges from 150 to 2000 m³/h.
- Air balance volume rate can be varied to suit the usage environment and location.
- Version with humidifier is available for applications where humidity levels need to be controlled.

Fully integrated

- Air conditioners and heat exchangers are controlled with the same main bus system (TCC-LINK).

OUTDOOR UNITS

MiNi SMMS-e

SHRM-e

LOCAL CONTROLS

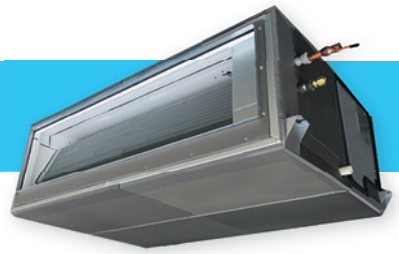
NRC-01HE

AIR-TO-AIR HEAT EXCHANGER WITH DX COIL / WITH HUMIDIFIER — Performance and physical data

Model	MMD-		VN502HEX1E/TR	VN802HEX1E/TR	VN1002HEX1E/TR	VNK502HEX1E/TR	VNK802HEX1E/TR	VNK1002HEX1E/TR
Fresh air conditioning capacity	CO	kW	4.10 (1.30)	6.56 (2.06)	8.25 (2.32)	4.10 (1.30)	6.56 (2.06)	8.25 (2.32)
Fresh air conditioning capacity	HP	kW	5.53 (2.33)	8.61 (3.61)	10.92 (4.32)	5.53 (2.33)	8.61 (3.61)	10.92 (4.32)
Air volume	(EH/H/L)	m³/h	500/500/440	800/800/640	950/950/820	500/500/440	800/800/640	950/950/820
Temperature exchange efficiency	(EH/H/L)	%	70.5/70.5/71.5	70/70/72.5	65.5/65.5/67.5	70.5/70.5/71.5	70/70/72.5	65.5/65.5/67.5
Enthalpy exchange efficiency (Heating)	(EH/H/L)	%	68.5/68.5/69	70/70/73	66/66/68.5	68.5/68.5/69	70/70/73	66/66/68.5
Enthalpy exchange efficiency (Cooling)	(EH/H/L)	%	56.5/56.5/57.5	56/56/59	52/52/54.0	56.5/56.5/57.5	56/56/59	52/52/54.5
Sound pressure level* ***	(EH/H/L)	dB(A)	37.5/36.5/34.5	41/40/38	43/42/40	36.5/35.5/33.5	40/39/38	42/41/39
Power consumption***	(EH/H/L)	W	300/280/235	505/465/335	550/545/485	305/285/240	530/485/350	575/565/520
External static pressure***	(EH/H/L)	Pa	120/105/115	120/100/100	135/120/105	95/85/95	105/85/90	110/90/115
Heat exchanger			Finned tube - R410A			Finned tube - R410A		
Gas line diameter		mm	9.5	12.7	12.7	9.5	12.7	12.7
Liquid line diameter		mm	6.4	6.4	6.4	6.4	6.4	6.4
Drain port diameter		mm	25	25	25	25	25	25
Humidifier technology						Permeable film humidifier		
water pressure						0.02 to 0.49		
water flow						3	5	6
water supply						1/2"	1/2"	1/2"
Dimensions (HxWxD)		mm	430x1140x1690	430x1189x1739	430x1189x1739	430x1140x1690	430x1189x1739	430x1189x1739
Weight		kg	84	100	101	91	111	112
Duct diameter	indoor side	mm	200	250	250	200	250	250
Power supply		V-ph-Hz	220-240 - 1 - 50			220-240 - 1 - 50		
Operating range	Around unit		-10 / 40°C . RH ≤80%			-10 / 40°C . RH ≤80%		
	Outdoor Air (OA)		-15 / 43°C . RH ≤80%			-15 / 43°C . RH ≤80%		
	Return Air (RA)		5 / 40°C . RH ≤80%			5 / 40°C . RH ≤80%		

* Sound pressure level is measured 1.5m below the center of the unit. *** Sound pressure level, power consumption and external static pressure values at 230 V. Cooling and heating capacities are based on the following conditions: Cooling capacities are based on: indoor temperature: 27°CDB/19°CWB, Outdoor temperature: 35°CDB. Heating capacities are based on: indoor temperature: 20°CDB, Outdoor temperature: 7 °CDB/6°CWB. The figures in ( ) indicate the heat reclaimed from the heat recovery ventilator.
EH/H/L = extra-high/high/low. C: cooling mode. H: heating mode

MMD-UP_HFP
FRESH AIR DUCT



This indoor unit manages and treats the fresh air intake before it will be distributed into the building.

AHU alternative
- Ideal solution for all buildings that require fresh air ventilation.
- Air flow up to 3,060m³/h.
- Up to 200Pa available pressure, enough to create long pipe work.

Comfort
- Constant 20°C fresh air delivery from -10 to +46°c air suction temperature.
- 5-speed fan operation for perfect air flow adaptation.
- Filters available as an option.

Integration flexibility
- Make your choice between VRF 1:1 connection or mix with other indoor unit types.

CAPACITY	AIR FLOW	SOUND PRESSURE LEVEL
8.9kW > **40**kW	**1,080**m³/h > **3,060**m³/h	**31**dB

OUTDOOR UNITS

SMMS-u &
SHRM Advance

LOCAL CONTROLS

RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR

FRESH AIR DUCT Performance

Indoor unit	MMD-	UP0481HFP-E/TR	UP0721HFP-E1/TR1	UP0961HFP-E1/TR1	UP1121HFP-E/TR	UP1281HFP-E/TR
	HP	5	8	10	12	14
Cooling capacity	kW	14.0	22.4	28.0	33.5	40.0
Heating capacity	kW	8.9	13.9	17.4	20.8	25.2
Power consumption	kW	0.110	0.160	0.200	0.250	0.330
Running current	A	0.77	0.86	1.07	1.30	1.83
Starting current	A	2.01	7.80	7.80	7.80	7.80

FRESH AIR DUCT Physical data

Indoor unit	MMD-	UP0481HFP-E/TR	UP0721HFP-E1/TR1	UP0961HFP-E1/TR1	UP1121HFP-E/TR	UP1281HFP-E/TR
Air Flow (h/m+/m/l+/l)	m³/h	1080/990/930/840/760	1680/1560/1440/1320/1200	2100/1950/1800/1620/1470	2520/2340/2130/1950/1770	3060/2820/2580/2370/2130
Air Flow (h/m+/m/l+/l)	l/s	300/275/258/233/211	466/433/400/366/333	583/542/500/450/408	700/650/592/542/492	850/783/717/658/592
Sound pressure level (h/m+/m/l+/l)	dB(A)	38/37/35/32/31	38/37/36/35/33	39/38/3635/33	40/39/37/36/34	42/40/38/37/35
Dimensions (HxWxD)	mm	327 x 1430 x 750	477 x 1430 x 900	477 x 1430 x 900	477 x 1430 x 900	477 x 1430 x 900
Weight	kg	44	99	99	99	99
External static pressure	Pa	50/75/111/125/150/175/200				
Eexternal static pressure -factory setting	Pa	100	100	100	100	100
Connecting pipe, gas	in	5/8"	7/8"	7/8"	1"1/8	1"1/8
Connecting pipe, liquid	in	3/8"	1/2"	1/2"	1/2"	5/8"
Drain port diameter	mm	25	25	25	25	25
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50
Operation range for SMMS-u & SHRM Advance – Cooling (*2)	°C	+5/+46 (Note 4)				
Operation range for SMMS-u & SHRM Advance – Heating (*3)	°C	-10/46				

* The setting temperature is 13 - 25°C (standard FCU.. 18 - 30 °C).
* Height difference between Fresh Air Intake Indoor units must be within 5 m.
Note 1: Rated conditions. Cooling : Outdoor air temperature 33°C DB/28°C WB setting 18°C. Heating : Outdoor air temperature 0°C DB/-2.9°C WB setting temperature 25°C.
Note 2: When supply air temperature is "setting temperature + 3°C" or less, Fresh Air Intake unit operates as FAN mode.
Note 3: When supply air temperature is "setting temperature -3°C" or over, Fresh Air Intake unit operates as FAN mode.
Note 4: 46-52°C is also avaialble but temporary operable.

TOSHIBA

MMW
HOT WATER MODULE

With the mid temperature hot water module, produce hot water in addition of cooling and heating.

Hot water

- Designed to produce hot water from 25°C up to 50°C outlet water temperature, whilst still maintaining the performance and efficiency levels of the rest of the system.
- Compatible with both space heating and domestic hot water applications, making the unit particularly suited to small shops and residential apartments where both space heating and hot water production is required.

Adaptability

- Up to 200% diversity indoor units & hot water module
- Operating range from -20°C WB to 19°C WB.
- Compatible with 4 series FS box & SHRM Advance FS box.

Installation

- Light and compact chassis to simplify the handling and the project integration.

CAPACITY	HOT WATER	SOUND PRESSURE LEVEL
8kW > **16**kW	Max **50**°C	**25**dB(A)

OUTDOOR UNITS

Mini SMMS-e
8/10HP

SMMS-u
& SHRM Advance

SHRM-e

LOCAL CONTROLS

RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR

HOT WATER MODULE Performance

Indoor unit	MMW-	UP0271LQ-E/TR	UP0561LQ-E/TR
Cooling capacity	kW	-	-
Heating capacity	kW	8	16
Power consumption	kW	0.014	0.014
Running current	A	0.08	0.08
Starting current	A	-	-

HOT WATER MODULE Physical data

Indoor unit	MMW-	UP0271LQ-E/TR	UP0561LQ-E/TR
Standard water flow	l/min	22.9	45.8
Minimum water flow	l/min	19.5	38.9
Sound pressure level	dB(A)	25	27
Dimensions (HxWxD)	mm	580x400x250	580x400x250
Weight	kg	17.8	20.3
Gas	in	5/8"	5/8"
Liquid	in	3/8"	3/8"
Drain port diameter	mm	R1	R1
Water Inlet	mm	R1 - 1/4"	R1 - 1/4"
Water Outlet	mm	R1 - 1/4"	R1 - 1/4"
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50

MMW-AP_CHQ
HIGH TEMPERATURE HOT WATER MODULE

In addition to the standard simultaneous heating and cooling function of the SHRM-e system, it is possible with the high temperature hot water module, to produce hot water up to 82°C, whilst still retaining the comfort operation of the indoor units.

CAPACITY
5HP

HOT WATER
82°C

High temperature

- Designed to produce hot water from 50°C up to 82°C outlet water temperature, whilst still maintaining the performance and efficiency levels of the rest of the system.
- Particularly suited for hot water sanitary production for residential and business applications.

All year round hot water

- All season hot water even when the other indoor units are operate in cooling.
- Operating range from -25°c WD to +40°C DB ambiant condition.

OUTDOOR UNITS

SHRM-e

LOCAL CONTROLS

RBC-AMSU52-E
RBC-AMTU31-E
RBC-ASCU11-E/TR

HOT WATER MODULE Performance

Indoor unit	MMW-	AP0481CHQ-E
Cooling capacity	kW	-
Heating capacity	kW	14
Power consumption	kW	4.15
Running current	A	17.5
Starting current	A	-

HOT WATER MODULE Physical data

Indoor unit	MMW-	AP0481CHQ-E
Water flow	m³/h	2.400
Water flow	l/min	40
Sound pressure level	dB(A)	44
Dimensions (HxWxD)	mm	700x900x320
Weight	kg	100
Gas	in	5/8
Liquid	in	3/8
Drain port diameter	mm	15
Water Inlet	mm	R1 - 1/4"
Water Outlet	mm	R1 - 1/4"
Power supply	V-ph-Hz	220/240-1-50

TOSHIBA

TCB-IFDM
DX KIT

Expand the connexion capabilities between an AHU and the SMMS-u to provide the most advanced fresh air solution.

New concept
- One control kit compatible with discharge temperature, suction temperature or capacity control.
- 2PMV kits available: 8 to 12 & 14 to 20HP.

Advanced technology
- The latest generation of PMV.
- New boundaries: Up to 120HP equal to 60,000m³/h thanks to Twin Connections.
- All SMMS-u benefits (Rotation drive, auto backup and alternative defrost) applicable when using DX kit system.

Simplified installation
- Controller available with embedded relays to save time during installation.
- Control box delivered with 7.5m temperature sensor.

CAPACITY

8HP < **120**HP

AIR FLOW

Up to **60,000**m³/h

OUTDOOR UNITS

SMMS-u

SHRM-e

LOCAL CONTROLS

RBC-AMSU52-E

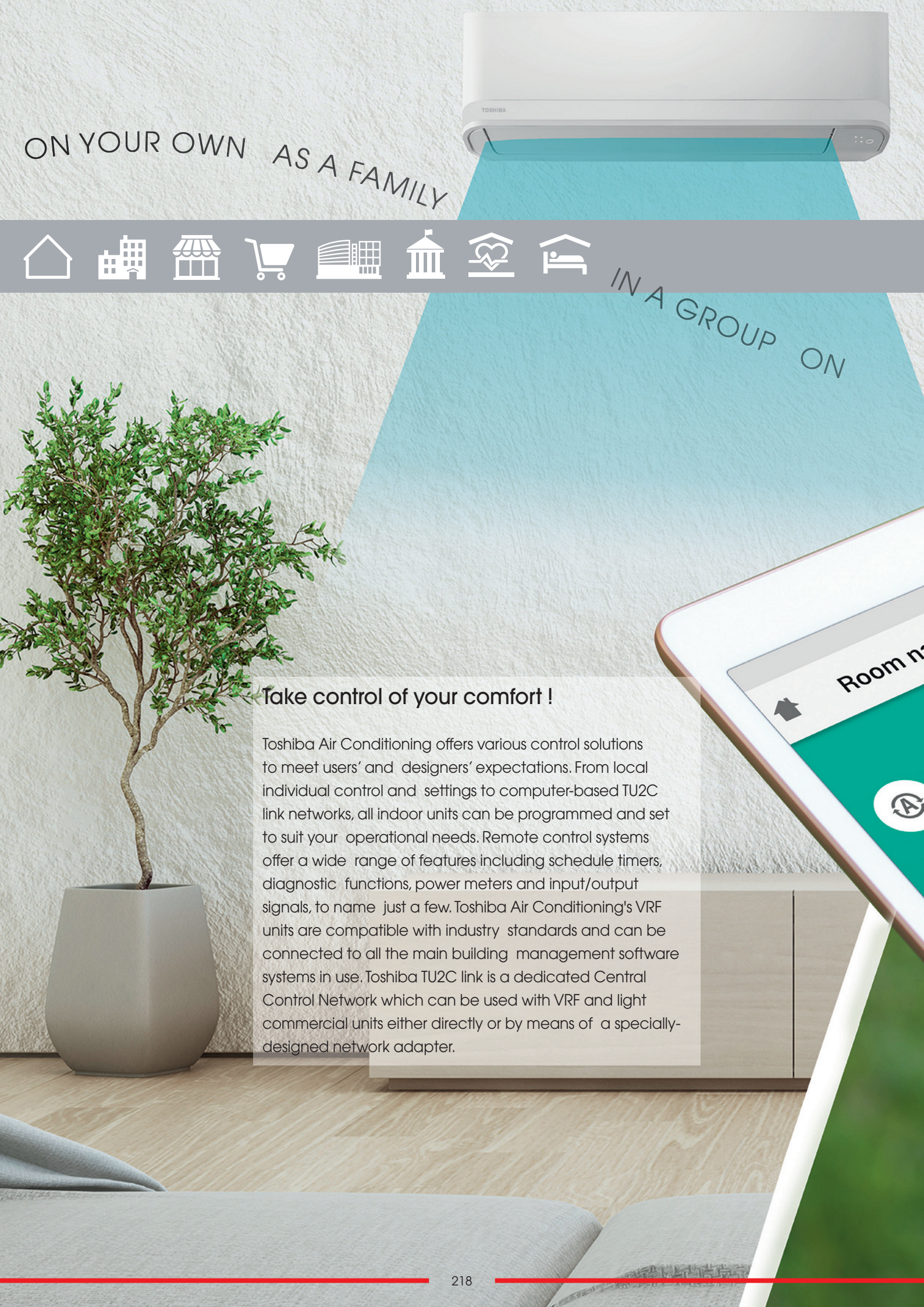
DX KIT Physical data

DX Controller unit		TCB-IFDMX01UP-E All simple terminal block	TCB-IFDMR01UP-E With relay terminal blocks for 6 DO
Dimensions (HxWxD)	mm	420 x 330 x 122	420 x 330 x 122
Weight	kg	4	4.1
Operating temperature/humidity	°C / RH	5-52 / 10-80	5-52 / 10-80
Operating range - Cooling coil "Air on" temp	°C	15°CWB÷24°CWB	15°CWB÷24°CWB
Operating range - Heating coil "Air on" temp	°C	12°CDB÷28°CDB	12°CDB÷28°CDB
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50
Integrated components		- TC1 sensor(φ4) x1 ; 7.500 mm - TC2/TCJ sensor(φ6) x2 ; 7.500 mm - TA/TF sensor(Resin) x1 ; 7.500 mm	

DX KIT Physical data

DX valve kit		RBM-A101UPVA-E	RBM-A201UPVA-E
Nominal capacity		8/10/12HP	14/16/18/20HP
Dimensions (HxWxD)	mm	360 x 209 x 80	
Weight	kg	2.3	2.4
Integrated components		- Holders and plates for sensors - Heat insulation	

ON YOUR OWN AS A FAMILY IN A GROUP ON



Take control of your comfort !

Toshiba Air Conditioning offers various control solutions to meet users' and designers' expectations. From local individual control and settings to computer-based TU2C link networks, all indoor units can be programmed and set to suit your operational needs. Remote control systems offer a wide range of features including schedule timers, diagnostic functions, power meters and input/output signals, to name just a few. Toshiba Air Conditioning's VRF units are compatible with industry standards and can be connected to all the main building management software systems in use. Toshiba TU2C link is a dedicated Central Control Network which can be used with VRF and light commercial units either directly or by means of a specially-designed network adapter.

CONTROLS

YOUR OWN AS A FAMILY IN A GROUP ON YOUR OWN

RAS
INDIVIDUAL REMOTE CONTROLLER

INFRARED CONTROL

Compatible with		Functions																				
		Plasma ion purifier / Ionizer	3D air flow	Silent outdoor unit	Fire place mode	On demand defrost	On touch my comfort	Comfort sleep	Preset	Hi power	Eco logic	Fix or Swing louvers	Powerfull fan speed	Floor warming	Quiet	Power select	8°c	Off timer	Weekly timer	Luminous buttons	Backlight display	Wired connectable
Daiseikai 10 Wood WH-UD01UE ***Included***		●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	
Daiseikai 10 White WH-UD02UE ***Included***		●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	
HAORI WH-UA01UE ***Included***		●	●	●	●	●				●	●	●	●		●	●	●	●		●	●	
SHORAI Edge Black WH-UA04UE ***Included***			●	●	●	●				●	●	●	●		●	●	●	●		●	●	
SHORAI Edge White WH-UA06UE (-E) WH-TA15PE (-ND) ***Included***	 -ND -E		●	●	●	●				●	●	●	●		●	●	●	●		●	●	
SEIYA WH-TG01NE ***Included***				●		●		●	●	●	●	●	●		●		●	●				●
SEIYA Classic WH-TG01NE ***Included***				●		●		●	●	●	●	●	●		●		●	●				●
Console WH-TA12LE ***Option***				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
IR for 4way cassette RBC-AX32UM(W)-E ***Option***								●	●	●	●	●	●		●	●	●	●				
Wired for : 4way cassette & Duct RB-RWS21-E ***Option***								●	●	●	●	●	●		●	●	●		●	●	●	●
Seiya RB-RXS33-E ***Option***				●	●	●		●	●	●	●	●	●		●	●	●	●	●	●	●	

WIRED CONTROL

Remote for multisplit cassette and duct

RB-RWS21E

- Large backlighted screen
- Multilanguage menu
- Integrated weekly timer
- Enables ambient temperature sensor
- Quik access to standard functions (mode, fan speed & set point)
- Wired connection

WIFI CONTROL

Toshiba Home AC Control
Toshiba Wi-Fi control solutions

Multiple units, one app
- 1 user can control up to 10 AC units
- 1 AC unit can be controlled by up to 5 users

Easy grouping
- Make control simple by grouping your AC units in up to 3 zones

Secure connections
- Password & login
- Child lock function

Compatible Products
- DAISEIKAI 10, HAORI, SHORAI EDGE, SEIYA, SEIYA Classic, Console.

Download YOUR APP
- Toshiba AC Control App for your Android and iOS smartphone from Google Play or the App Store

TOSHIBA

RAV/VRF

INDIVIDUAL REMOTE CONTROLLER

INFRARED REMOTE CONTROLLER

One remote compatible with every LC/VRF indoor units

Included with bi-flow console and LC/VRF high wall

- Easy to use remote controller with direct access to every function
- In addition of standard function, HI power, Quiet and Comfort sleep mode
- 2 steps timer mode

RBC-AX41U(W)-E

- Smart cassette panel corner receiver

RBC-AX33UYP-E

- 1 way cassette panel corner receiver (compatible with YHP 1-way cassette)

RBC-AXU33UP-E (White)
RBC-AXU33PB-E (Black)

- Standard cassette panel corner receiver

RBC-AXU31UMP-E (White)
RBC-AXU31UMPB-E (Black)

- Panel corner receiver (compatible with compact 4-Way cassette)

RBC-AX31UC-E

- Ceiling panel receiver

RBC-AXU31-E

- Stand alone receiver (compatible with all indoor units)

WIRED REMOTE CONTROLLER

One solution for every projects

RBC-AMSU52-E

The ultimate in local remote controller with built-in 7-Day timer, large screen and menu

Functions:
On/Off, operation mode, dual set point, fan speed, louvres, return back, energy savings, frost protection, auto summer/winter clock, soft cooling, leak detection, fault codes, unit setup and button restrictions

RBC-AMTU31-E

The standard remote to control an individual indoor unit or a group of 8 indoor units

Functions:
On/Off, operation mode, temperature setting, fan speed, louvres, fault codes, unit setup and button restrictions

RBC-ASCU11-E/TR

Back to basics with this new remote offering all the standard functionalities with compact dimensions and large screen.

Functions:
On/Off, operation mode, temperature setting, fan speed, louvres fault codes & unit setup.

RBC-AS41E

Simplified Control

WIRED REMOTE CONTROLLER WITH BLUETOOTH CAPABILITY

RBC-AWSU52-E

- Enjoy a greater control experience with the wired remote controller RBC-AWSU52-E that offers an optimised user interface and advanced installer-oriented functionalities.
- With Bluetooth connectivity, easily manage comfort through smartphones using the Wave Commu Control app.

Toshiba Home
AC CONTROL

DO YOU WANT A SMART SOLUTION TO GIVE YOUR FAMILY GREATER COMFORT WHILST EASILY MANAGING YOUR ENERGY SAVINGS?

MULTIPLE UNITS, ONE APP
- 1 user can **control up to 10 AC units**
- 1 AC unit can be controlled by up to 5 users

EASY GROUPING
- Make control simple by **grouping your AC units in up to 3 zones**

SECURE CONNECTIONS
- **Password & login**
- **Child lock function**

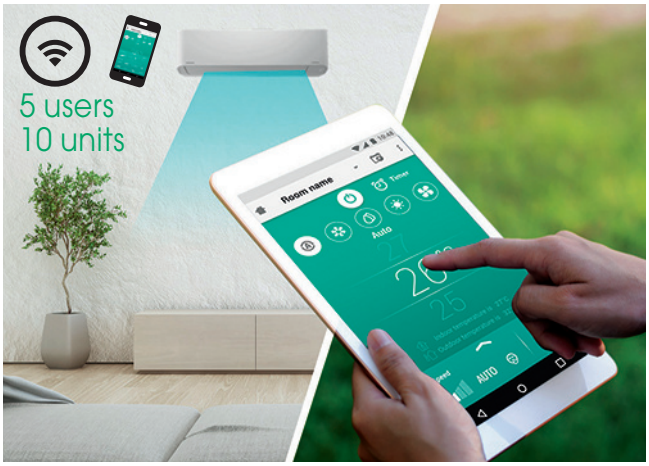
COMPATIBLE PRODUCTS
- DAISEIKAI 10, HAORI, SHORAI EDGE, SEIYA, SEIYA Classic, Console.

DOWNLOAD YOUR APP
- Toshiba AC Control App for your Android and iOS smartphone from Google Play or the App Store

Take complete control of your comfort with the Toshiba Home AC Control App. Simple to use on your smartphone or tablet, both at home and on the move. Fully compatible, the adapter can be used with all Toshiba High-walls and Console units.

Enhance your comfort, at home or away

Customise your comfort, finding the perfect cooling or heating level for your family at any time, no matter where you are. When at home, simply replace your infrared remote control with the intuitive smart app. This also gives you easy access to your air conditioner on the move, allowing you to adapt your comfort to your lifestyle!



Smart & efficient

- Want to go home and immediately enjoy an ideal temperature? Simply use the app to check the status, quickly and easily, adjust your comfort, no matter where you are.
- Match your AC schedule to your family's routine to optimise running time, and enjoy savings on your energy bill.

Modern app

- This user-friendly app is available in 5 languages, and boasts a host of intuitive features. With a different colour for each different mode, and the main functions accessible in just one touch.
- Toshiba Air Conditioning premium features enable you to enjoy all the benefits of your AC systems at home. Simply swipe up on the main app screen on your smartphone or tablet to access additional specific features.

FLOOR

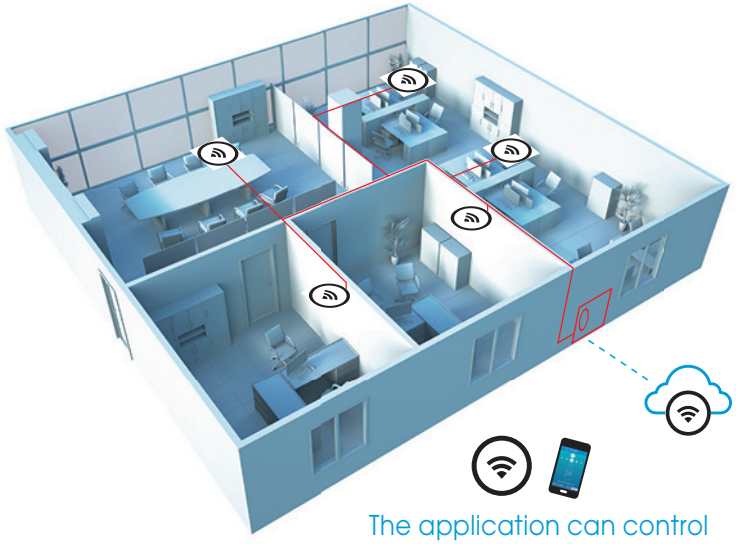
8°C	Holiday frost protection mode		Silent CDU to reduce the outdoor unit noise level
Hi POWER	Boost mode	PURE	Plasma & ionizer filters
	Fireplace mode	FLOOR	Floor function for Consoles

TOSHIBA

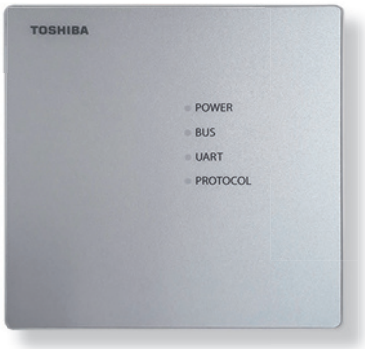
Toshiba
HOME AC CONTROL

DO YOU WANT FULL CONTROL OF YOUR AC SYSTEM IN ONE TOUCH, WHEREVER YOU ARE?

Toshiba Home AC Control is now compatible with light commercial and VRF indoor units.
Get access to main control features via an Android or iOS smartphone.



The application can control up to 16 indoor units



BMS-IWF0010UCP-E,
1 module is needed per indoor unit

Solutions wherever you are

Toshiba Air Conditioning technology you can trust, fully committed to providing creative building management solutions, designed to enhance your sustainable lifestyle.

Make it your own

1 unit is manageable by a maximum of 5 users. For enhanced security, a user name and password is needed to log in.

Everything you need in one app

All of the indoor unit's functions can be accessed in an instant, allowing you to enjoy the full advantages of the AC system at work. The entire system is simple to manage, even remotely.

QUICK AND EASY

- Simplified installation with **direct connection to the remote controller port (AB port).**

DESIGNED FOR YOU

- **Up to 5 users** to control one indoor unit.
- **Login and password** required for high access security level.

EVERYTHING UNDER CONTROL

- **Optimize the management** of spaces like offices or meeting rooms without compromising comfort.

COMPATIBLE PRODUCTS

- RAV light commercial solutions, MiNi-SMMS, MiNi SMMS-e, SMMS-u, SHRM-e & SHRM Advance.

DOWNLOAD YOUR APP

- Toshiba home AC Control App for your Android and iOS smartphone from Google Play or the App Store.

A2W/RAV/VRF
CENTRAL CONTROL

UP TO 64 INDOOR UNITS

64 central controller

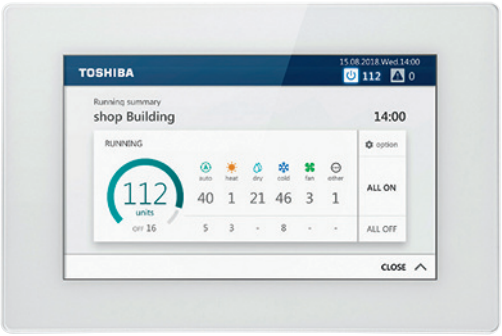
TCB-SC640U-E

64 central controller is now able to control Estia R32 products.

- Full control of max 64 LC &VRF indoor units + Estia R32 air to water systems
- Individual indoor unit, group (up to 10 groups) or full installation control
- Simple and intuitive interface with user friendly menus
- Large bvacklight display
- Touch-sensitive keys
- Standard features (On/Off, mode, temperature setting, fan speed, louvers) + permit/prohibit functions + Estia R32 functions accessibility
- Embedded digital outputs
- Compatible with TU2C Link

UP TO 256 INDOOR UNITS

Touch Screen Smart Manager



BMS-CT2560U-E/TR

- Full control of max 256 indoor units
- 7" color touchscreen
- Nice looking menu with intuitive navigation to enhance control experience
- Advanced scheduling of indoor and outdoor units to maximize comfort & save energy
- Energy monitoring with or without power meter thanks to Data Analyser software
- Webserver to keep control in any circumstances
- Embedded input and output to enlarge control or interact with other equipment
- Dedicated fault code menu with Email transfer capability
- Compatible with TU2C link

DESIGN AWARD 2019

RAC interface - specifications

TCB-SRRL011UUP-E

- Control RAS systems using centralyzed remote controller.
- Advanced RAS features accessible using BMS-CT2560U-E/TR Touch Screen or TCB-IFMB1280U-E/TR Modbus gateway.

Model name			TCB-SSRL011UUP-E
Dimensions	WxLxH	mm	28x120x120
Max connection	Interface to RAS		1 by 1 connection
	Interface to BMS		Max 256 interfaces
Wiring	Interface to RAS		UART port
	Interface to BMS		TU2C link Uh or TCC Link U3U4
Net weight		kg	0.14
Operation temperature		°C	0 to 50°C
Power input			From indoor unit through UART port
Power consumption		W	0.22
Body material			ABS (UL94-BH complaint)

UP TO 512 INDOOR UNITS

Centralized Touch Screen Controller

BMS-CT5121E

- Full control of max 512 indoor units: on/off, mode, set point, fan speed, louver management and prohibit mode
- 12.1 large screens
- Quick and accurate view of indoor unit status through dedicated logo
- Floor, building, tenant and system overview with possibility to integrate plan
- Built in web server for control through web browser
- Weekly timer with up to 20 steps per day
- Energy monitoring with graph, to view operating hours, set point, inside/outside temperature, and power consumption
- Email alert in case of troubles

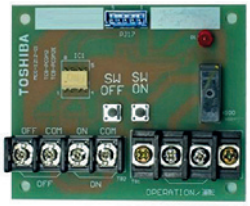
TOSHIBA

Additionnal PCB

DEDICATED TO OUTDOOR UNITS

Outdoor units advanced functions

POWER PEAK CUT CONTROL BOARD SENSOR



TCB-PCDM4E

- Limits capacity of the VRF outdoor unit at 85%, 80%, 75% and 60% load or stop it.
- Compatible with all VRF outdoor units.

CONTROL OPERATION BOARD SENSOR

TCB-PCIN4E

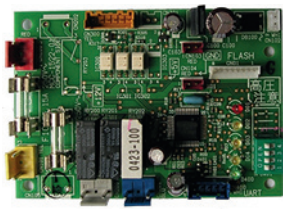
- Error/Individual compressor operation output control board.
- Compatible with all VRF outdoor units.

EXTERNAL MASTER ON/OFF CONTROL SENSOR

TCB-PCMO4E

- External master On/Off control board, night mode and mode priority selection.
- Compatible with all VRF outdoor units.

APPLICATION CONTROL SENSOR KIT



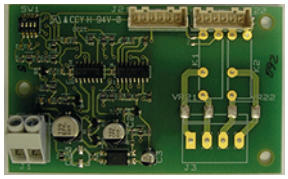
TCB-PCOS1E2

- Enables night operation control, demand control and operation monitoring.
- Compatible with DI.

DEDICATED FOR INDOOR UNITS

Indoor units advanced functions

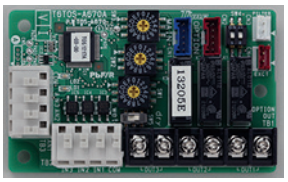
WINDOWS SWITCH SENSOR



TCB-IFCB5PE

- Ensures the indoor unit not operate when outside window is open or for door entry systems.
- RAS, RAV and VRF indoor units.

OPTIONAL CONNECTION KIT



TCB-PCUC2E

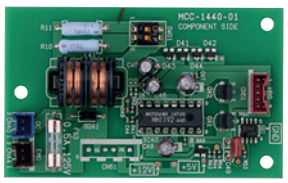
- Extends control capability of light commercial and VRF indoor units with third party equipment.
- Compatible with RAV and VRF indoor units.

MULTI-TENANT

TCB-PSMT1E

- For multi tenant application, this PCB maintains low voltage power supply during tenant absence when the main power supply for the FCU is shut down.
- Compatible with VRF indoor units.

TCC LINK INTERFACE



TCB-PCNT30TLE2

- Allows DI/SDI indoor units & AHU DX kits to be connected to TCC link network.

RAV/VRF/ESTIA GATEWAY

MODBUS® RTU

Reliable and easy to use

TCB-IFMB1280U-E/TR

Directly connect up to 128 Toshiba Air Conditioning indoor units to a Modbus® Building Management System.
Maximum 15 Modbus I/F can be connected per Modbus Master Device. Compatible with TCC Link & TU2C Link protocols.

Individual gateway

BMS-IFMB0UCW- E (RAV/VRF)
BMS-IFMB0UEW- E (Estia)

Connect easily one indoor unit or a group of 8 indoor units to a Modbus Building Management Control System.

LONWORKS®

12 input network variables

TCB-IFLN642TLE

Directly connect up to 64 Toshiba Air Conditioning indoor units and up to 16 outdoor units to a Lonworks® Building.
Management Control System.
Compatible with RBC-WP1-PE Lonworks Control software.

KNX®

ETS configuration

TO-AC- KNX-64 (RAV/VRF - TCC Link)
TO-AC- KNX- 16 (RAV/VRF - TCC Link)
BMS-IFKX0UCW-E (RAV/VRF)
BMS-IFKX0UEW-E (Estia)

Directly connect up to 64, 16 or only one Toshiba Air Conditioning indoor units to a KNX® Building Management Control System.

BACNET® IP

Standard gateway

BMS-IFBN1281U-E/TR

Directly connect up to 128 Toshiba Air Conditioning indoor units to a BACnet® Building management Control System.

Network adaptor TCB-PCNT30TLE2 required for connection of DI/SDI Indoor Units (1 per Master Indoor Unit)

RAV/VRF INTERFACES

ANALOGUE INTERFACE

Analogue 0/10V control

TCB-IFCB640TLE

The Analogue Relay Interface is a device that can be connected directly to the TCC-Link Central Control network to provide Analogue & Digital Inputs & Outputs for control over Toshiba Air Conditioner products from non-Toshiba control systems.

GENERAL PURPOSE RELAY INTERFACE

Equipment control

TCB-IFCG1TLE

The General Purpose Relay Interface is a device that can be connected directly to the TCC-Link Central Control Network and addressed on the TCC-Link Network in order to provide control of non-Toshiba equipment from a Toshiba control system, and control of the Toshiba Air Conditioner from Digital & Analogue Inputs.

GSM INTERFACE

Control any time anywhere...

TCB-IFGSM1E

The TCB-IFGSM1E Interface is a device that allows control of the Toshiba Air Conditioning Equipment from a remote location using standard GSM (Global system for Mobile communications) Mobile phone SMS text messages.

TOSHIBA

VRF CONTROL

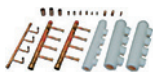
Model number	Reference	TCC-link	TU2C-Link	Description	Used with
BMS-CT1256U-E	7" Touch Screen Controller	●	●	Enables full control of up to 256 indoor units	
BMS-CT5121E	12" Touch Screen Controller	●		Enables full control of up to 512 indoor units with electric billing	
BMS-IFBN1281U-E/TR	BacNet Interface	●	●	BACnet Interface for Estia R32, LC & VRF	
BMS-IFDD03E	Digital I/O relay interface	●		Digital I/O relay interface	Touch screen controller, Compliant manager, Web based controller, Smart Manager
BMS-IFKX0UCW-E	1:1 KNX interface		●	Connect RAV/VRF system to a KNX Building Management System	Remote Control wiring
BMS-IFKX0UEW-E	1:1 KNX interface		●	Connect Estia R32 system to a KNX Building Management System	
BMS-IFLSV4E	TCS-Net Relay Interface	●		Relay for integration to TCS-Net	Bacnet gateway, Touch-screens & Web based controller
BMS-IFMB0UCW-E	1:1 Modbus interface		●	Connect LC & VRF systems to a Modbus Building Management System	Remote Control wiring
BMS-IFMB0UEW-E	1:1 Modbus interface		●	Connect Estia R32 system to a Modbus Building Management System	
BMS-IFWH5E	Energy monitoring relay interface	●		Energy monitoring relay interface	Touch screen controller, Compliant manager, Web based controller, Smart Manager
NRB-1HE	Remote ON/OFF adapter	●		Allows ON/OFF control	All Air-to-air heat exchangers
NRC-01HE	Wired Remote Controller	●		Air-to-air heat exchanger remote controller, including with DX coil and humidifiers models	Air-to-air heat exchangers and Air-to-air heat exchangers with DX coil
RBC-AMSU52-E	Design remote Controller with schedule timer	●	●	Multi-Language LCD display, a built-in 7-Day timer, Energy Saving options and return back function,Dual set points,and Soft cooling. Langagues : English, Italian, Polish, Greek, Russian, Turkish, Spanish, Portuguese, French, Dutch, German	
RBC-AWSU52-E	Design remote Controller with schedule timer	●	●		Bluetooth connectivity for comfort control trough smartphone app
RBC-AMTU31-E	Wired Remote Controller	●	●	Main wired remote controller	
RBC-ASC11U-E/TR	Wired Remote Controller	●	●	Main wired remote controller	
RBC-AX33UYP-E	Infra-red Remote Kit	●	●	Wireless remote controller	Compact 1-way cassettes (YHP series)
RBC-AXU31C-E	Infra-red Remote Kit	●	●	Wireless remote controller	All ceiling units and one-way cassettes (SH series)
RBC-AXU31-E	Infra-red Remote Kit	●	●	Wireless remote controller	All units
RBC-AXU33UP-E (White)	Wireless remote unit kit	●	●	Wireless remote controller	Standard 4-way cassettes & RBC-U33P-E panel
RBC-AXU33UPB-E (Black)	Wireless remote unit kit	●	●	Wireless remote controller	Standard 4-way cassettes & RBC-U33PB-E panel
RBC-AXU31UMP-E (White)	Wireless remote unit kit	●	●	Wireless remote controller	Compact 4-way cassettes RBC-UM21P-E panel
RBC-AXU31UMPB-E (Black)	Wireless remote unit kit	●	●	Wireless remote controller	Compact 4-way cassettes & RBC-UM21PB-E panel
TCB-IFCB-4E2	Remote location On/Off Control Box	●		Enables remote location On/Off control	
TCB-IFCB5-PE	Window Switch & Remote on/off	●		Ensure the indoor unit not operate when outside window is open or for Door Entry systems	
TCB-IFCB640TLE	Analog interface	●		Control & monitoring up to 64 IU on TCC-link	Combination with TCB-IFCG1TLE
TCB-IFCG1TLE	General purpose interface	●		Enables control of A/C by the DI/DO and AI/AO	Combination with TCB-IFCB640TLE
TCB-IFLN642TLE	LN interface	●		Allows control of 64 indoor units from a Lonworks based BMS	
TCB-IFMB1280U-E/TR	Modbus interface box	●	●	Connect LC & VRF systems to a Modbus Building Management System	
TCB-KBCN32VEE	Connectors	●		For CN32	
TCB-KBCN60OPE	Connectors	●		For CN60	
TCB-KBCN61HAE	Connectors	●		For CN61	
TCB-KBCN70OAE	Connectors	●		For CN70	
TCB-KBCN73DEE	Connectors	●		For CN73	
TCB-KBCN80EXE	Connectors	●		For CN80	
TCB-PCDM4E	Application Control PC Board	●		Power Peak Cut Control	
TCB-PCIN4E	Application Control PC Board	●		Error/Individual compressor Operation Output Control Board	
TCB-PCMO4E	Application Control PC Board	●		External Master ON/OFF Control Board	
TCB-PCUC2E	Optionnal connection kit	●			
TCB-PSMT1E	Optional connector kit	●		Multi-Tenant Kit for VRF Systems	SMMS-e, SHRM-e and Mini-SMMS Indoor Units (refer to I/M for more details of connectable Indoor units)
TCB-PX100-PE	Enclosure for the Window Switch / Remote On/Off	●		For use when the Window Switch / Remote On/Off Accessory cannot fit within the AC unit, eg. High Walls	For use with TCB-IFCB5-PE
TCB-PX30MUE	E-Box Extension Enclosure	●		For 1:1 Model connection I/F and Window Switch / Remote On/Off PCB	4-Way cassettes only & TCB-IFCB5-PE
TCB-PX40MUE	E-Box Extension Enclosure	●		For 1:1 Model connection I/F and Window Switch / Remote On/Off PCB	Compact 4-Way Cassettes only & TCB-IFCB5-PE
TCB-SC640U-E	Centralized remote controlle	●	●	Up to 64 indoor units	
TCB-SSRL011UP-E	RAC Interface			Connect RAS products on centralyzed remote controler and BMS	Not compatible with IMS compact cassette and IMS duct
TCB-TC41U-E	Remote temperature sensor	●	●	Remote temperature sensor for cassette & duct	
BMS-IWF0010UCP-E	LC/VRF Wifi control	●	●	LC/VRF Wifi interface	Q4 2023 availability / Please download Toshiba Home AC control app

LIGHT COMMERCIAL ACCESSORIES

Indoor unit type	Parts name	Model name	Comply with	Notes	Remarks
Smart 4-way Cassette	Standard panel	RBC-U41PG(W)-E	RAV-HM***UT-E	Required accessory	
	Motion Sensor	TCB-SIR41U-E			
	Fresh air and filter chamber	TCB-GFC1603UE		For fresh air inlet box	
	Fresh air inlet box	TCB-GB1602UE		For fresh air intake by using the knockout hole of Fresh air and filter chamber. (dia.=100 mm)	Use with TCB-GFC1603UE
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
	Spacer for height adjustment	TCB-SP1603UE		height 50 mm	
	Air discharge direction kit	TCB-BC1603UE		Air direction change by cutting off air discharge port (3 pcs.)	
Standard 4-way Cassette	Panel	RBC-U33P-E	RAV-HM***UTP-E	White version	
		RBC-U33PB-E		Black version	
	Motion Sensor	TCB-SIR33UP-E			
	Air purifier kit	TCB-EAPC1UHP-E		Ionizer + dust filter + dust sensor + remote	
		TCB-EABC1UHP-E		Ionizer + dust filter + remote	
	PM2.5 filters	TCB-PLFC1UPE-120		Before pre filter	
		TCB-PLFC2UPE-80		After pre filter	
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
Compact 4-way cassette	Panel	RBC-UM21P-E	RAV-HM***MUTP-E	White version	
		RBC-UM21PB-E		Black version	
	Motion Sensor	TCB-SIR41UM-E			Wireless remote controller kit (RBC-AX32UM(W)-E) and Occupancy sensor cannot be used on the same indoor unit
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
Compact 1-way Cassette	Panel	RBC-UY32P-E	RAV-HM***U1TP-E		
	Air purifier kit	TCB-EAPC1UYHP-E			
	Motion Sensor	TCB-SIR41UYP-E			
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
Slim duct	Auxiliary fresh air flange	TCB-FF101URE2	RAV-HM***SDTY-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
Standard Duct	Spigot shaped flange	TCB-SF56C6BE	RAV-HM401BTP-E, RAV-HM456BTP-E & RAV-HM561BTP-E		
		TCB-SF80C6BE	RAV-HM801BTP-E		
		TCB-SF160C6BE	RAV-HM1**1BTP-E		
	Auxiliary fresh air flange	TCB-FF101US-E	RAV-HM***BTP-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
High-Static Duct	Long life filter kit	TCB-LK2801DP-E	RAV-GM***DTP-E		
	Drain Pump kit	TCB-DP40DPE			
	Auxiliary fresh air flange	TCB-FF101US-E		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
Ceiling	Drain pump kit	TCB-DP31CE	RAV-HM***1CTP-E	Lift up to 600 mm	Use TCB-KP13, 23CE
	Elbow Piping Kit	TCB-KP14CPE	RAV-HM401CTP & RAV-HM561CTP-E	Needed when drain pump kit is used	
		TCB-KP24CPE	RAV-HM801CTP-E & RAV-HM1**1CTP-E		
	Auxiliary fresh air flange	TCB-FF101URE2	RAV-HM***1CTP-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
High-Wall	Ultra Pure filter	818F0050	RAV-HM***KRTP-E	2 filters per high wall	
Floor standing	Remote controller cover kit	TCB-CKC1F-E	RAV-HM***FT-E		Needed when remote is isntalled inside the floor standing

Code	Description	Capacities
RBC-TWP30E2	Twin-branch kit for DI & SDI	1.5 HP + 1.5 HP
		2 HP + 2 HP
RBC-TWP50E2	Twin-branch kit for DI & SDI	3 HP + 3 HP
RBC-TWP101E	Twin-branch kit for BigDI	4 HP + 4 HP
		5 HP + 5 HP
RBC-TRP100E	Triple-branch kit for DI & Big DI	2 HP + 2 HP + 2 HP
		3 HP + 3 HP + 3 HP
RBC-DTWP101E	Double-twin branch kit fir Big DI	2 HP + 2 HP + 2 HP + 2HP
		3 HP + 3 HP + 3 HP + 3HP

BUSINESS REFRIGERANT ACCESSORIES

Model Name			Specification	Picture	Total capacity codes
Compatible Mini SMMS, Mini SMMS-e & SMMS-u	Compatible SHRM-e	Comaptible SHRM Advance			
RBM-BY55E	RBM-BY55FE		Branching joint		under 6.4hp
RBM-BY105E	RBM-BY105FE				from 6.4 to 14.2hp
RBM-BY205E	RBM-BY205FE				from 14.2 to 25.2hp
RBM-BY305E	RBM-BY305FE				from 25.2 to 61.2hp
RBM-BY405E					61.2hp or more
RBM-HY1043E	RBM-HY1043FE		Headers branching four-way		< 14.2 HP
RBM-HY2043E	RBM-HY2043FE				< 14.2 - 25.2 HP
RBM-HY1083E	RBM-HY1083FE		Headers branching eight-way		< 14.2 HP
RBM-HY2083E	RBM-HY2083FE				< 14.2 - 25.2 HP
RBM-BT14E	RBM-BT14FE		Joints for connection of outdoor units		< 26 HP system capacity
RBM-BT24E	RBM-BT24FE				>26 <46 HP system capacity
RBM-BT34E					>44 HP system capacity
	RBM-Y1123FE		Flow selector unit		< 4.0 HP indoor units
	RBM-Y1803FE				< 4.0 - 6.4 HP indoor units
	RBM-Y2803FE				< 6.4 - 10.0 HP indoor units
	RBM-Y1124FE	RBM-Y1121FUPE*	Flow selector unit long piping		< 4.0 HP indoor units
	RBM-Y1804FE	RBM-Y1801FUPE*			< 4.0 - 6.4 HP indoor units
	RBM-Y2804FE	RBM-Y2801FUPE*			< 6.4 - 10.0 HP indoor units
	RBM-Y1801F4PE	RBM-Y1801FU4PE*	Multi-port flow selector unit		< 6.4 HP indoor units x 4 port
	RBM-Y1801F6PE				< 6.4 HP indoor units x 6 port
		RBM-Y1801FU8PE*			< 6.4 HP indoor units x 8 port
		RBM-Y1801FU12PE*			< 6.4 HP indoor units x 12 port
RBM-SV1121HUP-E		RBM-SV1121HUPE**	Shut off valve unit		< 4.0 HP indoor units
RBM-SV1801HUP-E		RBM-SV1801HUPE**			< 4.0 - 6.4 HP indoor units

* Embedded shut off valve. ** 8, 10 & 12HP only.

TOSHIBA

VRF ACCESSORIES

	Parts name	Model name	Comply with	Notes	Remarks
SMMS-u and SHRM Advance	Fin guard kit	RBM-FGUS1P-E	SMMS-u & SHRM Advance sizes 8 to 12		
		RBM-FGUM1P-E	SMMS-u & SHRM Advance sizes 14 to 22		
Smart 4-way Cassette	Standard panel	RBC-U41PG(W)-E	MMU-UP***1H-E	Required accessory	
	Fresh air and filter chamber	TCB-GFC1603UE		For fresh air inlet box	
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
	Spacer for height adjustment	TCB-SP1603UE		height 50 mm	
	Air discharge direction kit	TCB-BC1603UE		Air direction change by cutting off air discharge port (3 pcs.)	
	Occupancy sensor	TCB-SIR41U-E		Can not be used with IR kit at the same time	
Standard 4-way Cassette	Panel	RBC-U33P-E	MMU-UP***1HP-E	White version	
		RBC-U33PB-E		Black version	
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
	Air purifier kit	TCB-EAPC1UHP-E		Ionizer + dust filter + dust sensor + remote	
		TCB-EABC1UHP-E		Ionizer + dust filter + remote	
	PM2.5 filters	TCB-PLFC1UPE-120		Before pre filter	
		TCB-PLFC2UPE-80		After pre filter	
	Occupancy sensor Kit	TCB-SIR33UP-E		Can not be used with IR kit at the same time	
Compact 4-way Cassette	Panel	RBC-UM21P-E	MMU-UP***1MHP-E	White version	
		RBC-UM21PB-E		Black version	
	Auxiliary fresh air flange	TCB-FF101URE2		For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
	Occupancy Sensor	TCB-SIR41UMP-E		Can not be used with IR kit at the same time	
Compact 1-way Cassette	Standard panel	RBC-UY32P-E	MMU-UP0031YHP-E to MMU-UP0121YHP-E	Required accessory	
		RBC-UY42P-E	MMU-UP0151YHP-E to MMU-UP0271YHP-E		
	Auxiliary fresh air flange	TCB-FF101URE2	MMU-UP***1YHP-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
	Air purifier kit	TCB-EAPC1UYHP-E		Set of Plasma Air Purifier, Dust sensor, Air quality indicator and Wireless receiver	
	Occupancy sensor	TCB-SIR41UYP-E		Can not be used with IR kit at the same time	
2-way Cassette	Standard panel	RBC-UW283PG(W)-E	MMU-UP0071WH-E to MMU-UP0151WH-E	Required accessory	
		RBC-UW803PG(W)-E	MMU-UP0181WH-E to MMU-UP0301WH-E		
		RBC-UW1403PG(W)-E	MMU-UP0361WH-E to MMU-UP0561WH-E		
	Auxiliary fresh air flange	TCB-FF151US-E	MMU-UP***1WH-E	For easy fresh air intake by using the knockout hole of indoor unit	
	Filter chamber	TCB-FC283UW-E	MMU-UP0071WH-E to MMU-UP0151WH-E		
		TCB-FC803UW-E	MMU-UP0181WH-E to MMU-UP0301WH-E		
		TCB-FC1403UW-E	MMU-UP0361WH-E to MMU-UP0561WH-E		
	Super Long life filter	TCB-LF283UW-E	MMU-UP0071WH-E to MMU-UP0151WH-E	For use with filter chamber	Use with TCB-FC283UW-E
		TCB-LF803UW-E	MMU-UP0181WH-E to MMU-UP0301WH-E		Use with TCB-FC803UW-E
		TCB-LF1403UW-E	MMU-UP0361WH-E to MMU-UP0561WH-E		Use with TCB-LF1403UW-E
Slim Duct	3DW Diffusor	TCB-TDL0141SDY-E	MMD-UP0031SPHY-E to MMD-UP0121SPHY-E	Horizontal, veritcal motirized louver for slim duct	Horizontal louver control using RBC-ASCU11-E & RBC-AMTU31-E Horizontal & veritcla louver control using RBC-AMSU52-E & RBC-AWSU52-E
		TCB-TDL0181SDY-E	MMD-UP0151SPHY-E to MMD-UP0181SPHY-E		
		TCB-TDL0271SDY-E	MMD-UP0201SPHY-E to MMD-UP0271SPHY-E		
	Auxiliary fresh air flange	TCB-FF101URE2	MMD-UP***1SPHY-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
Standard Duct	Spigot shaped flange	TCB-SF56C6BE	MMD-UP0071BHP-E to MMD-UP0181BHP-E		
		TCB-SF80C6BE	MMD-UP0241BHP-E to MMD-UP0301BHP-E		
		TCB-SF160C6BE	MMD-UP0361BHP-E to MMD-UP0561BHP-E		
	Auxiliary fresh air flange	TCB-FF151US-E	MMD-UP***1BHP-E		
High-Static Pressure Duct	Long life filter kit	TCB-LK801D-E	MMD-UP0181HP-E to MMD-UP0271HP-E		
		TCB-LK1401D-E	MMD-UP0361HP-E to MMD-UP0561HP-E		
		TCB-LK2801DP-E	MMD-UP0721/0961HP-E		
	Spigot shaped flange	TCB-SF56C6BPE	MMD-UP0181HP-E to MMD-UP0271HP-E		
		TCB-SF80C6BE	MMD-UP0361HP-E to MMD-UP0561HP-E		
		TCB-SF160C6BE	MMD-UP0721HP-E to MMD-UP0961HP-E		
	Auxiliary fresh air flange	TCB-FF151US-E	MMD-UP***1HP-E		
	Drain Pump kit	TCB-DP40DPE	MMD-UP***1HP-E		
Ceiling	Drain pump kit	TCB-DP31CE	MMC-UP***1HP-E	Lift up to 600 mm	Use TCB-KP13, 23CE
	Elbow Piping kit	TCB-KP14CPE	MMC-UP0151/0181HP-E		
		TCB-KP24CPE	MMC-UP0241HP-E to MMC-UP561HP-E		
	Auxiliary fresh air flange	TCB-FF101URE2	MMC-UP***1HP-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)	
High-Wall	Ultra pure filter	818F0050	MMK-UP***1HP(L)-E	1 pack includes 2 filters	
	PMV Kit	RBM-PMV0361UP-E	All high wall models	For FCU capacity 0.3-1.3HP	Suitable for high wall 1 serie with or without embedded PMV Mandatory for MMK-UP**1HPL-E
		RBM-PMV0901UP-E		For FCU capacity 1.7-2.5HP	
	Haroi optionnal fabrics	RB-I4103-E	MMK-UP***1DHPL-E	Bluish Gray	
		RB-I4104-E		Gray Beige	
		RB-I4105-E		Dark Brown	
		RB-I4106-E		Emerald Blue	
Fresh air Duct	High-efficiency filter 65	TCB-UFM0481D-E	MMD-UP0481HF-E	Dust collecting effect: 65% (NBS Colorimetric method)	Use with TCB-FC0481DF-E
		TCB-UFM1281D-E	MMD-UP0721HF-E1 to MMD-UP1281HF-E1		Use with TCB-FC1281DF-E
	High-efficiency filter 90	TCB-UFH0481D-E	MMD-UP0481HF-E	Dust collecting effect: 90% (NBS Colorimetric method)	Use with TCB-FC0481DF-E
		TCB-UFH1281D-E	MMD-UP0721HF-E1 to MMD-UP1281HF-E1		Use with TCB-FC1281DF-E
	Long life prefilter	TCK-PF1281DF-E	MMD-UP0721HF-E1 to MMD-UP1281HF-E1		Use with TCB-FC1281DF-E
	Filter chamber	TCB-FC0481DF-E	MMD-UP0481HF-E	For high efficiency filter or long life prefilter	
		TCB-FC1281DF-E	MMD-UP0721HF-E1 to MMD-UP1281HF-E1		
	Drain pump kit	TCB-DP40DFP-E	All models	Lift up to 330 mm	
Air to Air heat exchanger	ePM1 55% high performance filter	TCB-PSFC551VSY-E	VN-U00151SY-E / VN-U00251SY-E		
		TCB-PSFC551VMY-E	VN-U00351SY-E		
		TCB-PSFC551VLY-E	VN-U00501SY-E / VN-U00651SY-E		
		TCB-PSFC551VXY-E	VN-U00801SY-E / VN-U01001SY-E		
Air-to-air heat exchanger with DX coil	Drain pump kit	TCB-DP31HEXE	MMD-VN502/802/1002HEXE & MMD-VNK502/802/1002HEXE	Lift up to 330 mm	
DX kit	Optionnal sensor	TCB-IFDES1001P-E	TCB-IFDM*01UP-E	10 m lead wire	

Air filtration solutions

For standard 4-way cassette

TCB-EAPC1UHP-E

Air Purifier kit with Ionizer, dust indicator, IR and adapted remote. Can be merged with PM2.5 filter.

For High Wall

818F0050

Ultra pure filter set.

For 1-way cassette

TCB-EAPC1UYHP-E

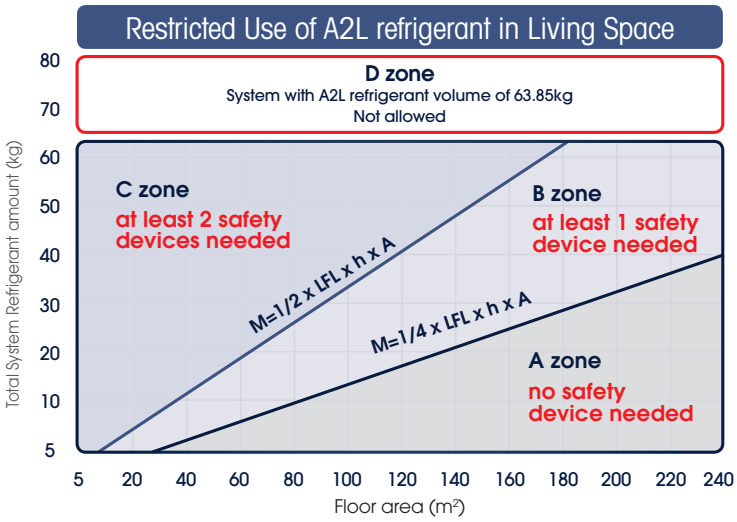
Air purifier kit with plasma, dust indicator, IR and adapted remote.

R32 SAFETY REGULATION

R32 CHALLENGING BY NATURE

Moving to R32 is a great opportunity for the environement. Nevertheless as classified A2L/mid flammable, precautions need to be taken. Toshiba Air Conditioning has thought of everything for your peace of mind.

Following IEC 60335-2-40 edition 6.0, depending upon the room surface and the total refrigerant amount, system needs to be equipped with safety devices.



R32 LFL = 0.307 kg/m3 - H = indoor unit position 2.2m - A= room surface in square metre
Please refer to IM and Toshiba Air Conditioning Selection Software for toxicity

Depend on zone in above graph, safety device is required with A2L refrigerant:

A zone (Indoor unit in a large room): Installation is possible w/o safety devices.

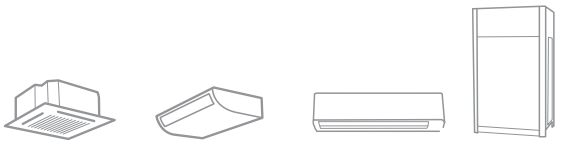
B zone (Indoor unit in a medium room): Require one safety devices.

C zone (Indoor unit in a small room): Require two safety devices.

D zone (Installation not allowed): Refrigerant amount with 63.85kg or less.

CASE STUDY

Scenario



16HP SHRM Advance has 6 IDUs as listed in the table below.

- Each unit is determined to be installed into separate room.
- This building does not have underground floor.
- Total refrigerant amount is 20kg.

Process (to be applied to each indoor units)

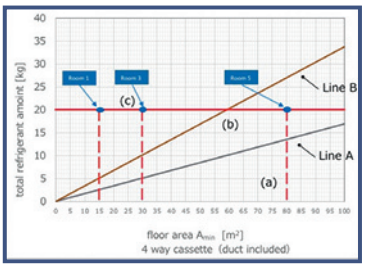
Step 1: Identify the indoor unit type and refe to the related graph

Step 2: Position the system refrigerant amount and the room surface on the graph

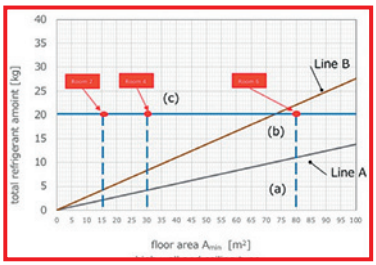
Step 3: Look at the zone a, b, c or d

Step 4: Select the proper safety solution

Duct and cassette graph



Ceiling and high wall graph



System summary

Room number	Floor area	Indoor unit type	Indoor unit size	Zone	Additionalsafety measures
1	15 m²	4-way cassette	1HP	c	2 safeties measures
2	15 m²	High wall	1HP	c	2 safeties measures
3	30 m²	4-way cassette	2HP	c	2 safeties measures
4	30 m²	Ceiling	2HP	c	2 safeties measures
5	80 m²	4-way cassette	5HP	b	1 safety measure
6	80 m²	Ceiling	5HP	b	1 safety measure

Rely on Toshiba Air Conditioning selection software to comply with IEC 60335-2-40 ed6 regulation.

R32 SAFETY REGULATION

SOLUTIONS MANAGE SAFETY REQUIREMENTS

TCB-LD1UPE
R32 leak detector
(audible and visual alarm)

RBM-Y_1FUxPE
Shut-off valve included into
Flow selector unit for 3-pipe
SHRM Advance operations

RBM-SV_1HUPE
Shut-off valve for 2 pipe SHRM
Advance & MiNi-SMMS operations

TCB-BT1UPE
Battery kit to secure
Shut-off valve operations
in case of power failure
(required by IEC603353-2-40 standard)

Toshiba Air Conditioning safety concept certified by 3rd party certification institution following IEC60335-2-40 (Ed.6) regulation.

MEET BUILDINGS CONSTRAINTS

Select the appropriate answer (applicable for SHRM Advance and MiNi-SMMS)

For buildings with large spaces

✓ Only one flow selector or shut off valve unit is needed

In case of leak detection:

- Audible and visible alarm on concerned leak detector
- Refrigerant Pump down
- Fault code on remotes

SYSTEM IS TURNED OFF IN CASE OF LEAK DETECTION

For buildings with many individual rooms

✓ Multiple flow selector units or shut off valves are needed

In case of leak detection:

- Audible and visible alarm on concerned leak detector
- Fault code on remotes
- Individual shut-off valve

SYSTEM CONTINUES TO RUN,
ONLY CONCERNED AREA IS TURNED OFF

Other alternative

✓ For 2-pipe operation without shut-off valves

In case of leak detection:

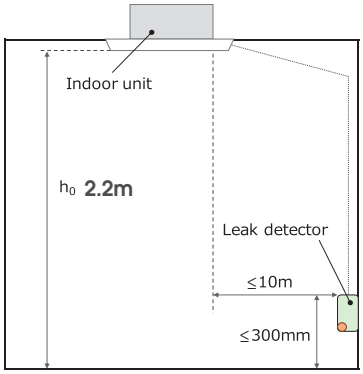
- Audible and visible alarm on concerned leak detector
- System operation stop or fan only
- External output enabled (fan,…)

SYSTEM IS TURNED OFF IN CASE OF LEAK DETECTION

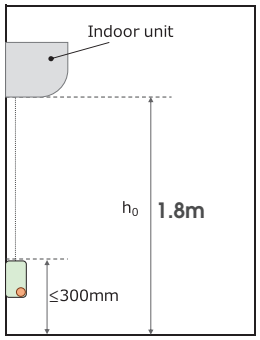
Contact Toshiba Air Conditioning for more details.

Leak detector installation rules

Duct and cassette



High wall and ceiling

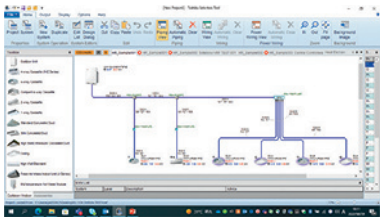


For more explanation, please refer to SHRM Advance & Mini SMMS installation manuals.

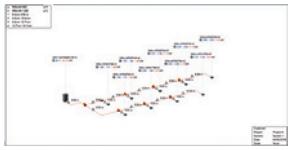
SELECTION TOOL

Toshiba Air Conditioning selection software has been fully designed with a user-friendly interface allowing novice and expert users alike to create simple, yet detailed VRF system schematics. It is highly versatile to tailor the level of details to customers expectations. In line with SHRM Advance and MiNi SMMS R32 safety regulation compliancy, the software identify the rooms to be equipped with safety devices. Final detailed reports can then be produced and sent to customers in a PDF format that summaries all the information needed to ensure proper installation, good system operation and customer satisfaction.

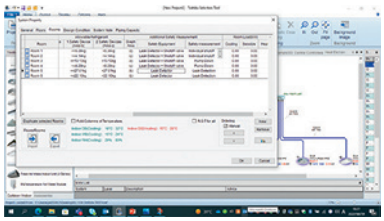
Software main screen



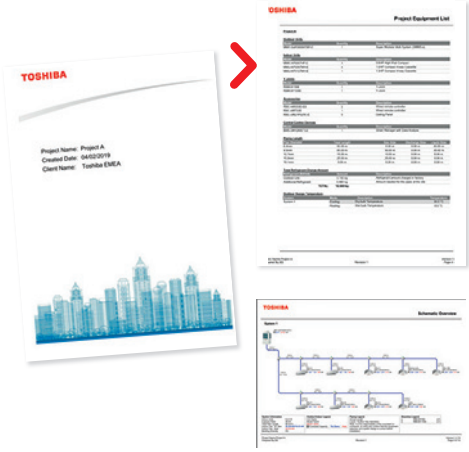
Project fully customizable



Safety devices guidance

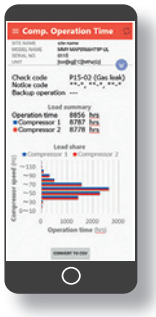


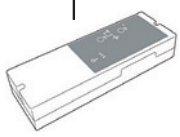
Complete report



SERVICE TOOL

Save time during commissioning and maintenance. Choose between the "Wave Tool Advance" using Smartphone NFC connection or the link adaptor connected to the outdoor or indoor unit.

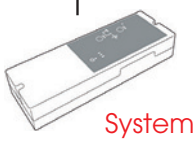




Get access to system data indoor using link adaptor

Direct USB connection to get access to system data

Wireless connection using smartphone* NFC technology to collect system data



System operation self record using link adaptor

*Please contact Toshiba Air Conditioning for Android® phone compatibility list.

INSTALLATION AND USE OF REFRIGERANTS NOT SPECIFIED BY TOSHIBA AIR CONDITIONING

Toshiba Air Conditioning products are designed and manufactured on the assumption that each product is used with the specific refrigerant specified for that product.
The use of incorrect refrigerant may cause mechanical defects, malfunctions or failures which, in some cases, could result in a serious safety issue. For this reason Toshiba Air Conditioning requires that only the specified refrigerant for a product should be used.
The type of refrigerant specified for a product is stated in the accompanying owners manual for a product, or on the label attached to the product itself.
Toshiba Air Conditioning shall not assume any liability for failures, malfunctions or safety issues on any product if incorrect refrigerant is used in that product.

TESTING CONDITIONS BASED ON EUROVENT REQUIREMENTS

Cooling mode
Indoor air temperature: 27°CDB / 19°CWB
Outdoor temperature: 35°CDB / 24°CWB

Heating mode
Indoor air temperature: 20°CDB
Outdoor temperature: 7°CDB / 6°CWB

Certified data accessible on Eurovent website
Correlation Toshiba Air Conditioning - ECC naming:
- DAISEIKAI 9: DSK9
- Super Digital Inverter: SDI
- Big Digital Inverter: BIG DI 3ph
Seasonal data accessible on Toshiba Ecodesing website

NOTES