2014
2015

RESIDENTIAL & LIGHT COMMERCIAL PRODUCTS

GENERAL CATALOGUE

TOSHIBA
Leading Innovation

Index

Toshiba Group

Toshiba's origins go back to 1875 and two great inventors.
Today, more than 130 years after, Toshiba Group provides a wide range of products and services that feature the best in innovative technologies and the finest quality.
By continually developing innovative technologies, we strive to create products and services that enhance human life, and which lead to a thriving healthy society.

Toshiba air conditioning

Toshiba produced its first air conditioning units in the 1950's, and immediately worked on introducing improvements.
Its role as an innovator continued with the introduction of the rotary compressor and electronic controls.
By the 1980's with a broad product offering, Toshiba was the first to introduce the inverter driven unit (1981) and the twin rotary compressor (in 1988).
In 1999, Toshiba again led the industry with the launch of its product range operating with non-ozone depleting refrigerants (R-410A and R-407C).
Toshiba's spirit of innovation continues with its relentless drive for product and system improvements.
Every year from 1994 onward Toshiba has received a prestigious award for its great achievement in the industry.

Corporate social responsibility

Toshiba signed the United Nations Global Compact in 2004 and since then has implemented and promoted these basic principle concerning human rights, labor, environment and anti-corruption within the organization and towards its suppliers.
Corporate social responsibility is reviewed every year by third parties and Toshiba has been awarded with several prizes for its success and commitment.

Quality commitment philosophy

Toshiba has been studying, designing and creating innovative air conditioning systems for more than 60 years and always offers the highest performance on the market.
Quality has always been Toshiba's strength and will remain the trademark that will differentiate Toshiba air conditioners from the competition.
This is the philosophy behind every Toshiba product, developed and manufactured following strictly all the industry regulations, the quality of processes certifications and higher internal Toshiba quality standards, which includes controls on all finished products and supplied parts.
Toshiba products are certified with third parties institutes for quality, safety and performance (TUV, Eurovent, WEEE, RoHS, REACH).

Environmental based management

Toshiba Group manages its business operations as a corporate citizen of planet.
Earth with the future of the world in mind. With compliance with laws and regulations the Toshiba Group has formulated the Environmental Vision 2050.
A vision of a world in which "People lead richer lifestyles in harmony with the Earth" by 2050.
Under this vision, it is the mission of Toshiba to reduce environmental impacts and create new value by promoting the development of Environmentally conscious products, which involves environmentally conscious product design, the assessment of environmental impact and disclosure of the environmental performance.

Eurovent certification program

Eurovent Certification certifies the performance ratings of air-conditioning and refrigeration products according to European and international standards.

Toshiba participation in the Eurovent program is a guarantee to its customers and users that our products will operate in accordance with the design specifications, that the data published and communicated are real and therefore the energy consumption and costs are correctly stated.

Toshiba solutions

Toshiba offers a solution for all applications: residential, light commercial and commercial applications.
Residential indoor units are designed to blend perfectly with all interiors and incorporate advanced filtration systems to deliver optimum indoor air quality.
For small commercial premises, products are designed to deliver top performance combined with energy efficiency.
For larger applications, VRF systems combine flexibility, energy efficiency and respect for the environment, with a wide choice of stylish indoor units.



Absolute comfort

Toshiba commitment to people drives a focused attention for the details in every stage of the development process, form design to user field tests. Therefore, the products and systems installed feature higher standard of indoor air quality, sound levels, energy savings and environmental awareness.

Core technologies

Toshiba commitment to innovation led to the design of highly efficient and reliable components like:
IPDU inverter
DC Twin rotary compressor
IAQ filtration system

The New Energy Label

Since 1995, the label has helped customers to make an informed choice when purchasing an appliance.
In 2003, the success of the labeling scheme, led the European Union to introduce two new classes for refrigerating appliances, A+ and A++. These new categories were placed on top of the A class to respond to a market-led demand for environmental-friendly products and to incentivise suppliers to develop even more efficient products in this category. Revision of the label is now necessary to ensure continued transparency and clarity of information for consumers. The label has been a driver of technological progress in appliances. Advances in product design now means that the energy label must be updated to remain informative and relevant. It will also continue to stimulate innovative efficiency gains.

The European Union has now approved new labels to indicate energy efficiency beyond A. The new framework Directive entered into force on 19 June 2010. It introduces a new energy label layout which has nonetheless kept its uniform and simple design characteristics across the different product categories.

The basic elements of the new label are:

- The initial A to G classification scale
- Colours from dark green (high energy efficiency) to red (low energy efficiency);
- Size of the label.

Additional elements have been introduced:

- Depending on the product group up, to three additional classes (A+, A++, A+++) are added to the previous A-G classification scale. But the seven-class structure of the old labeling system will be preserved: the introduction of new classes above A will be accompanied by the removal of existing bottom classes, from G upward.
- The new label is language-neutral: this is achieved by replacing text with pictograms which inform consumers about the characteristics and performance of the given product.
- Each single product will be supplied with the full new label. The current practice in some countries to provide the basic label and the data strip separately will not be necessary any more.
- Where energy-related or price information is disclosed, any advertisement for a specific model will bear a reference to the energy efficiency class of the product.

New European Eco Design Directive

The objective of the new European Eco Design Directive is the integration of environmental aspects into product design with the aim of improving the environmental performance of the product throughout its whole life cycle. Energy efficiency values, together with the sound levels of the units, will be reflected in the new Energy label to allow end-customers to do better and environmentally sensible choice.

Apart from the user's behavior, there are two complementary ways of reducing the energy consumed by products: the labeling to raise the awareness of consumers and the energy efficiency requirements imposed to products on the design phase.

Stage 1: From 1 January 2013

Air conditioners, shall correspond to minimum energy efficiency requirements.

Requirements for minimum energy efficiency

	SEER	SCOP (Aver. heating saeson)
If GWP of refrigerant > 150	3,6	3,24
If GWP of refrigerant ≤ 150	3,4	3,06

The requirements on sound power shall relate to the standard rating conditions are listed below:

REQUIREMENTS FOR MAXIMUM SOUND POWER LEVEL

Rated capacity ≤ 6kW		**6 < Rated capacity ≤ 12kW**	
Indoor sound power level in db (A)	Outdoor sound power level in db (A)	Indoor sound power level in db (A)	Outdoor sound power level in db (A)
30	65	65	70

Stage 2: From 1 January 2014

Air conditioners, shall correspond to minimum energy efficiency requirements.

REQUIREMENTS FOR MINIMUM ENERGY EFFICIENCY

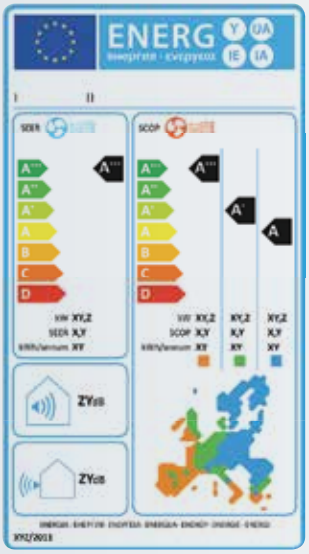
	Air conditioners, except double and single duct air conditioners		Double duct air conditioners		Single duct air conditioners	
	SEER	SCOP (Aver. heating saeson)	EER rated	COP rated	EER rated	COP rated
If GWP of refrigerant > 150 for 6kW	4,6	3,8	2,6	2,6	2,6	2,04
If GWP of refrigerant ≤ 150 for 6kW	4,14	3,42	2,34	2,34	2,34	1,84
If GWP of refrigerant > 150 for 6-12kW	4,3	3,8	2,6	2,6	2,6	2,04
If GWP of refrigerant ≤ 150 for 6-12kW	3,87	3,42	2,34	2,34	2,34	1,84

New Energy labeling for air conditioners

Under the new labeling the energy efficiency of air conditioning systems will be calculated based on seasonal performance.

Climate zones for calculating Heating (SCOP),for Heating mode a comprehensive temperature profile for the whole of Europe could not be created, for this reason the EU is divided into three climate zones, this ensures the energy efficiency calculation applies the actual regional ambient temperatures.

- Warmer – annual temperature of Athens
- Average – annual temperature of Strasbourg
- Colder – annual temperature of Helsinki



Energy Efficiency Class	SEER	SCOP
A+++	SEER ≥ 8,50	SEER ≥ 5,10
A++	6,10 ≤ SEER < 8,50	4,60 ≤ SEER < 5,10
A+	5,60 ≤ SEER < 6,10	4,00 ≤ SEER < 4,60
A	5,10 ≤ SEER < 5,60	3,40 ≤ SEER < 4,00
B	4,60 ≤ SEER < 5,10	3,10 ≤ SEER < 3,40
C	4,10 ≤ SEER < 4,60	2,80 ≤ SEER < 3,10
D	3,60 ≤ SEER < 4,10	2,50 ≤ SEER < 2,80

WARMER (ATHENS)

Temperatures Conditions			
Partial Load	Outdoors		Indoors
	DB	WB	DB
-	-	-	20°C
100%	2°C	1°C	20°C
64%	7°C	6°C	20°C
29%	12°C	11°C	20°C

AVERAGE (STRASBOURG)

Temperatures Conditions			
Partial Load	Outdoors		Indoors
	DB	WB	DB
88%	-2°C	- 2°C	20°C
54%	2°C	1°C	20°C
35%	7°C	6°C	20°C
15%	12°C	11°C	20°C

COLDER (HELSINKI)

Temperatures Conditions			
Partial Load	Outdoors		Indoors
	DB	WB	DB
61%	-7°C	- 8°C	20°C
37%	2°C	1°C	20°C
24%	7°C	6°C	20°C
11%	12°C	11°C	20°C

Climate zones for calculating Cooling (SEER), only ONE climate zone for calculating Cooling efficiencies.The climate data for Strasbourg is the single reference point for the whole of Europe.

SEER

Temperatures Conditions			
Partial Load	Outdoors	Indoors	
	DB	DB	WB
21%	20°C	27°C	19°C
47%	25°C	27°C	19°C
74%	30°C	27°C	19°C
100%	35°C	27°C	19°C

Residential

THE RESIDENTIAL RANGE

ULTIMATE INVERTER TECHNOLOGY
ULTIMATE COMFORT

STYLISH NEW DESIGN

Toshiba's modern and stylish look complements any interior, while the moon-white finish reflects sophistication and taste.

Clearing the air for generations to come

As human activities accelerate the climatic change, scientists foresee limits of damage the ecology can take. The sustainable solutions require stronger commitment to global priorities. How far and fast people are willing to lessen the environment impact. Toshiba is making a positive difference to the ecology in a big way. We lead initiatives with academic innovators, industries and government to think bigger, act bolder and move faster towards more environmentally sustainable solutions. Thus, Toshiba Carrier (Thailand) Co., Ltd., with heat-pump technology as its backbone, will strive to become an environmentally creative company to contribute to the society and the global environment and to grow globally by offering the highest-quality products and services which properly serves various customer's needs. In addition, the sustainable sales and profits growth has been driven by full line-up of Energy saving, Environmental conscious and Eco-friendly (3E) climate control solutions.

Toshiba Airconditioning, we care about Better Air...

Our products comply with RoHS Regulations, ensuring prohibition of restricted substances in every material of components.

With the fast increasing waste stream, we aim to minimize the impact of electronic goods on the environment. Such inspiration leads us to limit the quantity of waste going to final disposal by applying plastic that can be recycled.

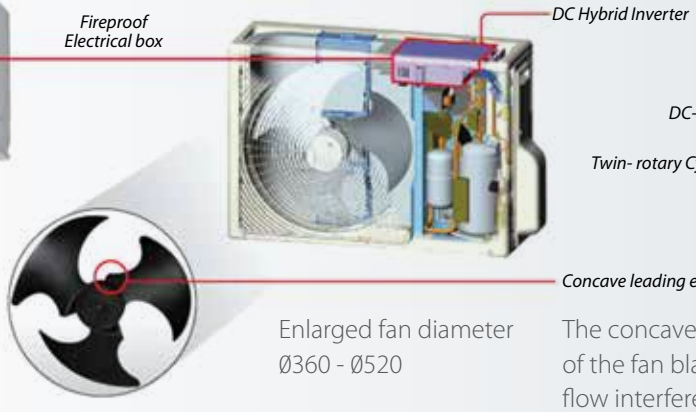
Our commitment is to save the earth and increase savings with digital technology that provides superior control and cost efficiency with the DC invertor compressor. Super-accurate rotation of an environmentally sustainable compressor results in power savings of up to 50%* (compared to AC Fixed Speed compressors) and quieter operation.

*13k Btu Inverter vs. 13k Btu Fixed Speed product

Toshiba DC Hybrid Inverter Technology and Useful Features

Fireproof electrical enclosure are both indoor* and outdoor unit, Flame must not be spread.

*Not applicable for size 10k Btu



Enlarged fan diameter
Ø360 - Ø520

The concave leading edge of the fan blades reduces flow interference between adjacent blades.

DC **Twin-Rotary** Compressor

Increased, wide range efficiency is realized.

This compressor enables the adoption of a high-pressure refrigerant. High efficiency is evident in low speed operation ranges. It can reduce energy consumption when operated in a long stable conditions.

High Efficiency

Rotation with two rollers at the same time, makes accurate compressor rotation possible with less energy loss. As a result, it offers a great reduction in energy consumption yet with very powerful operation

High reliability & Low Noise

The enhanced DC Twin-rotary compressor delivers stable performance with minimum friction. Ideal for noise-sensitive applications. The sound of the outdoor unit is almost imperceptible.

Benefits of the Toshiba DC Hybrid Inverter system

Comparison of energy consumption

Testing Condition

Indoor temperature : Staring from 35ºC until it reaches a set-point temperature 25ºC.
Ambient temperature : Vary between 28 and 30ºC by every 2 hours period.
Testing period : More than 8 hours.

Energy saving

Digital technology provides superior control and cost efficiency with the DC Inverter compressor when compared to AC Fixed Speed compressors. Super-accurate rotation of an environmentally sustainable compressor results in power savings of up to 50%* and quieter operation.

Comfort

Toshiba's DC Hybrid Inverter uses a Twin Rotary compressor**, which ensures a steadier rotation therefore reducing the unwanted vibration sound.

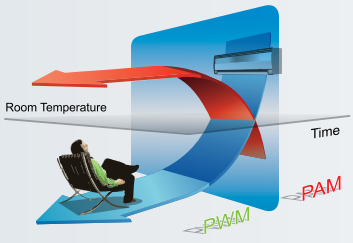
High power

PAM drives high power to ensure the fastest achievement of the set temperature.

No ozone Depletion

At Toshiba, our concerns for the environment have led us to use the R-410a refrigerant, which is confirmed to be non-ozone depleting, non-flammable and non-toxic.

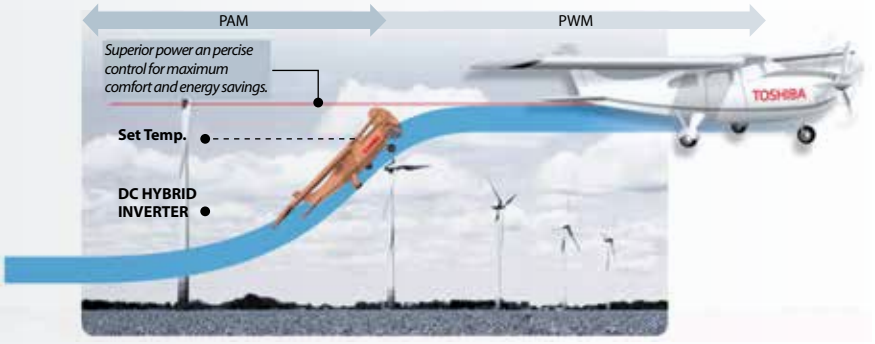
*13k Btu Inverter vs. 13k Btu Fixed Speed product
**Applicable for 10, 13, 16N3AVP, 16, 18, 22N3AV2, 16, 18, 22N3AVR, 16, 18, 22, 24N3ACV and 18, 22N3AV Series



Unique Hybrid Design

The Hybrid Inverter features PAM (Pulse Amplitude Modulation) and PWM (Pulse Width Modulation).

Toshiba DC Hybrid Inverter system



The former provides the highest levels of power while the latter ensures the desired room temperature and energy efficiency. As a hybrid, the Toshiba Inverter System features the best of both.

Care for the environment

Toshiba has anticipated legislation on the control of refrigerant emissions to the atmosphere, and pioneers solutions that our technological leadership enables us to offer.

Filtration, purification, innovation

True quality in the residential environment goes beyond control of the air filtration.
With Toshiba residential air conditioners, air quality is guaranteed by many stages of filtration.

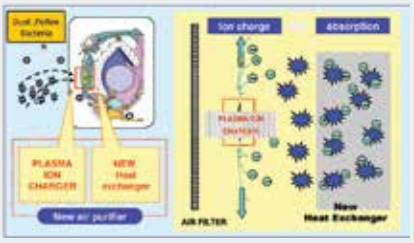
Residential

INVERTER SYSTEMS

SINGLE SPLIT

DAISEIKAI 8

New Air Purifier



Impurities are ionized by the plasma ion charger and absorbed by heat exchanger

Higher standard in efficiency and comfort.

High energy efficiency class, both in cooling and heating (A+++ for sizes 10 & 13).

Elegant design.

Low energy consumption in minimum capacity:
When demand is reduced, the unit reduces also its capacity and achieves lower power consumption.

Wide operating range.

Improved airflow features

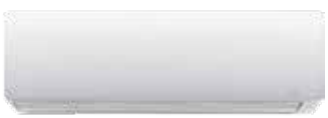
Pico Ionizer with possibility to enhance humidity in air.

User friendly wireless remote control and optimal customization.

G 2 K V P

DAISEIKAI 8

INVERTER HIGH-WALL



INDOOR UNITS	OUTDOOR UNITS	REMOTE CONTROLS
RAS-10G2KVP-E	RAS-10G2AVP-E	WIRELESS
RAS-13G2KVP-E	RAS-13G2AVP-E	
RAS-16G2KVP-E	RAS-16G2AVP-E	

G2AVP +G2KVP — Performance data

Outdoor unit			RAS-10G2AVP-E	RAS-13G2AVP-E	RAS-16G2AVP-E
Indoor unit			RAS-10G2KVP-E	RAS-13G2KVP-E	RAS-16G2KVP-E
Cooling capacity	kW		2,50	3,50	4,50
Cooling range (min. - max.)	kW		0,55 - 3,5	0,63 - 4,1	0,63 - 5,0
Power input (min. - rated - max.)	kW	C	0,11 - 0,485 - 0,9	0,17 - 0,82 - 1,20	0,17 - 1,30 - 1,75
EER	W/W		5,15	4,27	3,46
SEER			9,10	8,90	7,30
Energy efficiency class		C	A+++	A+++	A++
Seasonal electricity consumption	kWh/a	C	96	138	216
Annual energy consumption	kWh		243	410	650
Heating capacity	kW		3,2	4,0	5,5
Heating range (min. - max.)	kW		0,45 - 5,8	0,65 - 6,3	0,65 - 6,8
Power input (min. - rated - max.)	kW	H	0,09 - 0,58 - 1,65	0,14- 0,80 - 1,77	0,14 - 1,37 - 2,05
COP	W/W		5,52	5,00	4,01
SCOP (Average)			5,20	5,10	4,60
Energy efficiency class (Average)		H	A+++	A+++	A++
Seasonal electricity consumption	kWh/a	H	808	988	1369

G2KVP — Physical data Indoor unit

Indoor unit			RAS-10G2KVP-E	RAS-13G2KVP-E	RAS-16G2KVP-E
Air Flow (max)	m^3/h - l/s	C	648 - 180	672 -187	696 - 193
Sound pressure level (h/l (q))	dB(A)	C	42/24 (20)	43/25 (21)	44/26 (23)
Sound power level (h)	dB(A)	C	57	58	59
Air Flow (max)	m^3/h - l/s	H	678 - 188	726 - 202	744 - 207
Sound pressure level (h/l (q))	dB(A)	H	43/24 (20)	44/25 (21)	45/26 (23)
Sound power level (h)	dB(A)	H	58	59	60
Dimensions (HxWxD)	mm		293x831x270	293x831x270	293x831x270
Weight	kg		14	14	14

G2AVP — Physical data Outdoor unit

Outdoor unit			RAS-10G2AVP-E	RAS-13G2AVP-E	RAS-16G2AVP-E
Air Flow	m^3/h - l/s	C	1872 - 520	2160 - 600	2544 - 707
Sound pressure level	dB(A)	C	46	48	49
Sound power level	dB(A)	C	61	63	64
Operating range	°C	C	-10~46	-10~46	-10~46
Air Flow	m^3/h - l/s	H	1872 - 520	2160 -600	2544 - 707
Sound pressure level (h)	dB(A)	H	47	49	50
Sound power level (h)	dBA	H	62	64	65
Operating range	°C	H	-15~24	-15~24	-15~24
Dimensions (HxWxD)	mm		630x800x300	630x800x300	630x800x300
Weight	kg		42	42	42
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		10	10	10
Chargeless pipe length	m		15	15	15
Power supply	V-ph-Hz		220/240-1-50, 220/230-1-60	220/240-1-50, 220/230-1-60	220/240-1-50, 220/230-1-60

C = cooling mode
H = heating mode

h/l (q)= high / low speed (quiet)

DAISEIKAI 6,5

Indoor Air Quality

- Plasma air purifier
- Ionizer

High standards in efficiency and comfort.

Power change button: reduce the power to 75 or 50%. Helps preventing black-outs when other appliances are used.

New, modern aesthetic.

Self-cleaning with low density Ozone will eliminate all bacteria normally remaining after operation.

DC Hybrid Inverter technology with Twin Rotary compressor.

New ergonomic and practical remote control with easy access to main buttons and a sliding panel to hide the control used less frequently.

Nordic version with heat on the base plate of outdoor unit and winter operation mode.

N 3 K V P

DAISEIKAI 6,5

INVERTER HIGH-WALL

INDOOR UNITS	OUTDOOR UNITS		REMOTE CONTROLS
RAS-B10N3KVP-E	RAS-10N3AVP-E	RAS-M14GAV-E	WIRELESS
RAS-B13N3KVP-E	RAS-13N3AVP-E	RAS-M18UAV-E	
RAS-B16N3KVP-E	RAS-16N3AVP-E	RAS-3M26UAV-E	
		RAS-4M27UAV-E	
		RAS-5M34UAV-E1	

N3KVP+N3AVP — Performance data

Outdoor unit			RAS-10N3AVP-E	RAS-13N3AVP-E	RAS-16N3AVP-E
Indoor unit			RAS-B10N3KVP-E	RAS-B13N3KVP-E	RAS-B16N3KVP-E
Cooling capacity	kW		2,51	3,52	4,53
Cooling range (min. - max.)	kW		0,8 - 3,5	0,9 - 4,1	0,9 - 5,0
Power input (min. - rated - max.)	kW	C	0,14 - 0,49 - 0,9	0,16 - 0,84 - 1,37	0,16 - 1,34 - 1,82
EER	W/W		5,12	4,19	3,38
SEER			8,5	7,0	6,6
Energy efficiency class		C	A+++	A++	A++
Seasonal electricity consumption	kWh/a	C	82	175	239
Annual energy consumption	kWh		245	420	670
Heating capacity	kW		3,21	4,22	5,53
Heating range (min. - max.)	kW		0,8 - 5,8	0,8 - 5,9	0,8 - 6,7
Power input (min. - rated - max.)	kW	H	0,15 - 0,63 - 1,90	0,16- 0,95 - 1,95	0,17 - 1,47 - 2,51
SCOP (South Europe)			5,2	4,9	4,8
Energy efficiency class (South Europe)			A+++	A++	A++
COP	W/W		5,1	4,44	3,76
SCOP (Average)			4,6	4,5	4,3
Energy efficiency class (Average)		H	A++	A+	A+
Seasonal electricity consumption	kWh/a	H	852	933	1236

N3KVP — Physical data Indoor unit

Indoor unit			RAS-B10N3KVP-E	RAS-B13N3KVP-E	RAS-B16N3KVP-E
Air Flow (max)	m^3/h - l/s	C	630 - 175	660 -183	690 - 192
Sound pressure level (h/l)	dB(A)	C	42/27	43/27	45/29
Sound power level (h)	dB(A)	C	57	58	60
Air Flow (max)	m^3/h - l/s	H	708 - 197	732 - 203	756 - 210
Sound pressure level (h/l)	dB(A)	H	43/27	44/27	45/29
Sound power level (h)	dB(A)	H	58	59	60
Dimensions (HxWxD)	mm		275x790x225	275x790x225	275x790x225
Weight	kg		10	10	10

N3AVP — Physical data Outdoor unit

Outdoor unit			RAS-10N3AVP-E	RAS-13N3AVP-E	RAS-16N3AVP-E
Air Flow (max)	m^3/h - l/s	C	1800 - 500	2160 - 600	2520 - 700
Sound pressure level (h)	dB(A)	C	46	48	49
Sound power level (h)	dB(A)	C	61	63	64
Operating range	°C	C	-10~46	-10~46	-10~46
Air Flow (max)	m^3/h - l/s	H	1800 - 500	2160 - 600	2160 - 600
Sound pressure level (h)	dB(A)	H	47	50	50
Sound power level (h)	dB(A)	H	62	65	65
Operating range	°C	H	-15~24	-15~24	-15~24
Dimensions (HxWxD)	mm		630x800x300	630x800x300	630x800x300
Weight	kg		41	41	41
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		10	10	10
Chargeless pipe length	m		15	15	15
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

C = cooling mode
H = heating mode

h/l= high / low speed

IAQ filter

Toshiba IAQ
filtration system

This elegant unit combines an improved energy efficiency with indoor air quality in single and/or multi split applications.

Memorization of the desired operation parameters with one touch of " my comfort" button.

Self cleaning function to remove moist from the internal components of the unit.

Toshiba DC hybrid inverter technology controls and adjust the capacity supplied by the air conditioner.

Modern stylish and compact design.

N 3 K V 2

SUZUMI+

INVERTER HIGH - WALL

INDOOR UNITS	OUTDOOR UNITS		REMOTE CONTROLS
RAS-B10N3KV2-E	RAS-10N3AV2-E	RAS-M14GAV-E	WIRELESS
RAS-B13N3KV2-E	RAS-13N3AV2-E	RAS-M18UAV-E	
RAS-B16N3KV2-E	RAS-16N3AV2-E	RAS-3M26UAV-E	
RAS-18N3KV2-E	RAS-18N3AV2-E	RAS-4M27UAV-E	
RAS-B22N3KV3-E	RAS-22N3AV2-E	RAS-5M34UAV-E1	

N3KV2+N3AV2 — Performance data

Outdoor unit			RAS-10N3AV2-E	RAS-13N3AV2-E	RAS-16N3AV2-E	RAS-18N3AV2-E	RAS-22N3AV2-E
Indoor unit			RAS-B10N3KV2-E	RAS-B13N3KV2-E	RAS-B16N3KV2-E	RAS-18N3KV2-E	RAS-B22N3KV2-E
Cooling capacity	kW		2,5	3,5	4,5	5,0	6,0
Cooling range (min. - max.)	kW		1,1 - 3,0	0,8 - 4,1	0,8 - 5,0	1,1 - 6,0	1,2 - 6,7
Power input (min. - rated - max.)	kW	C	0,25 - 0,598 - 0,82	0,15 - 1,00 - 1,25	0,15 - 1,395 - 1,72	0,18 -1,42 - 2,00	0,20 - 1,995 - 2,65
EER	W/W		4,18	3,50	3,23	3,52	3,01
SEER			6,7	6,2	6,1	7,0	6,5
Energy efficiency class		C	A++	A++	A++	A++	A++
Seasonal electricity consumption	kWh/a	C	104	198	258	250	323
Annual energy consumption	kWh		299	500	698	710	998
Heating capacity	kW		3,2	4,2	5,5	5,8	7,0
Heating range (min. - max.)	kW		0,9 - 4,8	0,9 - 5,6	0,9 - 6,9	0,8 - 6,3	1,0 - 7,5
Power input (min. - rated - max.)	kW	H	0,17 - 0,75 - 1,40	0,15 - 1,08 - 1,58	0,15 -1,52 -1,98	0,14 - 1,56 -1,70	0,18 - 2,05 - 2,21
SCOP (South Europe)			4,6	4,4	4,1	4,7	4,6
Energy efficiency class (South Europe)			A++	A+	A+	A++	A++
COP	W/W		4,27	3,89	3,62	3,72	3,41
SCOP (Average)			4,0	3,9	3,9	4,1	4,0
Energy efficiency class (Average)		H	A+	A	A	A+	A+
Seasonal electricity consumption	kWh/a	H	980	1077	1362	1400	1645

N3KV2 — Physical data Indoor unit

Indoor unit			RAS-B10N3KV2-E	RAS-B13N3KV2-E	RAS-B16N3KV2-E	RAS-18N3KV2-E	RAS-B22N3KV2-E
Air Flow (max)	m^3/h - l/s	C	516 - 143	570 - 158	684 - 190	954 - 265	1080 - 300
Sound pressure level (h/l)	dB(A)	C	38/26	39/26	45/30	44/32	47/35
Sound power level (h)	dB(A)	C	53	54	60	59	60
Air Flow (max)	m^3/h - l/s	H	570 - 158	624 - 173	738 - 205	990-275	1098/305
Sound pressure level (h/l)	dB(A)	H	39/28	40/28	45/31	44/32	47/35
Sound power level (h)	dB(A)	H	54	55	60	59	60
Dimensions (HxWxD)	mm		275x790x225	275x790x225	275x790x225	320x1050x243	320x1050x243
Weight	kg		10	10	10	13	13

N3AV2 — Physical data Outdoor unit

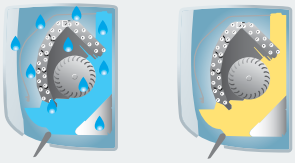
Outdoor unit			RAS-10N3AV2-E	RAS-13N3AV2-E	RAS-16N3AV2-E	RAS-18N3AV2-E	RAS-22N3AV2-E
Air Flow (max)	m^3/h - l/s	C	1800 - 500	2250 - 625	2160 - 600	2178 - 605	2316 - 643
Sound pressure level (h)	dB(A)	C	46	48	49	49	53
Sound power level (h)	dB(A)	C	61	63	64	64	65
Operating range	°C	C	-10~46	-10~46	-10~46	-10~46	-10~46
Air Flow (max)	m^3/h - l/s	H	1800 - 500	2250 - 625	1920 - 533	1914 -532	2232 - 620
Sound pressure level (h)	dB(A)	H	47	50	50	50	52
Sound power level (h)	dB(A)	H	62	65	65	65	65
Operating range	°C	H	-15~24	-15~24	-15~24	-15~24	-15~24
Dimensions (HxWxD)	mm		550x780x290	550x780x290	550x780x290	550x780x290	550x780x290
Weight	kg		33	33	38	39	41
Compressor type			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"	1/2" - 1/4"	1/2" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2	2	2
Maximum pipe length	m		20	20	20	20	20
Maximum height difference	m		10	10	10	10	10
Chargeless pipe length	m		15	15	15	15	15
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, 220-1-60	220/240-1-50, 220-1-60

C = cooling mode
H = heating mode

h/l= high / low speed

AvAnt

Self cleaning function



AvAnt is endowed with the self-cleaning function, that prevents moisture and mould to be formed in the indoor unit. When the air conditioner is turned off, the internal fan runs and dries the moisture coil, before turning off automatically.

If your need is ideal temperature all year round, delivered with high energy saving and extremely low noise, Toshiba AvAnt Inverter is the solution.

Improved energy efficiency in cooling and heating.

Compact design fit easily into every room.

Wider usable operating range.

User friendly remote control.

Detachable front panel for regular maintenance routines.

7 S K V

AvAnt

INVERTER HIGH - WALL

INDOOR UNITS

RAS-107SKV-E5
RAS-107SKV-E6
RAS-137SKV-E3
RAS-167SKV-E3

OUTDOOR UNITS

RAS-107SAV-E5
RAS-107SAV-E6
RAS-137SAV-E3
RAS-167SAV-E3

REMOTE CONTROLS

WIRELESS E3 Series

WIRELESS E5 & E6 Series

7SKV + 7SAV — Performance data

Outdoor unit			RAS-107SAV-E5	RAS-107SAV-E6	RAS-137SAV-E3	RAS-167SAV-E3
Indoor unit			RAS-107SKV-E5	RAS-107SKV-E6	RAS-137SKV-E3	RAS-167SKV-E3
Cooling capacity	kW		2,5	2,5	3,5	4,4
Cooling range (min. - max.)	kW		1,1-3,0	1,2-3,0	1,1-4,0	1,1-5,0
Power input (min. -rated - max)	kW	C	0,28-0,77-1,05	0,29-0,77-1,05	0,25-1,08-1,33	0,26-1,56-1,90
EER	W/W		3,25	3,25	3,24	2,82
SEER			5,1	5,1	5,9	5,8
Energy efficiency class		C	A	A	A+	A+
Seasonal electricity consumption	kWh/a	C	137	171	208	266
Annual energy consumption	kWh		385	385	540	780
Heating capacity	kW		3,2	3,2	4,2	5,2
Heating range (min. - max.)	kW		1,0-3,5	0,9-3,5	0,9-5,0	1,0-6,2
Power input (min. -rated - max)	kW	H	0,21-0,84-1,20	0,21-0,84-0,97	0,17-1,14-1,48	0,19-1,52-1,81
COP	W/W		3,81	3,81	3,68	3,42
SCOP (Average)			3,6	3,8	3,8	3,8
Energy efficiency class (Average)		H	A	A	A	A
Seasonal electricity consumption	kWh/a	H	972	736	1106	1399

7SKV — Physical data Indoor unit

Indoor unit			RAS-107SKV-E5	RAS-107SKV-E6	RAS-137SKV-E3	RAS-167SKV-E3
Air Flow (max)	m^3/h - l/s	C	528 - 147	528 - 147	570 - 158	690 - 192
Sound pressure level (h/l)	dB(A)	C	40/27	40/27	39/26	45/30
Sound power level (h)	dB(A)	C	55	55	54	58
Air Flow (max)	m^3/h - l/s	H	570 - 158	570 - 158	624 - 173	744 - 207
Sound pressure level (h/l)	dB(A)	H	41/28	41/28	40/28	45/31
Sound power level (h)	dB(A)	H	56	56	55	58
Dimensions (HxWxD)	mm		275x790x205	275x790x205	275x790x205	275x790x205
Weight	kg		9	9	9	9

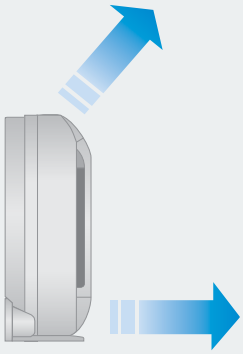
7SAV — Physical data Outdoor unit

Outdoor unit			RAS-107SAV-E5	RAS-107SAV-E6	RAS-137SAV-E3	RAS-167SAV-E3
Air Flow (max)	m^3/h - l/s	C	1740 - 483	1740 - 483	2250 - 625	2250 - 625
Sound pressure level (h)	dB(A)	C	48	48	48	49
Sound power level (h)	dB(A)	C	63	63	63	62
Operating range	°C	C	-10~46	-10~46	-10~46	-10~46
Air Flow (max)	m^3/h - l/s	H	1740 - 483	1740 - 483	2250 - 625	2250 - 625
Sound pressure level (h)	dB(A)	H	50	50	50	50
Sound power level (h)	dB(A)	H	65	65	65	63
Operating range	°C	H	-15~24	-15~24	-15~24	-15~24
Dimensions (HXWXD)	mm		530x660x240	530x660x240	550x780x290	550x780x290
Weight	kg		27	28	33	40
Compressor type			DC Rotary	DC Rotary	DC Rotary	DC Rotary
Flare connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"
Minimum pipe length	m		2	2	2	2
Maximum pipe length	m		15	15	20	20
Maximum height difference	m		8	8	10	10
Chargeless pipe length	m		10	15	15	15
Power supply	V-ph-Hz		220-240/1/50 220-230/1/60	220-240/1/50 220-230/1/60	220-240/1/50 220-230/1/60	220-240/1/50 220-230/1/60

C = cooling mode
H = heating mode

h/l= high / low speed

Bi-flow air delivery system



This feature enables users to select the favorable air flow outlet between the two available positioned at the top and bottom front of the unit.
The warm air distributed from the bottom front is a Toshiba original feature.

Innovative and compact unit to be installed on the floor and in low wall applications, fit perfectly under the window sills or in a low ceiling attic.

Compact and modern design in all three dimensions (60x70x22 cm).

Toshiba IAQ filtration system.

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.

UFV

UFV

INVERTER CONSOLE

INDOOR UNITS

RAS-B10UFV-E
RAS-B13UFV-E
RAS-B18UFV-E

OUTDOOR UNITS

RAS-10N3AV2-E
RAS-13N3AV2-E
RAS-18N3AV2-E
RAS-M14GAV-E
RAS-M18UAV-E
RAS-3M26UAV-E
RAS-4M27UAV-E
RAS-5M34UAV-E1

REMOTE CONTROLS

WIRELESS

B_UFV + N3AV2-E — Performance data

Outdoor unit			RAS-10N3AV2-E	RAS-13N3AV2-E	RAS-18N3AV2-E
Indoor unit			RAS-B10UFV-E	RAS-B13UFV-E	RAS-B18UFV-E
Cooling capacity	kW		2,5	3,5	5,0
Cooling range (min. - max.)	kW		1,1 - 3,1	1,1 - 4,1	1,0 - 5,7
Power input (min. - rated - max.)	kW	C	0,23 - 0,595 - 0,82	0,23 - 0,97 - 1,35	0,20 - 1,66 - 1,95
EER	W/W		4,20	3,61	3,01
SEER			6,6	6,2	5,7
Energy efficiency class		C	A++	A++	A+
Seasonal electricity consumption	kWh/a	C	106	198	307
Annual energy consumption	kWh		298	485	830
Heating capacity	kW		3,2	4,2	5,8
Heating range (min. - max.)	kW		1,0 - 4,8	1,0 - 5,4	1,1 - 6,3
Power input (min. - rated - max.)	kW	H	0,18 - 0,75 - 1,40	0,18 - 1,125 - 1,70	0,20 - 1,805 - 2,20
SCOP (South Europe)			4,6	4,4	4,3
Energy efficiency class (South Europe)			A++	A+	A+
COP	W/W		4,27	3,73	3,21
SCOP (Average)			4,0	3,9	3,8
Energy efficiency class (Average)		H	A+	A	A
Seasonal electricity consumption	kWh/a	H	980	1113	1474

B_UFV — Physical data Indoor unit

Indoor unit			RAS-B10UFV-E	RAS-B13UFV-E	RAS-B18UFV-E
Air Flow (max)	m^3/h - l/s	C	468 - 130	510 - 142	600 - 167
Sound pressure level (h/q)	dB(A)	C	39/23	40/24	46/31
Sound power level (h)	dB(A)	C	54	55	60
Air Flow (max)	m^3/h - l/s	H	510 - 142	552 - 153	642 - 178
Sound pressure level (h/q)	dB(A)	H	39/23	40/24	46/31
Sound power level (h)	dB(A)	H	54	55	61
Dimensions (HxWxD)	mm		600x700x220	600x700x220	600x700x220
Weight	kg		16	16	16

N3AV2-E — Physical data Outdoor unit

Outdoor unit			RAS-10N3AV2-E	RAS-13N3AV2-E	RAS-18N3AV2-E
Air Flow (max)	m^3/h - l/s	C	1800 - 500	2250 - 625	2178 - 605
Sound pressure level (h)	dB(A)	C	46	48	49
Sound power level (h)	dB(A)	C	59	61	64
Operating range	°C	C	-10~46	-10~46	-10~46
Air Flow (max)	m^3/h - l/s	H	1800 - 500	2250 - 625	1914 - 532
Sound pressure level (h)	dB(A)	H	47	50	50
Sound power level (h)	dB(A)	H	60	63	64
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		33	33	39
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		10	10	10
Chargeless pipe length	m		15	15	15
Power supply	V-ph-Hz		220-240/1/50, 220-230/1/60	220-240/1/50, 220-230/1/60	220-240/1/50, 220-230/1/60

C = cooling mode
H = heating mode

h/q= high speed / quiet

Technology in multisplit systems

When it is necessary to provide total comfort solution for a multi-room application, Toshiba multisplit systems offer the perfect answer for any kind of requirement.

One outdoor unit is capable of operating 2, 3, 4 or 5 indoor units. They are compact and elegant as they are designed to blend in with any room interior. In fact, Toshiba offers a wide range of possibilities to create all the comfort you desire.

The full range of indoor units can satisfy every kind of need: it includes unobtrusive ducted units, console units and modern high walls, that provide hi-tech and sophisticated design and complete air filtration at the same time. Moreover, the efficient inverter systems are composed of high quality components: control electronics, motor, compressor etc.

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.

HI-WALL SKV

CONSOLE UFV

CASSETTE SMUV

DUCTED G3DV

Residential

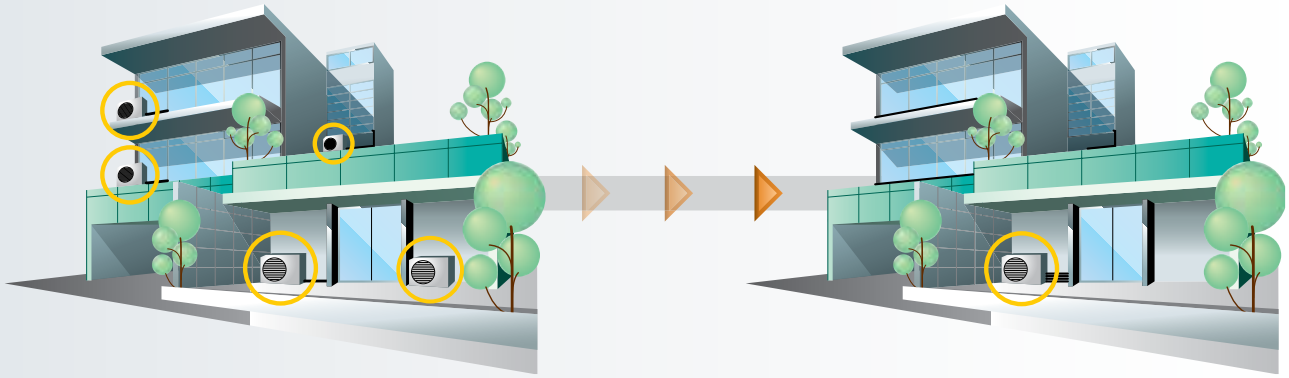
INVERTER SYSTEMS

MULTI SPLIT

TOSHIBA MULTI-SYSTEM
Big Advantages Flexibility

Luxury through Flexibility & Technology

Toshiba Multi system will deliver the ultimate in cooling and heating comfort. The very latest in air conditioning technology ensures optimum performance to greatly enhance the quality of your life.

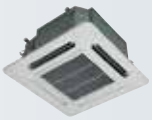


Small Unit - Big Advantages

Toshiba Multi-System exterior 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.

Benefits of the Toshiba Multi-System Flexibility

One external compressor can serve up to five interior units for exceptional flexibility, economy and reliability.

Heat Pump	Indoor unit	Hi-wall  N3KVP	Hi-wall  N3KV2	Console  UFV	Ducted  G3DV	Cassette  SMUV
 RAS-M14GAV-E	HP 10	RAS-B10N3KVP-E*	RAS-B10N3KV2-E	RAS-B10UFV-E	*	-
	HP 13	RAS-B13N3KVP-E*	RAS-B13N3KV2-E	RAS-B13UFV-E	*	-
 RAS-M18UAV-E	HP 7	-	RAS-M07N3KV2-E	-	*	-
	HP 10	RAS-B10N3KVP-E*	RAS-B10N3KV2-E	RAS-B10UFV-E	*	RAS-M10SMUV-E
	HP 13	RAS-B13N3KVP-E*	RAS-B13N3KV2-E	RAS-B13UFV-E	*	RAS-M13SMUV-E
	HP 16	RAS-B16N3KVP-E*	RAS-B16N3KV2-E*	-	*	RAS-M16SMUV-E
 RAS-3M26UAV-E	HP 7	-	RAS-M07N3KV2-E	-	-	-
	HP 10	RAS-B10N3KVP-E	RAS-B10N3KV2-E	RAS-B10UFV-E	RAS-M10G3DV-E	RAS-M10SMUV-E
	HP 13	RAS-B13N3KVP-E	RAS-B13N3KV2-E	RAS-B13UFV-E	RAS-M13G3DV-E	RAS-M13SMUV-E
	HP 16	RAS-B16N3KVP-E	RAS-B16N3KV2-E*	-	RAS-M16G3DV-E	RAS-M16SMUV-E
	HP 18	-	-	RAS-B18UFV-E	-	-
	HP 22	-	RAS-B22N3KV2-E*	-	-	-
	HP 24	-	-	-	-	-
 RAS-4M27UAV-E	HP 7	-	RAS-M07N3KV2-E	-	-	-
	HP 10	RAS-B10N3KVP-E	RAS-B10N3KV2-E	RAS-B10UFV-E	RAS-M10G3DV-E	RAS-M10SMUV-E
	HP 13	RAS-B13N3KVP-E	RAS-B13N3KV2-E	RAS-B13UFV-E	RAS-M13G3DV-E	RAS-M13SMUV-E
	HP 16	RAS-B16N3KVP-E	RAS-B16N3KV2-E*	-	RAS-M16G3DV-E	RAS-M16SMUV-E
	HP 18	-	-	RAS-B18UFV-E	-	-
	HP 22	-	RAS-B22N3KV2-E*	-	-	-
	HP 24	-	-	-	-	-
 RAS-5M34UAV-E1	HP 7	-	RAS-M07N3KV2-E	-	-	-
	HP 10	RAS-B10N3KVP-E	RAS-B10N3KV2-E	RAS-B10UFV-E	RAS-M10G3DV-E	RAS-M10SMUV-E
	HP 13	RAS-B13N3KVP-E	RAS-B13N3KV2-E	RAS-B13UFV-E	RAS-M13G3DV-E	RAS-M13SMUV-E
	HP 16	RAS-B16N3KVP-E	RAS-B16N3KV2-E*	-	RAS-M16G3DV-E	RAS-M16SMUV-E
	HP 18	-	-	RAS-B18UFV-E	-	-
	HP 22	-	RAS-B22N3KV2-E*	-	-	-
	HP 24	-	RAS-M24N3KV2-E	-	-	-

Model name*. . .For European countries except Nordic area
Please make reference to details on lot 10 website
*For Ducted combinations pls contact to AHI CARRIER SEE

Installation flexibility

80m

The multisplit system allow up to 25m for one room installation and 80m of total pipe length.

Toshiba new Super efficient DC Twin rotary compressor enables top performance at low energy consumption. With this efficient unit, operating costs decrease dramatically, compare to other multisplit systems.

Toshiba multi-splits are equipped with Toshiba DC hybrid inverter, an enhanced feature that ensures improved performance and reliability.

Wide range of indoor units available: High-walls, ducted, cassette 600x600 and the new Console from Toshiba.

Environmental conscious, with R-410A refrigerant and reduced overall CO_2 emissions.

Superior reliability, due to the reduction of the compressor ON/ OFF cycles.

Low noise levels.

Pipe elevation up to 15 meters in installation height.

U A V

MULTI - SPLIT

OUTDOOR UNIT

OUTDOOR UNITS

RAS-M18UAV-E	RAS-3M26UAV-E RAS-4M27UAV-E RAS-5M34UAV-E1

UAV — Performance data

Outdoor unit			2-room	3-room	4-room	5-room
			RAS-M18UAV-E	RAS-3M26UAV-E	RAS-4M27UAV-E	RAS-5M34UAV-E1
Cooling capacity	kW		5,2	7,5	8,0	10,0
Cooling range (min. - max.)	kW		1,4 - 6,2	4,1 - 9,0	4,2 - 9,3	3,7 - 11,0
Power input	kW	C	1,44	2,0	2,29	2,92
EER	W/W		3,61	3,75	3,5	3,42
Energy efficiency class			A	A	A	A
Heating capacity	kW		5,6	9,0	9,0	12,0
Heating range (min. - max.)	kW		1,0 - 8,3	2,0 - 11,2	2,9 - 11,7	2,7 - 14,0
Power input	kW		1,19	2,20	1,93	2,83
COP	W/W		4,71	4,09	4,67	4,24
Energy efficiency class			A	A	A	A

UAV — Physical data Outdoor unit

Outdoor unit			RAS-M18UAV-E	RAS-3M26UAV-E	RAS-4M27UAV-E	RAS-5M34UAV-E1
Air Flow	m^3/h - l/s	C	1800 - 500	2507-696	2507-696	3245-901
Sound pressure level	dB(A)	C	49	48	48	51
Sound power level	dB(A)	C	64	63	63	66
Operating range	°C	C	5÷43	10÷43	10÷43	10÷43
Air Flow	m^3/h - l/s	H	1950-542	2507-696	2507-696	3562-989
Sound pressure level	dB(A)	H	51	49	49	54
Sound power level	dB(A)	H	66	64	63	69
Operating range	°C	H	-15÷24	-15÷22	-15÷22	-15÷22
Dimensions (HxWxD)	mm		550x780x290	890x900x320	890x900x320	890x900x320
Weight	kg		41	69	69	75
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections - gas			3/8" + 1/2"	1/2" x 2 + 3/8" x 1	3/8" x 2 + 1/2" x 2	3/8" x 3 + 1/2" x 2
Flare connections - liquid			1/4" x 2	1/4" x 3	1/4" x 4	1/4" x 5
Maximum pipe length (per unit/total)	m		20 / 30	25 / 70	25 / 70	25 / 80
Maximum height difference	m		10	15	15	15
Chargeless pipe length	m		20	40	40	40
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

C= cooling mode
H = heating mode

DC Compressor

Fast and precise temperature management, with energy savings of 40 - 50% compared to fixed-speed systems.

Toshiba multi-splits are equipped with Toshiba DC hybrid Inverter technology, an enhanced feature that ensures improved performance and reliability.

Wide range of indoor units available: High-walls, ducted, cassette 600x600 and console.

A perfect combination of DC twin rotary compressor, DC hybrid inverter and R-410A refrigerant.

Superior reliability, due to the reduction of the compressor ON/ OFF cycles.

Low noise levels.

Flexibility: this system allows up to 20 m piping length for one room ensuring the overall length is not exceeded.

GAV

MULTI - SPLIT

OUTDOOR UNIT

OUTDOOR UNITS

RAS-M14GAV-E

GAV — Performance data

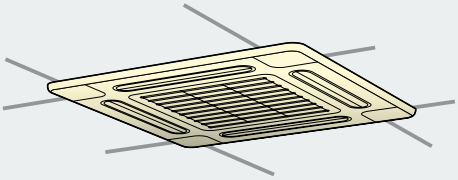
Outdoor unit			2-room RAS-M14GAV-E
Cooling capacity	kW		4,0
Cooling range (min. - max.)	kW		1,1 - 4,5
Power input	kW	C	1,08
EER	W/W		3,70
Energy efficiency class		C	A
Heating capacity	kW		4,4
Heating range (min. - max.)	kW		0,5 - 5,2
Power input	kW	H	1,01
COP	W/W		4,35
Energy efficiency class		H	A

GAV — Physical data

Outdoor unit			RAS-M14GAV-E
Air Flow	m^3/h - l/s	C	1812 - 503
Sound pressure level	dB(A)	C	46
Sound power level	dB(A)	C	59
Operating range	°C	C	5÷43
Sound pressure level	dB(A)	H	48
Sound power level	dB(A)	H	61
Operating range	°C	H	-15÷24
Dimensions (HxWxD)	mm		550x780x290
Weight	kg		36
Compressor type			DC Twin Rotary
Flare connections - gas			3/8" x 2
Flare connections - liquid			1/4" x 2
Maximum pipe length (per unit/total)	m		20 / 30
Maximum height difference	m		10
Chargeless pipe length	m		20
Power supply	V-ph-Hz		220/240-1-50

C = cooling mode
H = heating mode

Standard size



Stylish design and compact dimensions to suit all standard 600 x 600 mm grid ceilings.

Its compact and stylish panel design makes it discreet and unobtrusive.

Complete range from 10 to 16 k.

Easy maintenance: easy access to electrical box by simply removing the suction grill.

Easy installation by panel adjust pocket.

All units equipped with IR remotes as standard.

Corner pocket opening.

S M U V

4-WAY CASSETTE

INDOOR UNIT

SMUV			Physical data Indoor unit		
Indoor unit		HP	RAS-M10SMUV-E	RAS-M13SMUV-E	RAS-M16SMUV-E
Air Flow (h/l)	m^3/h - l/s	C	588 - 163	618 - 172	660 - 183
Sound pressure level (h/l)	dB(A)	C	37/30	38/30	40/31
Sound power level	dB(A)	C	52	53	55
Air Flow (h/l)	m^3/h	H	558 - 432	618 - 432	660 - 450
Sound pressure level (h/l)	dB(A)	H	37/30	38/30	40/31
Sound power level	dB(A)	H	52	53	55
Dimensions (HxWxD)	mm		268x575x575	268x575x575	268x575x575
Weight	kg		15	15	15
Flare connections (gas - liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"

C = cooling mode H = heating mode h/l= high / low speed

Slim design

210m

Very slim design and only 210 mm high, for easier and versatile installations.

The compact and quiet units are suitable for a wide range of residential and light commercial applications, with one outdoor unit serving up to four indoor units.

Easy-to-use infrared remote control or wired remote control as an option.

Low noise level: the unit operates very quietly.

Flexible air inlet: rear or below the unit.

Drain pump kit available as an option.

Up to 63,7 Pa static pressure.

G 3 D V

DUCTED

INDOOR UNIT

GDV			Physical data Indoor unit		
Indoor unit		HP	RAS-M10G3DV-E	RAS-M13G3DV-E	RAS-M16G3DV-E
Air Flow (h)	m^3/h	C	600	640	830
Sound pressure level (h)	dB(A)	C	36	37	38
Sound power level (h)	dB(A)	C	51	52	53
Air Flow (h)	m^3/h	H	600	640	830
Sound pressure level (h)	dB(A)	H	36	37	38
Sound power level (h)	dB(A)	H	51	52	53
Dimensions (HxWxD)	mm		210 × 700 × 450	210 × 700 × 400	210 × 900 × 450
Weight	kg		16	16	19
Flare connections (gas - liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"
External static pressure* (stand/upper limit)	Pa		35	35	35

C = cooling mode H = heating mode h= high speed

DAISEIKAI 6,5

Indoor Air Quality

- Plasma air purifier
- Ionizer

High standards in efficiency and comfort.

Power change button: reduce the power to 75 or 50%. Helps preventing black-outs when other appliances are used.

Self-cleaning with low density Ozone will eliminate all bacteria normally remaining after operation.

DC Hybrid Inverter technology with Twin Rotary compressor.

New ergonomic and practical remote control with easy access to main buttons and a sliding panel to hide the control used less frequently.

N 3 K V P

HI - WALL

INOOR UNIT

SMUV			Physical data Indoor unit		
Indoor unit		HP	RAS-B10N3KVP-E	RAS-B13N3KVP-E	RAS-B16N3KVP-E
Air Flow (h/l)	m^3/h - l/s	C	630 - 175	660 - 183	690 - 192
Sound pressure level (h/l)	dB(A)	C	42/27	43/27	45/29
Sound power level (h/l)	dB(A)	C	57/42	58/42	60/44
Air Flow (h/l)	m^3/h - l/s	H	700 - 194	730 - 203	750 - 208
Sound pressure level (h/l)	dB(A)	H	43/27	44/27	45/29
Sound power level	dB(A)	H	58/42	59/42	60/44
Dimensions (HxWxD)	mm		275x790x225	275x790x225	275x790x225
Weight	kg		10	10	10
Flare connections (gas - liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"

C = cooling mode H = heating mode h/l= high / low speed

IAQ Filter

Toshiba IAQ
filtration system.

Modern stylish and compact design.

Memorization of the desired operation parameters with one touch of " my comfort" button.

Self cleaning function to remove moist from the internal components of the unit.

Toshiba DC hybrid inverter technology controls and adjust the capacity supplied by the air conditioner.

N 3 K V 2

HI - WALL

INDOOR UNIT

N3KV2 Physical data Indoor unit

Indoor unit	RAS-		M07N3KV2-E	B10N3KV2-E	B13N3KV2-E	B16N3KV2-E	B22N3KV2-E	M24N3KV2-E
Air Flow	m^3/h - l/s	C	516 - 143	516 - 143	563 - 156	684 - 190	1080 - 300	1134 - 315
Sound pressure level (h/l)	dB(A)	C	38/25	38/25	39/26	45/30	47/35	49/37
Sound power level (h/l)	dB(A)	C	51/38	51/38	52/39	58/43	60/48	62/50
Air Flow	m^3/h - l/s	H	570 - 158	570 - 158	630 - 175	743 - 206	1098 - 305	1152 - 320
Sound pressure level (h/l)	dB(A)	H	38/27	39/27	40/28	45/31	47/35	49/37
Sound power level (h/l)	dB(A)	H	51/40	52/40	53/41	58/44	60/48	62/50
Dimensions (HxWxD)	mm		275x790x205	275x790x205	275x790x205	275x790x205	320x1050x228	320x1050x228
Weight	kg		9	9	9	9	13	13
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"

C = cooling mode H = heating mode h/l= high / low speed

Floor heating function

Unique floor heating function, to deliver a powerful flow at floor level for a uniform and comfortable room heating.

Innovative and compact unit to be installed on the floor and in low wall applications, fit perfectly under the window sills or in a low ceiling attic.

Compact and modern design in all three dimensions (60x70x22 cm). Bi-flow. Two outlets for complete personalized flow: flow intensity and air direction control.

Toshiba IAQ filtration system.

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.

U F V

CONSOLE

INDOOR UNIT

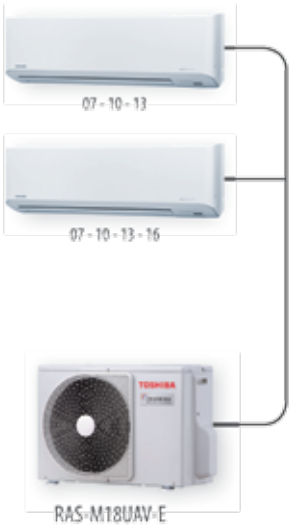
UFV Physical data Indoor unit

Indoor unit		HP	RAS-B10UFV-E	RAS-B13UFV-E	RAS-B18UFV-E
Air Flow	m^3/h - l/s	C	468 - 130	510 - 142	600 - 167
Sound pressure level (h/l)	dB(A)	C	39/26	40/27	46/34
Sound power level	dB(A)	C	54	55	61
Air Flow	m3/h - l/s	H	510 - 142	552 - 153	642 - 178
Sound pressure level (h/l)	dB(A)	H	39/26	40/27	46/34
Sound power level (h/l)	dB(A)	H	54	55	61
Dimensions (HxWxD)	mm		600x700x220	600x700x220	600x700x220
Weight	kg		16	16	16
Flare connections (gas - liquid)			3/8" - 1/4"	3/8" - 1/4"	1/2" - 1/4"

C = cooling mode H = heating mode h/l= high / low speed

Indoor units combinations examples

2:1



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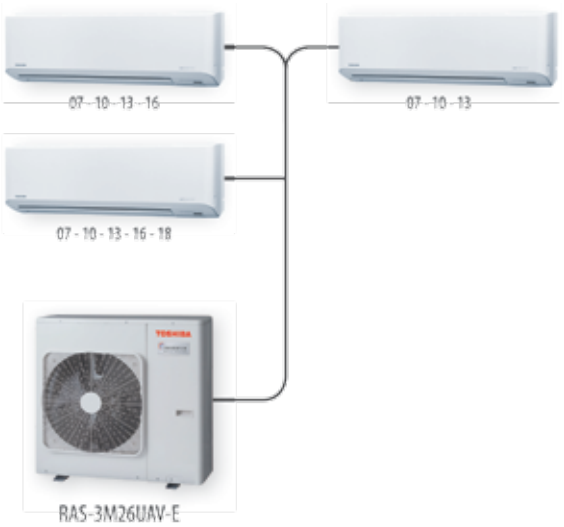


4:1

5:1

Note: Differtent type of indoor units can be connected in the same system. Refer to the matching table to see the sizes available for each system combination.

Outdoor unit RAS-M14GAV-E — Combination ratings (size 14) heat pump

Performances in Cooling mode

Operating status	Combination		Unit capacity (kW)		Cooling capacity (kW)			Power input (W)			Operating current (A)			SEER	label
	Unit A	Unit B	Unit A	Unit B	Min.	Rated	Max	Min.	Rated	Max	Min.	Rated	Max		
2 unit operation	10	10	1,95	1,95	1,4	3,9	4,4	230	1070	1290	1,43	4,9	5,84	5,80	A+
	13	10	2,33	1,67	1,4	4	4,5	230	1080	1300	1,43	4,94	5,89	5,83	A+

Performances in Heating mode

Operating status	Combination		Unit capacity (kW)		Heating capacity (kW)			Power input (W)			Operating current (A)			SCOP	label
	Unit A	Unit B	Unit A	Unit B	Min.	Rated	Max	Min.	Rated	Max	Min.	Rated	Max		
2 unit operation	10	10	2,15	2,15	0,8	4,3	5,1	179	980	1230	1,11	4,39	5,51	3,84	A
	13	10	2,5	1,9	0,8	4,4	5,2	179	1010	1250	1,11	4,53	5,6	3,84	A

Outdoor unit RAS-M18UAV-E — Combination ratings (size 18) heat pump

Performances in Cooling mode

Operating status	Combination		Unit capacity (kW)		Cooling capacity (kW)			Power input (W)			Operating current (A)			SEER	label
	Unit A	Unit B	Unit A	Unit B	Min.	Rated	Max.	Min.	Rated	Max.	Min.	Rated	Max.		
2 unit operation	07	07	2,00	2,00	1,4	4,0	4,8	260	960	2150	1,61	4,50	9,54	5,95	A+
	10	07	2,64	1,96	1,4	4,6	6,0	260	1200	2150	1,61	5,61	9,54	6,12	A++
	10	10	2,55	2,55	1,4	5,1	6,1	260	1410	2150	1,61	6,45	9,54	6,25	A++
	13	07	3,31	1,79	1,4	5,1	6,1	260	1411	2170	1,61	6,45	9,63	6,24	A++
	13	10	2,95	2,15	1,4	5,1	6,2	260	1411	2170	1,61	6,45	9,63	6,24	A++
	16	07	3,53	1,57	1,4	5,1	6,2	260	1411	2170	1,61	6,45	9,63	6,22	A++
	16	10	3,19	1,91	1,4	5,1	6,2	260	1411	2170	1,61	6,45	9,63	6,22	A++
	13	13	2,55	2,55	1,4	5,1	6,2	260	1411	2170	1,61	6,45	9,63	6,23	A++
	16	16	2,85	2,35	1,4	5,2	6,2	260	1440	2170	1,61	6,45	9,63	6,23	A++

Performances in Heating mode

Operating status	Combination		Unit capacity (kW)		Heating capacity (kW)			Power input (W)			Operating current (A)			SCOP	label
	Unit A	Unit B	Unit A	Unit B	Min.	Rated	Max.	Min.	Rated	Max.	Min.	Rated	Max.		
2 unit operation	07	07	2,70	2,70	1,0	5,4	8,0	183	1190	2480	1,14	5,35	11,12	4,59	A+
	10	07	3,22	2,18	1,0	5,4	8,2	183	1190	2530	1,14	5,35	11,22	4,59	A+
	10	10	2,70	2,70	1,0	5,4	8,2	183	1190	2530	1,14	5,35	11,22	4,59	A+
	13	07	3,57	1,93	1,0	5,5	8,2	183	1168	2530	1,14	5,24	11,22	4,58	A+
	13	10	3,06	2,44	1,0	5,5	8,3	183	1168	2530	1,14	5,24	11,22	4,58	A+
	16	07	3,69	1,81	1,0	5,5	8,3	183	1168	2530	1,14	5,24	11,22	4,58	A+
	16	10	3,18	2,32	1,0	5,5	8,3	183	1168	2530	1,14	5,24	11,22	4,58	A+
	13	13	2,75	2,75	1,0	5,5	8,3	183	1168	2530	1,14	5,24	11,22	4,58	A+
	16	16	2,93	2,67	1,0	5,6	8,3	183	1190	2530	1,14	5,35	11,22	4,59	A+

Outdoor unit RAS-3M26UAV-E — Combination ratings (size 26) heat pump

Performances in Cooling mode

Operating status	Combination			Unit capacity (kW)			Cooling capacity (kW)			Power input (W)			Operating current (A)			SEER	label
	Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Rated	Max	Min.	Rated	Max	Min.	Rated	Max.		
	07	07	07	2,00	2,00	2,00	3,8	6,0	8,4	950	1400	2720	4,59	6,41	12,07	5,57	A
	10	07	07	2,70	2,00	2,00	3,8	6,7	8,4	950	1660	2720	4,59	7,60	12,07	5,73	A+
	13	07	07	3,56	1,92	1,92	3,9	7,4	8,6	960	1975	2750	4,64	9,04	12,20	5,79	A+
	16	07	07	3,92	1,74	1,74	3,9	7,4	8,6	960	1975	2750	4,64	9,04	12,20	5,78	A+
	18	07	07	4,11	1,64	1,64	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,80	A+
	22	07	07	4,44	1,48	1,48	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,98	A+
	24	07	07	4,73	1,33	1,33	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,96	A+
	10	10	07	2,70	2,70	2,00	3,8	7,4	8,4	950	1850	2720	4,59	8,47	12,07	5,84	A+
	13	10	07	3,26	2,38	1,76	3,9	7,4	8,6	960	1975	2750	4,64	9,04	12,20	5,79	A+
	16	10	07	3,62	2,17	1,61	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,76	A+
	18	10	07	3,81	2,06	1,53	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,80	A+
	22	10	07	4,15	1,87	1,38	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,98	A+
	24	10	07	4,45	1,69	1,25	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,96	A+
	13	13	07	2,91	2,91	1,57	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,77	A+
	16	13	07	3,26	2,68	1,45	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,76	A+
	18	13	07	3,46	2,56	1,38	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,79	A+
	22	13	07	3,79	2,34	1,26	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,97	A+
	24	13	07	4,10	2,14	1,16	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,95	A+
	16	16	07	3,03	3,03	1,35	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,87	A+
	18	16	07	3,22	2,90	1,29	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	6,03	A+
	22	16	07	3,60	2,70	1,20	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,97	A+
	24	16	07	3,92	2,48	1,10	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,95	A+
	10	10	10	2,47	2,47	2,47	3,9	7,4	8,6	960	1975	2750	4,64	9,04	12,20	5,79	A+
	13	10	10	3,01	2,20	2,20	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,78	A+
3 unit operation	16	10	10	3,36	2,02	2,02	4,0	7,4	8,8	970	1975	770	4,69	9,04	12,29	5,76	A+
	18	10	10	3,56	1,92	1,92	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,80	A+
	22	10	10	3,89	1,75	1,75	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,98	A+
	24	10	10	4,20	1,60	1,60	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,96	A+
	13	13	10	2,71	2,71	1,98	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,77	A+
	16	13	10	3,06	2,51	1,83	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,76	A+
	18	13	10	3,25	2,40	1,75	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,92	A+
	22	13	10	3,63	2,24	1,63	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,98	A+
	24	13	10	3,94	2,06	1,50	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,96	A+
	16	16	10	2,85	2,85	1,71	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,99	A+
	18	16	10	3,03	2,73	1,64	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	6,03	A+
	22	16	10	3,41	2,56	1,53	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,97	A+
	24	16	10	3,72	2,36	1,42	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,95	A+
	13	13	13	2,47	2,47	2,47	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,76	A+
	16	13	13	2,80	2,30	2,30	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,88	A+
	18	13	13	2,98	2,21	2,21	4,0	7,4	8,8	970	1975	2770	4,69	9,04	12,29	5,91	A+
	22	13	13	3,36	2,07	2,07	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,97	A+
	24	13	13	3,67	1,91	1,91	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,96	A+
	16	16	13	2,66	2,66	2,19	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,99	A+
	18	16	13	2,84	2,56	2,10	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	6,03	A+
	22	16	13	3,17	2,38	1,95	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,96	A+
	24	16	13	3,48	2,21	1,81	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,95	A+
	16	16	16	2,50	2,50	2,50	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,98	A+
	18	16	16	2,68	2,41	2,41	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	6,02	A+
	22	16	16	3,00	2,25	2,25	4,1	7,5	9,0	980	2000	2800	4,73	9,15	12,42	5,95	A+

Outdoor unit RAS-3M26UAV-E

Combination ratings (size 26) heat pump

Performances in Heating mode

Operating status	Combination			Unit capacity (kW)			Heating capacity (kW)			Power input (W)			Operating current (A)			SCOP	label
	Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min.	Rated	Max	Min.	Rated	Max	Min.	Rated	Max.		
3 unit operation	07	07	07	2,70	2,70	2,70	2,0	8,1	10,8	380	1800	2750	2,07	8,24	12,20	4,41	A+
	10	07	07	3,53	2,38	2,38	2,0	8,3	10,8	380	1900	2750	2,07	8,24	12,20	4,41	A+
	13	07	07	4,28	2,31	2,31	2,0	8,9	10,8	380	2175	2750	2,07	9,95	12,20	4,41	A+
	16	07	07	4,49	2,20	2,20	2,0	8,9	10,8	380	2175	2750	2,07	9,95	12,20	4,41	A+
	18	07	07	4,68	2,11	2,11	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	07	07	5,02	1,94	1,94	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,27	A+
	24	07	07	5,34	1,78	1,78	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,26	A+
	10	10	07	3,18	3,18	2,14	2,0	8,5	10,8	380	2000	2750	2,07	9,15	12,20	4,41	A+
	13	10	07	3,80	3,04	2,05	2,0	8,9	10,8	380	2175	2750	2,07	9,95	12,20	4,41	A+
	16	10	07	4,01	2,92	1,97	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	18	10	07	4,20	2,80	1,89	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	10	07	4,55	2,60	1,75	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,27	A+
	24	10	07	4,87	2,41	1,62	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,26	A+
	13	13	07	3,50	3,50	1,89	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	16	13	07	3,71	3,37	1,82	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	18	13	07	3,90	3,25	1,75	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	13	07	4,24	3,03	1,63	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,26	A+
	24	13	07	4,56	2,82	1,52	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,26	A+
	16	16	07	3,57	3,57	1,75	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	18	16	07	3,76	3,45	1,69	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	16	07	4,14	3,26	1,60	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,56	4,27	A+
	24	16	07	4,47	3,04	1,49	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,26	A+
	10	10	10	2,97	2,97	2,97	2,0	8,9	10,8	380	2175	2750	2,07	9,95	12,20	4,41	A+
	13	10	10	3,42	2,74	2,74	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	16	10	10	3,63	2,64	2,64	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	18	10	10	3,81	2,54	2,54	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	10	10	4,15	2,37	2,37	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	24	10	10	4,48	2,21	2,21	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,27	A+
	13	13	10	3,18	3,18	2,54	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,26	A+
	16	13	10	3,38	3,07	2,46	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	18	13	10	3,56	2,97	2,37	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	13	10	3,94	2,81	2,25	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,41	A+
	24	13	10	4,26	2,63	2,11	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,26	A+
	16	16	10	3,26	3,26	2,37	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,87	4,41	A+
	18	16	10	3,45	3,16	2,30	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	16	10	3,82	3,00	2,18	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,27	A+
	24	16	10	4,14	2,81	2,05	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,26	A+
	13	13	13	2,97	2,97	2,97	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	16	13	13	3,16	2,87	2,87	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	18	13	13	3,34	2,78	2,78	2,0	8,9	11,0	380	2175	2830	2,07	9,95	12,56	4,41	A+
	22	13	13	3,71	2,65	2,65	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,26	A+
	24	13	13	4,03	2,49	2,49	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,26	A+
	16	16	13	3,09	3,09	2,81	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,41	A+
	18	16	13	3,27	3,00	2,73	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,41	A+
	22	16	13	3,60	2,83	2,57	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,27	A+
	24	16	13	3,92	2,66	2,42	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,26	A+
	16	16	16	3,00	3,00	3,00	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,42	A+
	18	16	16	3,18	2,91	2,91	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,42	A+
	22	16	16	3,50	2,75	2,75	2,0	9,0	11,2	380	2200	2900	2,07	10,07	12,87	4,27	A+

Outdoor unit RAS-4M27UAV-E — Combination ratings (size 27) heat pump

Performances in Cooling mode

Operating status	Combination				Unit capacity (kW)				Cooling capacity (kW)			Power input (W)			Operating current (A)			SEER	label
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Rated	Max	Min.	Rated	Max	Min.	Rated	Max.		
	07	07	07	07	1,78	1,78	1,78	1,78	4,0	7,1	8,6	850	2029	2620	4,11	9,29	11,62	5,81	A+
	10	07	07	07	2,33	1,72	1,72	1,72	4,0	7,5	8,7	890	2143	2640	4,30	9,81	11,71	5,88	A+
	13	07	07	07	2,90	1,57	1,57	1,57	4,1	7,6	8,9	900	2171	2700	4,35	9,94	11,98	5,88	A+
	16	07	07	07	3,30	1,47	1,47	1,47	4,1	7,7	9,0	930	2200	2730	4,49	10,07	12,11	5,89	A+
	18	07	07	07	3,55	1,42	1,42	1,42	4,1	7,8	9,1	930	2229	2760	4,49	10,20	12,24	5,94	A+
	22	*07	*07	*07	3,95	1,32	1,32	1,32	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,88	A+
	24	*07	*07	*07	4,28	1,21	1,21	1,21	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,86	A+
	10	10	07	07	2,18	2,18	1,62	1,62	4,1	7,6	8,9	900	2171	2700	4,35	9,94	11,98	5,89	A+
	13	10	07	07	2,74	2,00	1,48	1,48	4,1	7,7	9,0	930	2200	2730	4,49	10,07	12,11	5,90	A+
	16	10	07	07	3,13	1,88	1,39	1,39	4,1	7,8	9,1	930	2229	2760	4,49	10,20	12,24	5,90	A+
	18	10	07	07	3,38	1,82	1,35	1,35	4,1	7,9	9,2	940	2257	2790	4,54	10,33	12,38	5,95	A+
	22	*10	*07	*07	3,73	1,68	1,24	1,24	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,88	A+
	24	*10	*07	*07	4,06	1,55	1,14	1,14	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,86	A+
	13	13	07	07	2,56	2,56	1,39	1,39	4,1	7,9	9,2	940	2257	2790	4,54	10,33	12,38	5,92	A+
	16	13	07	07	2,91	2,40	1,30	1,30	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,90	A+
	18	13	07	07	3,11	2,30	1,24	1,24	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,94	A+
	22	*13	*07	*07	3,46	2,13	1,15	1,15	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,87	A+
	24	*13	*07	*07	3,79	1,98	1,07	1,07	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,86	A+
	16	16	07	07	2,73	2,73	1,22	1,22	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,89	A+
	18	16	07	07	2,93	2,63	1,17	1,17	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,93	A+
	18	18	07	07	2,82	2,82	1,13	1,13	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,96	A+
	10	10	10	07	2,03	2,03	2,03	1,50	4,1	7,6	8,9	900	2171	2700	4,35	9,94	11,98	5,89	A+
	13	10	10	07	2,60	1,90	1,90	1,41	4,1	7,8	9,1	930	2229	2760	4,49	10,20	12,24	5,91	A+
	16	10	10	07	2,99	1,79	1,79	1,33	4,1	7,9	9,2	940	2257	2790	4,54	10,33	12,38	5,92	A+
	18	10	10	07	3,19	1,72	1,72	1,27	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,94	A+
	22	*10	*10	*07	3,54	1,59	1,59	1,18	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,88	A+
	24	*10	*10	*07	3,87	1,47	1,47	1,09	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,86	A+
4 unit operation	13	13	10	07	2,42	2,42	1,76	1,31	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,91	A+
	16	13	10	07	2,76	2,27	1,65	1,22	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,90	A+
	18	13	10	07	2,95	2,18	1,59	1,18	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,94	A+
	22	*13	*10	*07	3,33	2,06	1,50	1,11	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,89	A+
	24	*13	*10	*07	3,66	1,91	1,39	1,03	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,88	A+
	16	16	10	07	2,59	2,59	1,56	1,15	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,89	A+
	18	16	10	07	2,78	2,50	1,50	1,11	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,93	A+
	18	18	10	07	2,72	2,72	1,47	1,09	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,97	A+
	13	13	13	07	2,23	2,23	2,23	1,21	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,91	A+
	16	13	13	07	2,56	2,10	2,10	1,14	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,90	A+
	18	13	13	07	2,74	2,03	2,03	1,10	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,93	A+
	16	16	13	07	2,45	2,45	2,01	1,09	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,90	A+
	18	16	13	07	2,63	2,37	1,95	1,05	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,94	A+
	10	10	10	10	1,98	1,98	1,98	1,98	4,1	7,9	9,2	940	2257	2790	4,54	10,33	12,38	5,94	A+
	13	10	10	10	2,48	1,81	1,81	1,81	4,1	7,9	9,2	940	2257	2790	4,54	10,33	12,38	5,93	A+
	16	10	10	10	2,82	1,69	1,69	1,69	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,91	A+
	18	10	10	10	3,02	1,63	1,63	1,63	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,94	A+
	22	*10	*10	*10	3,40	1,53	1,53	1,53	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,89	A+
	24	*10	*10	*10	3,74	1,42	1,42	1,42	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,88	A+
	13	13	10	10	2,28	2,28	1,67	1,67	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,91	A+
	16	13	10	10	2,61	2,15	1,57	1,57	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,90	A+
	16	16	10	10	2,50	2,50	1,50	1,50	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,94	A+
	18	13	10	10	2,80	2,07	1,51	1,51	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,91	A+
	18	16	10	10	2,68	2,42	1,45	1,45	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,94	A+
	13	13	13	10	2,12	2,12	2,12	1,55	4,2	7,9	9,3	950	2257	2820	4,59	10,33	12,51	5,91	A+
	16	13	13	10	2,47	2,03	2,03	1,48	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,91	A+
	18	13	13	10	2,65	1,96	1,96	1,43	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,95	A+
	13	13	13	13	2,00	2 ,00	2,00	2,00	4,2	8,0	9,3	950	2286	2820	4,59	10,46	12,51	5,92	A+

* Applicable FCU are only N3KVP-E or N3KV2-E

Outdoor unit RAS-4M27UAV-E Combination ratings (size 27) heat pump

Performances in Heating mode

Operating status	Combination				Unit capacity (kW)				Heating capacity (kW)			Power input (W)			Operating current (A)			SCOP	label
	Unit A	Unit B	Unit C	Unit D	Unit A	Unit B	Unit C	Unit D	Min.	Rated	Max.	Min.	Rated	Max.	Min.	Rated	Max.		
	07	07	07	07	2,09	2,09	2,09	2,09	2,9	8,4	11,5	501	1792	2560	2,42	8,20	11,36	4,24	A+
	10	07	07	07	2,80	1,89	1,89	1,89	2,9	8,5	11,5	501	1812	2560	2,42	8,29	11,36	4,24	A+
	13	07	07	07	3,30	1,78	1,78	1,78	2,9	8,6	11,6	501	1850	2580	2,42	8,47	11,45	4,24	A+
	16	07	07	07	3,53	1,73	1,73	1,73	2,9	8,7	11,6	501	1869	2580	2,42	8,55	11,45	4,24	A+
	18	07	07	07	3,75	1,69	1,69	1,69	2,9	8,8	11,6	501	1889	2580	2,42	8,65	11,45	4,24	A+
	22	*07	*07	*07	4,13	1,59	1,59	1,59	2,6	8,9	11,7	480	1905	2600	2,32	8,72	11,54	4,10	A+
	24	*07	*07	*07	4,45	1,48	1,48	1,48	2,6	8,9	11,7	480	1905	2600	2,32	8,72	11,54	4,10	A+
	10	10	07	07	2,58	2,58	1,74	1,74	2,9	8,6	11,6	501	1850	2580	2,42	8,47	11,45	4,24	A+
	13	10	07	07	3,03	2,43	1,64	1,64	2,9	8,7	11,6	501	1869	2580	2,42	8,55	11,45	4,24	A+
	16	10	07	07	3,26	2,37	1,60	1,60	2,9	8,8	11,6	501	1889	2580	2,42	8,65	11,45	4,24	A+
	18	10	07	07	3,47	2,31	1,56	1,56	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	22	*10	*07	*07	3,80	2,17	1,47	1,47	2,6	8,9	11,7	480	1905	2600	2,32	8,72	11,54	4,10	A+
	24	*10	*07	*07	4,12	2,03	1,37	1,37	2,6	8,9	11,7	480	1905	2600	2,32	8,72	11,54	4,10	A+
	13	13	07	07	2,89	2,89	1,56	1,56	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,23	A+
	16	13	07	07	3,08	2,80	1,51	1,51	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	13	07	07	3,26	2,71	1,47	1,47	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	22	*13	*07	*07	3,58	2,56	1,38	1,38	2,6	8,9	11,7	480	1905	2600	2,32	8,72	11,54	4,10	A+
	24	*13	*07	*07	3,90	2,41	1,30	1,30	2,6	8,9	11,7	480	1905	2600	2,32	8,72	11,54	4,10	A+
	16	16	07	07	2,98	2,98	1,47	1,47	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	16	07	07	3,16	2,90	1,42	1,42	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	18	07	07	3,07	3,07	1,38	1,38	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	10	10	10	07	2,35	2,35	2,35	1,59	2,9	8,6	11,6	501	1850	2580	2,42	8,47	11,45	4,24	A+
	13	10	10	07	2,81	2,25	2,25	1,52	2,9	8,8	11,6	501	1889	2580	2,42	8,65	11,45	4,24	A+
	16	10	10	07	3,02	2,20	2,20	1,48	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	10	10	07	3,20	2,13	2,13	1,44	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	22	*10	*10	*07	3,52	2,01	2,01	1,36	2,6	8,9	11,7	501	1905	2600	2,32	8,72	11,54	4,10	A+
	24	*10	*10	*07	3,83	1,89	1,89	1,28	2,6	8,9	11,7	480	1905	2600	2,32	8,72	11,54	4,10	A+
4 unit operation	13	13	10	07	2,66	2,66	2,13	1,44	2,9	8,9	11,7	480	1905	2600	2,42	8,72	11,54	4,23	A+
	16	13	10	07	2,85	2,59	2,07	1,40	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	13	10	07	3,02	2,51	2,01	1,36	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	22	*13	*10	*07	3,37	2,41	1,93	1,30	2,6	9,0	11,7	480	1927	2600	2,32	8,82	11,54	4,10	A+
	24	*13	*10	*07	3,68	2,27	1,82	1,23	2,6	9,0	11,7	480	1927	2600	2,32	8,82	11,54	4,10	A+
	16	16	10	07	2,77	2,77	2,01	1,36	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	16	10	07	2,93	2,69	1,96	1,32	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	18	10	07	2,89	2,89	1,93	1,30	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,24	A+
	13	13	13	07	2,51	2,51	2,51	1,36	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,23	A+
	16	13	13	07	2,69	2,45	2,45	1,32	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	13	13	07	2,86	2,38	2,38	1,29	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	16	16	13	07	2,65	2,65	2,41	1,30	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,24	A+
	18	16	13	07	2,81	2,58	2,34	1,27	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,24	A+
	10	10	10	10	2,18	2,18	2,18	2,18	2,9	8,7	11,6	501	1869	2580	2,42	8,55	11,45	4,24	A+
	13	10	10	10	2,62	2,09	2,09	2,09	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	16	10	10	10	2,80	2,03	2,03	2,03	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	10	10	10	2,97	1,98	1,98	1,98	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	22	*10	*10	*10	3,32	1,89	1,89	1,89	2,6	9,0	11,7	480	1927	2600	2,32	8,82	11,54	4,10	A+
	24	*10	*10	*10	3,63	1,79	1,79	1,79	2,6	9,0	11,7	480	1927	2600	2,32	8,82	11,54	4,10	A+
	13	13	10	10	2,47	2,47	1,98	1,98	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,23	A+
	16	13	10	10	2,65	2,41	1,92	1,92	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	16	16	10	10	2,61	2,61	1,89	1,89	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,24	A+
	18	13	10	10	2,81	2,34	1,87	1,87	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,24	A+
	18	16	10	10	2,77	2,54	1,85	1,85	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,24	A+
	13	13	13	10	2,34	2,34	2,34	1,87	2,9	8,9	11,7	501	1905	2600	2,42	8,72	11,54	4,23	A+
	16	13	13	10	2,54	2,31	2,31	1,85	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,24	A+
	18	13	13	10	2,70	2,25	2,25	1,80	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,24	A+
	13	13	13	13	2,25	2,25	2,25	2,25	2,9	9,0	11,7	501	1927	2600	2,42	8,82	11,54	4,23	A+

* Applicable FCU are only N3KVP-E or N3KV2-E

Outdoor unit RAS-5M34UAV-E1 Combination ratings (size 34) heat pump

Performances in Cooling mode

Operating status	Combination					Unit capacity (kW)					Cooling capacity (kW)			Power input (W)			Operating current (A)			SEER	label
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Rated	Max.	Min.	Rated	Max.	Min.	Rated	Max.		
5 unit operation	07	07	07	07	07	1,96	1,96	1,96	1,96	1,96	3,7	9,8	10,8	950	2865	3630	4,59	13,11	16,10	6,11	A++
	10	07	07	07	07	2,50	1,85	1,85	1,85	1,85	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	13	07	07	07	07	3,13	1,69	1,69	1,69	1,69	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	16	07	07	07	07	3,56	1,58	1,58	1,58	1,58	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	18	07	07	07	07	3,81	1,52	1,52	1,52	1,52	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	10	10	07	07	07	2,34	2,34	1,74	1,74	1,74	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	13	10	07	07	07	2,95	2,16	1,60	1,60	1,60	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	16	10	07	07	07	3,38	2,03	1,50	1,50	1,50	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,14	A++
	18	10	07	07	07	3,61	1,95	1,45	1,45	1,45	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	13	13	07	07	07	2,73	2,73	1,48	1,48	1,48	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	16	13	07	07	07	3,14	2,58	1,39	1,39	1,39	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	18	13	07	07	07	3,37	2,49	1,35	1,35	1,35	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	16	16	07	07	07	2,97	2,97	1,32	1,32	1,32	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,14	A++
	18	16	07	07	07	3,19	2,87	1,28	1,28	1,28	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	10	10	10	07	07	2,21	2,21	2,21	1,64	1,64	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	13	10	10	07	07	2,80	2,04	2,04	1,51	1,51	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	13	13	10	07	07	2,60	2,60	1,90	1,40	1,40	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	16	10	10	07	07	3,21	1,92	1,92	1,42	1,42	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	18	10	10	07	07	3,44	1,86	1,86	1,38	1,38	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,13	A++
	13	13	13	07	07	2,43	2,43	2,43	1,31	1,31	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,14	A++
	16	13	13	07	07	2,80	2,30	2,30	1,25	1,25	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,09	A+
	18	13	13	07	07	3,02	2,23	2,23	1,21	1,21	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	16	16	10	07	07	2,84	2,84	1,70	1,26	1,26	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	18	16	10	07	07	3,06	2,75	1,65	1,22	1,22	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	16	16	13	07	07	2,67	2,67	2,19	1,19	1,19	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	18	16	13	07	07	2,88	2,59	2,13	1,15	1,15	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	10	10	10	10	07	2,09	2,09	2,09	2,09	1,55	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,14	A++
	13	10	10	10	07	2,65	1,94	1,94	1,94	1,43	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	16	10	10	10	07	3,05	1,83	1,83	1,83	1,36	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,09	A+
	18	10	10	10	07	3,28	1,77	1,77	1,77	1,31	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A+
	13	13	10	10	07	2,48	2,48	1,81	1,81	1,34	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	16	13	10	10	07	2,86	2,35	1,71	1,71	1,27	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	18	13	10	10	07	3,07	2,28	1,66	1,66	1,23	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	16	16	10	10	07	2,72	2,72	1,63	1,63	1,21	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,13	A++
	13	13	13	10	07	2,32	2,32	2,32	1,69	1,25	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	16	13	13	10	07	2,68	2,21	2,21	1,61	1,19	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,13	A++
	16	16	13	10	07	2,56	2,56	2,11	1,54	1,14	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,14	A++
	13	13	13	13	07	2,18	2,18	2,18	2,18	1,18	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,09	A+
	16	13	13	13	07	2,53	2,08	2,08	2,08	1,13	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,09	A+
	16	16	13	13	07	2,42	2,42	1,99	1,99	1,08	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	10	10	10	10	10	1,98	1,98	1,98	1,98	1,98	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	13	10	10	10	10	2,53	1,84	1,84	1,84	1,84	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	16	10	10	10	10	2,91	1,75	1,75	1,75	1,75	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,11	A++
	18	10	10	10	10	3,13	1,69	1,69	1,69	1,69	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,12	A++
	13	13	10	10	10	2,36	2,36	1,72	1,72	1,72	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,13	A++
	16	13	10	10	10	2,73	2,25	1,64	1,64	1,64	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,09	A+
	18	13	10	10	10	2,95	2,18	1,59	1,59	1,59	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,09	A+
	16	16	10	10	10	2,61	2,61	1,56	1,56	1,56	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,09	A+
	13	13	13	10	10	2,22	2,22	2,22	1,62	1,62	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	16	13	13	10	10	2,58	2,12	2,12	1,55	1,55	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	18	13	13	10	10	2,78	2,06	2,06	1,50	1,50	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,13	A++
	16	16	13	10	10	2,49	2,49	2,04	1,49	1,49	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,08	A+
	13	13	13	13	10	2,09	2,09	2,09	2,09	1,53	3,7	9,9	10,9	950	2894	3670	4,59	13,24	16,28	6,10	A++
	16	13	13	13	10	2,46	2,02	2,02	2,02	1,48	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,11	A++
	18	13	13	13	10	2,66	1,97	1,97	1,97	1,44	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,11	A++
	16	16	13	13	10	2,36	2,36	1,94	1,94	1,41	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,14	A++
	13	13	13	13	13	2,00	2,00	2,00	2,00	2,00	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,10	A++
	16	13	13	13	13	2,33	1,92	1,92	1,92	1,92	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,10	A++
	22	*07	*07	*07	*07	4,24	1,41	1,41	1,41	1,41	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*10	*07	*07	*07	4,04	1,82	1,35	1,35	1,35	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*10	*10	*07	*07	3,86	1,74	1,74	1,29	1,29	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*10	*10	*10	*07	3,69	1,66	1,66	1,66	1,23	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*10	*10	*10	*10	3,54	1,59	1,59	1,59	1,59	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*13	*07	*07	*07	3,78	2,33	1,26	1,26	1,26	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*13	*10	*07	*07	3,62	2,23	1,63	1,21	1,21	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*13	*10	*10	*07	3,47	2,14	1,56	1,56	1,16	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	22	*13	*10	*10	*10	3,37	2,08	1,52	1,52	1,52	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,07	A+
	22	*13	*13	*07	*07	3,41	2,11	2,11	1,14	1,14	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,09	A+
	22	*13	*13	*10	*07	3,31	2,04	2,04	1,49	1,10	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,09	A+
	22	*13	*13	*10	*10	3,19	1,97	1,97	1,44	1,44	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,09	A+
	22	*13	*13	*13	*07	3,14	1,94	1,94	1,94	1,05	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,08	A+
	24	*07	*07	*07	*07	4,65	1,31	1,31	1,31	1,31	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*10	*07	*07	*07	4,45	1,69	1,25	1,25	1,25	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*10	*10	*07	*07	4,26	1,62	1,62	1,20	1,20	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*10	*10	*10	*07	4,09	1,55	1,55	1,55	1,15	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*10	*10	*10	*10	3,93	1,49	1,49	1,49	1,49	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*13	*07	*07	*07	4,18	2,18	1,18	1,18	1,18	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*13	*10	*07	*07	4,02	2,09	1,53	1,13	1,13	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*13	*10	*10	*07	3,86	2,01	1,47	1,47	1,09	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,07	A+
	24	*13	*10	*10	*10	3,76	1,96	1,43	1,43	1,43	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,06	A+
	24	*13	*13	*07	*07	3,80	1,98	1,98	1,07	1,07	3,7	9,9	11	950	2894	3700	4,59	13,24	16,42	6,08	A+
	24	*13	*13	*10	*07	3,70	1,93	1,93	1,41	1,04	3,7	10,0	11	950	2923	3700	4,59	13,38	16,42	6,07	A+

* Applicable FCU are only N3KVP-E or N3KV2-E

Outdoor unit RAS-5M34UAV-E1 — Combination ratings (size 34) heat pump

Performances in Heating mode

Operating status	Combination					Unit capacity (kW)					Heating capacity (kW)			Power input (W)			Operating current (A)			COP	label
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit A	Unit B	Unit C	Unit D	Unit E	Min.	Rated	Max.	Min.	Rated	Max.	Min.	Rated	Max.		
5 unit operation	07	07	07	07	07	2,28	2,28	2,28	2,28	2,28	2,7	11,4	13,4	508	2690	4020	2,76	12,31	17,83	4,06	A+
	10	07	07	07	07	3,16	2,13	2,13	2,13	2,13	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	07	07	07	07	3,70	2,00	2,00	2,00	2,00	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	07	07	07	07	3,95	1,94	1,94	1,94	1,94	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	07	07	07	07	4,18	1,88	1,88	1,88	1,88	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	10	10	07	07	07	2,91	2,91	1,96	1,96	1,96	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	10	07	07	07	3,42	2,74	1,85	1,85	1,85	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	10	07	07	07	3,66	2,66	1,79	1,79	1,79	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	10	07	07	07	3,88	2,59	1,75	1,75	1,75	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	07	07	07	3,23	3,23	1,75	1,75	1,75	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	07	07	07	3,46	3,15	1,70	1,70	1,70	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	13	07	07	07	3,68	3,06	1,65	1,65	1,65	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	07	07	07	3,37	3,37	1,65	1,65	1,65	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	16	07	07	07	3,58	3,28	1,61	1,61	1,61	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	10	10	10	07	07	2,69	2,69	2,69	1,82	1,82	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	10	10	07	07	3,18	2,54	2,54	1,72	1,72	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	10	07	07	3,02	3,02	2,41	1,63	1,63	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	10	10	07	07	3,40	2,48	2,48	1,67	1,67	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	10	10	07	07	3,62	2,41	2,41	1,63	1,63	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	13	07	07	2,87	2,87	2,87	1,55	1,55	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	13	07	07	3,08	2,80	2,80	1,51	1,51	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	13	13	07	07	3,28	2,73	2,73	1,48	1,48	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	10	07	07	3,15	3,15	2,29	1,55	1,55	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	16	10	07	07	3,36	3,08	2,24	1,51	1,51	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	13	07	07	3,01	3,01	2,73	1,48	1,48	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	16	13	07	07	3,21	2,94	2,67	1,44	1,44	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	10	10	10	10	07	2,50	2,50	2,50	2,50	1,69	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	10	10	10	07	2,97	2,38	2,38	2,38	1,60	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	10	10	10	07	3,19	2,32	2,32	2,32	1,56	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	10	10	10	07	3,39	2,26	2,26	2,26	1,53	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	10	10	07	2,83	2,83	2,26	2,26	1,53	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	10	10	07	3,04	2,76	2,21	2,21	1,49	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	13	10	10	07	3,24	2,70	2,16	2,16	1,46	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	10	10	07	2,97	2,97	2,16	2,16	1,46	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	13	10	07	2,70	2,70	2,70	2,16	1,46	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	13	10	07	2,90	2,64	2,64	2,11	1,42	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	13	10	07	2,83	2,83	2,58	2,06	1,39	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	13	13	07	2,58	2,58	2,58	2,58	1,39	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	13	13	07	2,77	2,52	2,52	2,52	1,36	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	13	13	07	2,72	2,72	2,47	2,47	1,33	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	10	10	10	10	10	2,34	2,34	2,34	2,34	2,34	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	10	10	10	10	2,79	2,23	2,23	2,23	2,23	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	10	10	10	10	2,99	2,18	2,18	2,18	2,18	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	10	10	10	10	3,19	2,13	2,13	2,13	2,13	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	10	10	10	2,66	2,66	2,13	2,13	2,13	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	10	10	10	2,86	2,60	2,08	2,08	2,08	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	13	10	10	10	3,05	2,54	2,03	2,03	2,03	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	10	10	10	2,80	2,80	2,03	2,03	2,03	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	13	13	13	10	10	2,54	2,54	2,54	2,03	2,03	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	13	10	10	2,74	2,49	2,49	1,99	1,99	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	18	13	13	10	10	2,93	2,44	2,44	1,95	1,95	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	16	13	10	10	2,75	2,75	2,50	2,00	2,00	2,7	12,0	14	508	2833	4200	2,76	12,97	18,63	4,06	A+
	13	13	13	13	10	2,44	2,44	2,44	2,44	1,95	2,7	11,7	13,7	508	2762	4120	2,76	12,64	18,28	4,06	A+
	16	13	13	13	10	2,69	2,45	2,45	2,45	1,96	2,7	12,0	14	508	2833	4200	2,76	12,97	18,63	4,06	A+
	18	13	13	13	10	2,88	2,40	2,40	2,40	1,92	2,7	12,0	14	508	2833	4200	2,76	12,97	18,63	4,06	A+
	16	16	13	13	10	2,64	2,64	2,40	2,40	1,92	2,7	12,0	14	508	2833	4200	2,76	12,97	18,63	4,06	A+
	13	13	13	13	13	2,40	2,40	2,40	2,40	2,40	2,7	12,0	14	508	2833	4200	2,76	12,97	18,63	4,06	A+
	16	13	13	13	13	2,59	2,35	2,35	2,35	2,35	2,7	12,0	14	508	2833	4200	2,76	12,97	18,63	4,06	A+
	22	*07	*07	*07	*07	4,60	1,77	1,77	1,77	1,77	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*10	*07	*07	*07	4,29	2,45	1,65	1,65	1,65	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*10	*10	*07	*07	4,01	2,29	2,29	1,55	1,55	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*10	*10	*10	*07	3,77	2,16	2,16	2,16	1,46	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*10	*10	*10	*10	3,56	2,03	2,03	2,03	2,03	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*13	*07	*07	*07	4,07	2,91	1,57	1,57	1,57	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*13	*10	*07	*07	3,83	2,73	2,19	1,48	1,48	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*13	*10	*10	*07	3,61	2,58	2,06	2,06	1,39	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*13	*10	*10	*10	3,50	2,50	2,00	2,00	2,00	2,5	12,0	14	487	2833	4200	2,65	12,97	18,63	3,94	A+
	22	*13	*13	*07	*07	3,66	2,61	2,61	1,41	1,41	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	22	*13	*13	*10	*07	3,54	2,53	2,53	2,03	1,37	2,5	12,0	14	487	2833	4200	2,65	12,97	18,63	3,94	A+
	22	*13	*13	*10	*10	3,36	2,40	2,40	1,92	1,92	2,5	12,0	14	487	2833	4200	2,65	12,97	18,63	3,94	A+
	22	*13	*13	*13	*07	3,40	2,43	2,43	2,43	1,31	2,5	12,0	14	487	2833	4200	2,65	12,97	18,63	3,94	A+
	24	*07	*07	*07	*07	5,01	1,67	1,67	1,67	1,67	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*10	*07	*07	*07	4,69	2,32	1,56	1,56	1,56	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*10	*10	*07	*07	4,41	2,18	2,18	1,47	1,47	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*10	*10	*10	*07	4,16	2,05	2,05	2,05	1,39	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*10	*10	*10	*10	3,93	1,94	1,94	1,94	1,94	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*13	*07	*07	*07	4,47	2,76	1,49	1,49	1,49	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*13	*10	*07	*07	4,21	2,60	2,08	1,40	1,40	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*13	*10	*10	*07	3,98	2,46	1,97	1,97	1,33	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*13	*10	*10	*10	3,87	2,39	1,91	1,91	1,91	2,5	12,0	14	487	2833	4200	2,65	12,97	18,63	3,94	A+
	24	*13	*13	*07	*07	4,03	2,49	2,49	1,34	1,34	2,5	11,7	14	487	2762	4200	2,65	12,64	18,63	3,94	A+
	24	*13	*13	*10	*07	3,92	2,42	2,42	1,94	1,31	2,5	12,0	14	487	2833	4200	2,65	12,97	18,63	3,94	A+

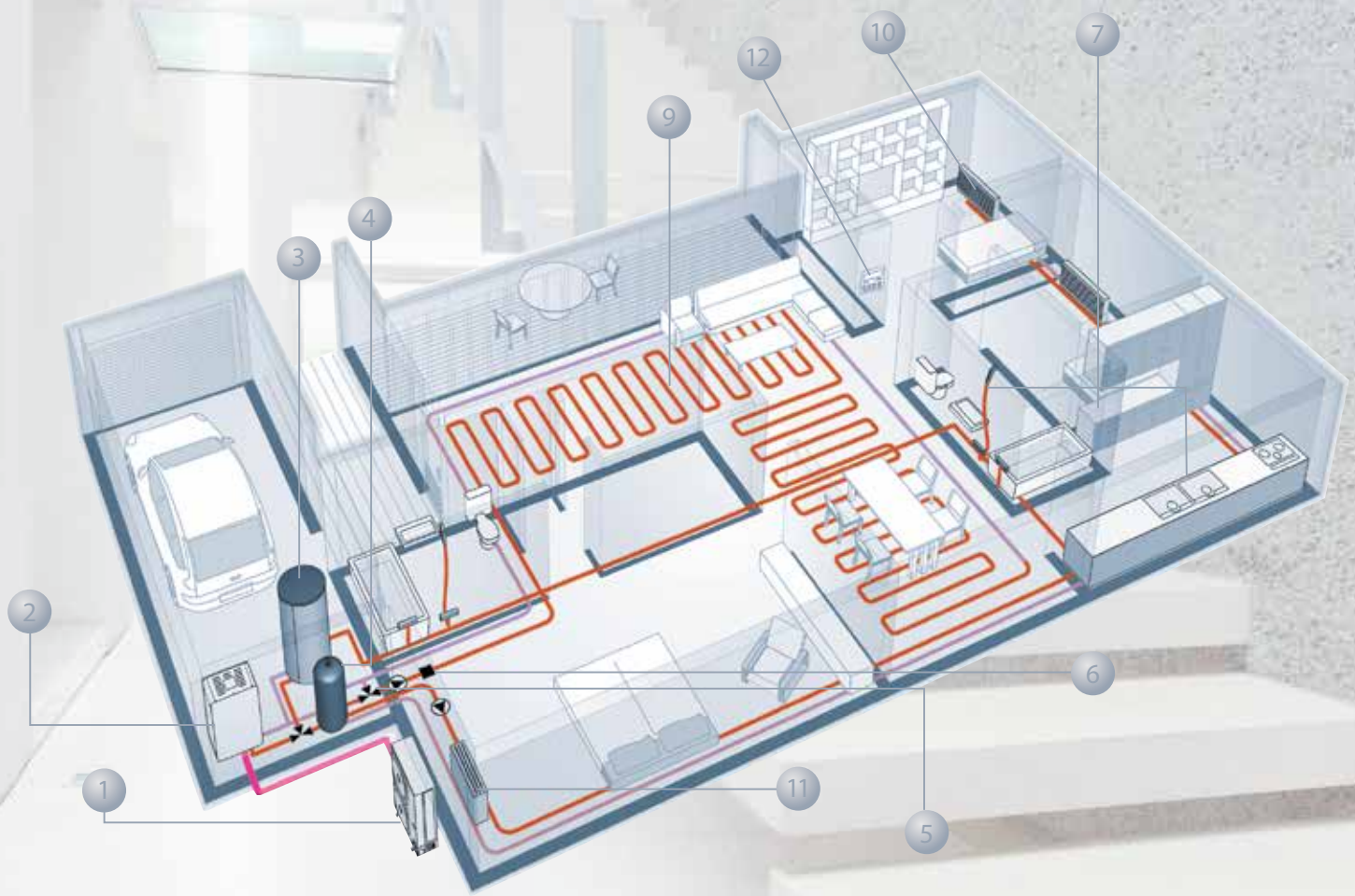
* Applicable FCU are only N3KVP-E or N3KV2-E

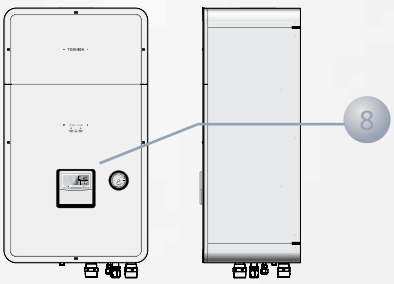
Estia

INVERTER SYSTEMS

AIR TO WATER

ESTIA





1. Outdoor unit
2. Hydro unit
3. Domestic hot water tank
4. Buffer tank*
5. Mixing valve*
6. Temperature sensor
7. Hot water supply
8. Remote controller with weekly timer
9. Floor heating*
10. Low temperature radiator*
11. Fan coil unit*
12. Room temperature remote controller

*Local supply

World-leading energy efficiency - COP of 4,88*

With its best in class COP performance, Estía air to water heat pump system delivers more heating power with less energy consumption.
Estía uses high quality components and material which contribute to the overall savings in energy consumption.
With the Toshiba advanced inverter, Estía air to water heat pump system only delivers the heating capacity required; thus consuming only the necessary electricity.
The hot water temperature is also optimized thanks to Toshiba advanced control depending on the outside air temperature. The milder outside, the air-to-water systems automatically produces lower water temperature to anticipate decreased needs of space heating. The same control logic allows to anticipate as well increasing heating needs when weather conditions become extreme; this overall temperature management gives the best conditions of comfort.
All this saving has a positive impact on the personal electricity bill and the whole community by reducing the CO_2 emissions in the atmosphere.

*HWS-1104H-E model

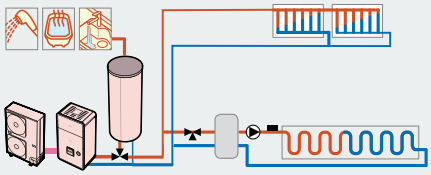
OUTDOOR UNITS

HYDRO UNITS

HOT WATER TANK

ESTIA

Two independent zones



Toshiba air to water heat pump systems can manage two independent zones.
This solution enables the delivery of water to diverse emitters at different temperature levels up to 55 °C.

This is an all in one system designed to deliver the right temperature for space heating, for domestic sanitary hot water and with the additional advantage of offering air conditioning in the warmer seasons.

World leading energy efficiency - COP up to 4,88.

Estía heat pump systems can be used in combination with different types of emitters: existing heating low temperature radiators, floor heating or fan coil units.

Contribute to reduce the CO_2 emissions in the atmosphere.

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

Toshiba Inverter uses the new vector controlled Intelligent Power Drive Unit, which enables a wider range of frequencies and voltages.

Domestic hot water from +40°C to +75°C.

Systems available in single and three phases.

E S T İ A

ESTİA

HEAT PUMP SYSTEM

OUTDOOR UNITS

HWS-804H-E

HWS-1104H-E
HWS-1104H8(R)-E
HWS-1404H-E
HWS-1404H8(R)-E
HWS-1604H8(R)-E

HYDRO UNITS

HWS-804XWHM3-E
HWS-804XWHT6-E
HWS-804XWHT9-E
HWS-1404XWHM3-E
HWS-1404XWHT6-E
HWS-1404XWHT9-E

HOT WATER TANK

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

REMOTE CONTROLS

Wired - HWS-AMS11E
Optional additional controller directly linked to the hydronic module. It can be placed directly in the living area for immediate and easy access.

HWS_XWH / HWS_H — System capacities

		Single Phase Units			Three Phase Units		
Outdoor unit	HWS-	804H-E	1104H-E	1404H-E	1104H8-E	1404H8-E	1604H8-E
Hydro unit combination	HWS-	804XWH**E	1404XWH**E	1404XWH**E	1404XWH**E	1404XWH**E	1404XWH**E
Heating Power * - (Nominal / Maximum)		8,00 / 8,52	11,20 / 14,63	14,00 / 16,74	11,20 / 14,73	14,00 / 15,77	16,00 / 16,76
Power input - (Nominal / Maximum)		1,79 / 2,01	2,30 / 3,24	3,11 / 3,95	2,34 / 3,14	3,16 / 3,55	3,72 / 3,89
COP		4,46 / 4,24	4,88 / 4,52	4,50 / 4,24	4,80 / 4,69	4,44 / 4,44	4,30 / 4,30
Cooling Power * - (Maximum)		9,19	13,82	15,00	13,15	15,44	16,39
Power input - (Maximum)		2,59	3,49	4,07	3,34	4,39	4,98
EER		3,55	3,96	3,69	3,94	3,52	3,29
Heating Power **- (Maximum)	kW	8,13	13,62	14,26	13,93	15,07	15,77
Power input - (Maximum)	kW	2,42	3,76	4,00	3,76	4,24	4,58
COP	W/W	3,36	3,62	3,56	3,70	3,56	3,44
Cooling Power **- (Nominal / Maximum)	kW	6,00/7,00	10,00/10,24	11,00/11,78	10,00/10,16	11,00/12,02	13,00/12,84
Power input - (Nominal / Maximum)	kW	1,94/2,42	3,26/3,29	3,81/4,07	3,26/3,17	3,81/4,13	4,80/4,63
EER	W/W	3,10/2,89	3,07/3,11	2,89/2,89	3,07/3,21	2,89/2,91	2,71/2,78

HWS_H — Outdoor units data

		Single Phase Units			Three Phase Units		
Outdoor unit	HWS-	804H-E	1104H-E	1404H-E	1104H8-E	1404H8-E	1604H8-E
Dimensions (HxWxD)	mm	890x900x320	1340x900x320	1340x900x320	1340x900x320	1340x900x320	1340x900x320
Weight	Kg	63	92	92	93	93	93
Sound pressure Level	dB(A)	49	49	51	50	51	52
Power supply	V-ph-Hz		220/230-1-50			380/400-3N-50	
Operating range	°C	-20 ÷ 43					
Minimum pipe length	m	5					
Maximum pipe length	m	30					
Maximum height difference	m	± 30					
Chargeless pipe length	m	30					
Compressor type		DC Twin rotary					
Refrigerant		R410A					
Flare connections (gas-liquid)		5/8" - 3/8"					

HWS_XWH — Hydro units data

Domestic hot water tank	HWS-		804XWHM3-E	804XWHT6-E	804XWHT9-E	1404XWHM3-E	1404XWHT6-E	1404XWHT9-E
To be used with size			80	80	80	110-140-160	110-140-160	110-140-160
Leaving water temperature	°C	H	20 ~ 55°C	20 ~ 55°C	20 ~ 55°C	20 ~ 55°C	20 ~ 55°C	20 ~ 55°C
	°C	C	7 ~ 25°C	7 ~ 25°C	7 ~ 25°C	7 ~ 25°C	7 ~ 25°C	7 ~ 25°C
Dimensions (HxWxD)	mm		925x525x355	925x525x355	925x525x355	925x525x355	925x525x355	925x525x355
Weight	Kg		50	50	50	54	54	54
Sound pressure level	dB(A)		27	27	27	29	29	29
Electric back up heater capacity	kW		3	6	9	3	6	9
Electric back up heater supply	V-ph-Hz		220/230-1-50	380/400-3N-50	380/400-3N-50	220~230-1-50	380/400-3N-50	380/400-3N-50
Maximum current	A		13	13 x 2	13 x 3	13	13 x 2	13 x 3

HWS_CSHM — Domestic hot water tanks data

		HWS-	1501CSHM3-E	2101CSHM3-E	3001CSHM3-E
Water volume	litres		150	210	300
Max water temperature	°C		75	75	75
Electric heater	kW		2,75	2,75	2,75
Power supply	V-ph-Hz		220/230-1-50	220/230-1-50	220/230-1-50
Height	mm		1090	1474	2040
Diameter	mm		550	550	550
Weight	Kg		31	41	60
Material			Stainless steel	Stainless steel	Stainless steel

Accessories

Model Name	Description	Functions
TCB-PCIN3E	Output signal PCB	Boiler operation output signal, Alarm output signal, Defrost output signal, Compressor operation output signal
TCB-PCMO3E	Input signal PCB	Room thermostat input, Emergency stop input
HWS-AMS11E	Wired RC	Wired Remote controller for Room air temperature control

The capacities in this catalogue are calculated based on following conditions:
*Heating: Leaving hot water temperature: 35°C (ΔT 5°C). Outdoor air temperature: 7 °C DB / 6 °C WB.
**Heating: Leaving hot water temperature: 45°C (ΔT 5°C). Outdoor air temperature: 7 °C DB / 6 °C WB.
*Cooling: Leaving cold water temperature: 18°C (ΔT 5°C). Outdoor air temperature: 35°C DB.
**Cooling: Leaving cold water temperature: 7°C (ΔT 5°C). Outdoor air temperature: 35°C DB.
The sound pressure level is given at 1 m distance from outdoor units, and 1.5 m distance from hydro units.

C = Cooling mode H = Heating mode

The light commercial range

Digital and Super Digital Inverter air conditioners perfectly satisfy the requirement of the commercial sector for the best return on your investment.
Toshiba offers the best options on operating costs, flexibility and maintenance.
Moreover, thanks to its flexibility, Toshiba can always find the ideal product for any requirement: high performance, technology, compactness, optimum comfort.

Simplicity and beyond

The Digital Inverter range for business applications provides compact, light weight units with exceptional performance.
Thanks to the TCC-Link communication system, the systems suit any installation with little business disruption.
In addition, most of the Super Digital Inverter* boasts energy efficiency class A and enables an even larger range of applications.
The wide range of indoor units is able to satisfy any kind of requirement and the the enhanced DC twin rotary compressor delivers stable performance with less friction, making this system really silent.

*except for 3HP high-wall

Light Commercial

THE LIGHT COMMERCIAL RANGE

THE MOST ADVANCED SYSTEMS
FOR THE PROFESSIONALS

Solutions for professionals, from professionals

Toshiba Digital and Super Digital Inverter systems deliver exceptional operating savings in extremely compact units.
With state-of-the-art technologies, flexible controls and improved installation Toshiba brings comfort and convenience to any business installation.
A complete range of indoor units satisfies all commercial applications: ceiling, cassette, ducted, suspended, high-wall and flexi units.
The enlargement of the range with maximum cooling capacities up to 27 kW allows to address even more commercial applications with larger volumes.

INDOOR UNITS

OUTDOOR UNITS

When the inverter becomes digital

The technology of the Digital Inverter control module ensures optimised reproduction of the supply sine wave at the desired frequency, in order to reduce inefficient harmonics that inverters normally emit.

With this innovative control method, the Toshiba Digital Inverter brings state-of-the-art inverter technology to the commercial sector, offering considerable advantages in terms of capacity, energy savings and optimised comfort.

Who says that you must choose between improved performance and minimised consumption?

The Toshiba Digital and Super Digital Inverters systems are powerful and extremely efficient. They provide air conditioning with great energy savings.

The Super Digital Inverter provides the best efficiency part load conditions performance in the industry in cooling and heating mode. In most applications, these systems can reduce the Seasonal Energy Consumption.

The variable capacity management of the compressor allows the Digital and Super Digital Inverter to maintain room temperature control and to ensure minimum energy wastage.

Super Digital Inverter series 4 and Digital Inverter series 4 can fit R22 or R407C old pipes in case of replacement of high-consuming fixed speed systems.

All the flexibility you have ever dreamt of

If you want high performance, compact units and optimum comfort, Toshiba has the ideal product for your requirements.

With the continuous improvement of the inverter control system, Toshiba offers vector control for its DC hybrid inverter, which enhances system efficiency and reduces noise levels.

High-tech elements include improved coils, high precision components and higher refrigerant compression thanks to redesigned compression channels.

Super Digital and Digital Inverter systems able to satisfy applications that require cooling at low operating conditions down to -15 °C, while powerful heating capacities are possible at –20 °C outdoor temperature.

The enhanced Eco-driving DC twin-rotary compressor delivers stable performance with extremely low rotor friction, making it ideal for noise-sensitive applications as well as for efficient operations in partial load conditions.

The condensing coil

The condensing coil of SDI uses two different tubes to obtain the most efficient heat transfer.
The phase changes from gas to liquid and the diameter is adapted according to the refrigerant state.
The new big DI condensing coils goes even further to ensure maximum capacity and efficiency in the smallest footprint by using 3-rows heat exchanger.

Outdoor unit

High heat exchanger efficiency is achieved by using condenser coils with two different tube diameters.

In the liquid phase a small diameter allows to achieve increased flow rates.

In the gas phase a large diameter is used to reduce pressure losses.

A powerful breeze

The fan in the outdoor unit has been redesigned to deliver higher static pressure and a reduction in sound levels to offset a more compact heat exchanger.
New fan blades have been designed to reduce turbulence with "anti-eddy" protuberances and a reverse curved profile.
In this way, despite a more compact coil, airflow has been increased and sound power decreased.

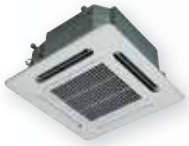
Toshiba DI4 & SDI4: the ideal solution to replace old units, reusing existing refrigerant lines

Whatever you choice for top energy efficiency (SDI) or for compactness and cost competitiveness (DI), all the Toshiba LC range meets the increasing market needs, in terms of comfort and ease of installation. Thanks to the filter positioned in the refrigerant circuit, the SDI & DI systems, equipped with R410A refrigerant, can use piping designed for old R22 or R407C refrigerant. High-mesh filters and stable lubricant oil against chloride compounds, combined with high-tech Toshiba control, are key to make SDI and DI units suitable for reuse existing piping.
This solution offers significant benefits in terms of performances, acoustic comfort and efficiency.

Products and features

- New infrared remote control kit
- Hi-wall serie SM_KRT (6 series)
- Low height standard ducted SM_BT (6 series)

HP inverter

	Super Digital Inverter	Digital Inverter	Big Digital Inverter
Outdoor units			
Indoor units	RAV-SPxx4ATP - E / series 4	RAV-SMxx4ATP-E / series 4	RAV-SMxx4AT8-E / series 4
 Four-way cassette RAV-SMxxx UTP-E	Single split Twin split Triple split	Single split Twin split Triple split	Twin split Triple split Double-twin split
 Cassette 600x600 mm RAV-SMxxxMUT-E	Single split Twin split Triple split	Single split Twin split Triple split	Double-twin split
 Ducted RAV-SMxxx BTP-E	Single split Twin split Triple split	Single split Twin split Triple split	Twin split Triple split Double-twin split
 Slim duct RAV-SMxxxSDT-E	Single split Twin split Triple split	Single split Twin split Triple split	Double-twin split
 High Static pressure duct RAV-SMxxx 2DT-E	-	-	Single split
 Ceiling RAV-SMxxx CTP-E	Single split Twin split Triple split	Single split Twin split Triple split	Twin split Triple split Double-twin split
 Hi Wall RAV-SMxxx KRT-E	Single split Twin split Triple split	Single split Twin split Triple split	Triple split Double-twin split

SUPER DIGITAL INVERTER

Vector controlled inverter

Intelligent Power Drive Unit, which produces a power supply whose wide range of frequencies and voltage provide superb control and energy efficiency.

The Super Digital Inverter, series 4, sets a new limit for the industry energy performance.

Advanced air management system: high efficiency fan motors, larger fans and new fan grille design.

Piping and operating limits improved. The new system can work at extremely low temperatures, in cooling and heating. Admitted pipe length is up to 75 m.

The structure and magnetic action of the new Eco-driving twin- rotary compressors provide excellent energy performance at full load as well as in partial load conditions (operation down to 10 rps).

Long pipe runs, up to 75 m length and 30 m elevation for increased installation flexibility (4HP ÷ 6HP).

Wide operating range: down to -15 °C in cooling mode and down to -20 °C in heating mode (2HP ÷ 6HP).

S P _ A T (P)

SUPER DIGITAL INVERTER

INVERTER OUTDOOR UNIT

OUTDOOR UNITS			CASSETTE	DUCTED	HI-WALL	CEILING
RAV-SP404ATP-E RAV-SP454ATP-E RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E RAV-SP1104AT8-E RAV-SP1404AT-E RAV-SP1404AT8-E RAV-SP1604AT8-E	RAV-SM_UTP RAV-SM_MUT	RAV-SM_BTP RAV-SM_SDT	RAV-SM_KRT	RAV-SM_CTP

SP_AT(P) — Physical data Outdoor unit / Single phase / Series 4

Outdoor unit			RAV-SP404ATP-E 1,5 HP	RAV-SP454ATP-E 1,7 HP	RAV-SP564ATP-E 2 HP	RAV-SP804ATP-E 3 HP	RAV-SP1104AT-E 4 HP	RAV-SP1404AT-E 5 HP
Air Flow	m^3/h - l/s		2400 - 667	2400 - 667	2400 - 667	3000 - 833	6060 - 1683	6180 - 1716
Sound pressure level	dB(A)	C	45	45	47	48	49	51
Sound power level	dB(A)	C	62	62	63	64	66	68
Operating range (DB)	°C	C	-15 / +43	-15 / +43	-15 / +43	-15 / +43	-15 / +43	-15 / +43
Sound pressure level	dB(A)	H	47	47	48	49	50	52
Sound power level	dB(A)	H	64	64	64	65	67	69
Operating range (WB)	°C	H	-15 / +15	-15 / +15	-20 / +15	-20 / +15	-20 / +15	-20 / +15
Dimensions (HxWxD)	mm		550 x 780 x 290	550 x 780 x 290	550 x 780 x 290	890 x 900 x 320	1340 × 900 × 320	1340x900x320
Weight	kg		40	40	44	66	93	93
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections								
Gas	in		1/2	1/2	1/2	5/8	5/8	5/8
Liquid	in		1/4	1/4	1/4	3/8	3/8	3/8
Minimum pipe length	m		5	5	5	5	3	3
Maximum pipe length	m		30	30	50	50	75	75
Maximum height difference	m		30	30	30	30	30	30
Chargeless pipe length	m		20	20	20	30	30	30
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

SP_AT8 — Physical data Outdoor unit / Three phase / Series 4

Outdoor unit			RAV-SP1104AT8-E 4 HP	RAV-SP1404AT8-E 5 HP	RAV-SP1604AT8-E 6 HP
Air Flow	m^3/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 (DB)	°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 (WB)	°C	H	-20 / +15	-20 / +15	-20 / +15
Dimensions (HxWxD)	mm		1340x900x320	1340x900x320	1340x900x320
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
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50	380/415-3N-50

C = cooling mode
H = heating mode

Twin rotary compressor

Toshiba state of the art compressor features a powerful new magnetic rotor with great surface area to increase efficiency and reduce the operating noise.

This Toshiba Digital Inverter enables old high-energy consumption air conditioning systems to be replaced by the most advanced inverter units, with significant benefits in terms of performance, acoustic comfort and energy-efficiency.

Extremely light and compact condensing units: easy to install in small spaces.

Compatible with a wide choice of indoor units: ceiling, 4-way cassette, compact 4-way cassette, ducted, high-wall and flexi units.

The Vector Intelligent Drive Unit (IPDU) technology ensures high performance.

Simplified maintenance using the new TCC-Link wired remote control panel.

Night operation to minimize the outdoor unit sound.

Energy saving operating mode with 1% step setting between 100% to 50%.

Wide operating range: down to -15 °C in cooling mode and down to -20 °C in heating mode (2HP ÷ 6HP).

SM_ATP

DIGITAL INVERTER

INVERTER OUTDOOR UNIT

OUTDOOR UNITS	CASSETTE	DUCTED	HI-WALL	CEILING
RAV-SM564ATP-E RAV-SM804ATP-E	RAV-SM_UTP RAV-SM_MUT	RAV-SM_BTP RAV-SM_SDT	RAV-SM_KRT	RAV-SM_CTP
RAV-SM1104ATP-E RAV-SM1404ATP-E				
RAV-SM1603AT-E				

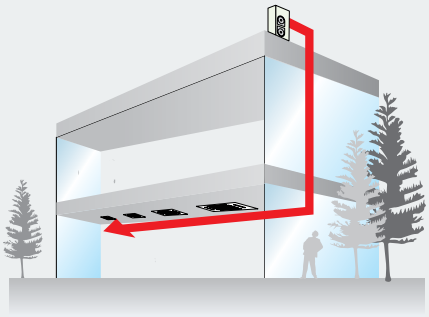
SM_ATP

Digital Inverter - Series 4 / Physical data Outdoor unit / Single phase

Outdoor unit			RAV-SM564ATP-E 2 HP	RAV-SM804ATP-E 3 HP	RAV-SM1104ATP-E 4 HP	RAV-SM1404ATP-E 5 HP	RAV-SM1603AT-E 6 HP
Air Flow	m^3/h - l/s		2400 - 667	2700 - 750	4080 - 1133	4200 - 1167	6180 - 1717
Sound pressure level	dB(A)	C	46	48	53	54	51
Sound power level	dB(A)	C	63	65	70	70	68
Operating range (DB)	°C	C	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 43
Sound pressure level	dB(A)	H	48	52	54	55	53
Sound power level	dB(A)	H	65	69	71	71	70
Operating range (WB)	°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	890 x 900 x 320	890 x 900 x 320	1340 x 900 x 320
Weight	kg		40	44	68	68	99
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	50	50	50
Maximum height difference	m		30	30	30	30	30
Chargeless pipe length	m		20	20	30	30	30
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

C = cooling mode
H = heating mode

Long pipe run



Installtions can reach up to 70m in total length and 30m in elevation.

The Big DI three phases inverter units proposes an alternative cost competitive solution for medium size applications like shop and small office buildings.

This system is the ideal solution in case of a large volume with single temperature control as it allows simultaneous operation of 2, 3 or up to 4 identical indoor units with the branching kit options.

Cost competitive solution for high capacity applications of up to 27 kW** cooling, concentrated in only 0.29 m2 footprint.

Toshiba top high-tech features: twin rotary DC compressor, DC fan motor, new propeller fan, vector controlled inverter and a 3-row heat exchanger.

Wide operation range down to -20 °C in heating mode, down to -15 °C and up to 46 °C in cooling mode: comfortable environment throughout the whole year.

Small footprint.

SM_AT8

BIG DI

INVERTER OUTDOOR UNIT

OUTDOOR UNITS	INDOOR UNITS
RAV-SM2244AT8-E	RAV-SM2242DT-E
RAV-SM2804AT8-E	RAV-SM2802DT-E

SM_AT8

Physical data Outdoor unit / Three phase

Outdoor unit			RAV-SM2244AT8-E 8 HP	RAV-SM2804AT8-E 10 HP
Air Flow	m^3/h - l/s		8000 - 2222	9000 - 2500
Sound pressure level	dB(A)	C	56	57
Sound power level	dB(A)	C	72	74
Operating range (DB)	°C	C	-15 / +46	-15 / +46
Sound pressure level	dB(A)	H	57	58
Sound power level	dB(A)	H	74	75
Operating range (WB)	°C	H	-20 / +15	-20 / +15
Dimensions (HxWxD)	mm		1540 x 900 x 320	1540 x 900 x 320
Weight	kg		134	134
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		7,5	7,5
Maximum pipe length	m		70	70
Maximum height difference	m		30	30
Chargeless pipe length	m		30	30
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50

C = cooling mode
H = heating mode

4-way

Wide air flow in all directions

Every component for the air distributuion was designed to guarantee the users the maximum flexibility of operation and the optimum air delivery in any conditions.
The louver shape ensure uniform distribution and long air throw while the louver motors controls the direction and patterns of air flow.

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

Two louver shape options: straight flow louver and wide flow louver optimum air distribution.

Light-weight unit, for easy and quick installation.

Built-in high-lift drain pump.

Self-cleaning function and the Ag-ion tip for anti-mould in drain cap.

Individual setting of louver position: 3 different Swing modes: standard, diagonally opposite, turn-around.

Wireless remote control and optional wired remote controller and timer.

Differnet panel option to blend easily in different ceiling design.

SM_UTP

4-WAY CASSETTE

DI AND SDI INVERTER

INDOOR UNITS

RAV-SM564UTP-E
RAV-SM804UTP-E
RAV-SM1104UTP-E
RAV-SM1404UTP-E
RAV-SM1604UTP-E

OUTDOOR UNITS

RAV-SP564ATP-E
RAV-SP804ATP-E
RAV-SP1104AT-E
RAV-SP1104AT8-E
RAV-SP1404AT-E
RAV-SP1404AT8-E
RAV-SP1604AT8-E

RAV-SM564ATP-E
RAV-SM804ATP-E
RAV-SM1104ATP-E
RAV-SM1404ATP-E
RAV-SM1603AT-E

RAV-SM2244AT8-E
RAV-SM2804AT8-E

REMOTE CONTROLS

Wireless
TCB-AX32E2
RBC-AX32U(W)-
RBC-AX32U(WS)-E

Wired
RBC-AMS51E-EN(ES)
RBC-AMS41E
RBC-AMT32E
RBC-AS21E2

SM_UTP + SP_ATP

Performance data with Super Digital Inverter / Series 4

Outdoor unit Indoor unit (Cassette)			RAV-SP564ATP-E RAV-SM564UTP-E	RAV-SP804ATP-E RAV-SM804UTP-E	RAV-SP1104AT-E RAV-SM1104UTP-E	RAV-SP1104AT8-E RAV-SM1104UTP-E	RAV-SP1404AT-E RAV-SM1404UTP-E	RAV-SP1404AT8-E RAV-SM1404UTP-E	RAV-SP1604AT8-E RAV-SM1604UTP-E
Cooling capacity	kW		5,3	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	2,6 - 12,0	2,6 - 12,0	2,6 - 14,0	2,6 - 14,0	2,6 - 16,0
Power input (min. - rated - max.)	kW	C	0,20 - 1,47 - 1,95	0,30 - 1,86 - 2,52	0,64 - 2,21 - 3,60	0,66 - 2,37 - 3,60	0,64 - 3,16 - 4,40	0,66 - 3,46 - 4,40	0,66 - 4,49 - 5,70
EER	W/W		3,61	3,82	4,52	4,22	3,96	3,61	3,12
SEER			6,17	6,39	6,60	6,57	-	-	-
Energy efficiency class		C	A++	A++	A++	A++	-	-	-
Seasonal electricity consumption	kWh/a	C	301	389	530	532	-	-	-
Heating capacity	kW		5,6	8,0	11,2	11,2	14,0	14,0	16,0
Heating range (min. - max.)	kW		0,9 - 8,1	1,3 - 11,3	2,4 - 13,0	2,4 - 15,6	2,4 - 16,5	2,4 - 18,0	2,4 - 19,0
Power input (min. - rated - max.)	kW	H	0,15 - 1,21 - 2,40	0,25 - 1,91 - 3,52	0,52 - 2,34- 4,20	0,53 -2,42 - 4,30	0,52 - 3,21 - 4,50	0,53 -3,42 - 5,50	0,53 -4,30 - 6,51
COP	W/W		4,63	4,19	4,79	4,63	4,36	4,09	3,72
SCOP (Average)			4,58	4,19	4,28	4,28	-	-	-
Energy efficiency class (Average)		H	A+	A+	A+	A+	-	-	-
Seasonal electricity consumption	kWh/a	H	1649	2542	3795	3795	-	-	-

SM_UTP + SM_ATP

Performance data with Digital Inverter / Series 4

Outdoor unit Indoor unit (4-way Cassette)			RAV-SM564ATP-E RAV-SM564UTP-E	RAV-SM804ATP-E RAV-SM804UTP-E	RAV-SM1104ATP-E1 RAV-SM1104UTP-E	RAV-SM1404ATP-E RAV-SM1404UTP-E	RAV-SM1603AT-E RAV-SM1604UTP-E
Cooling capacity	kW		5,0	6,7	10,0	12,0	14,0
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 8,0	3,0 - 11,2	3,0 - 13,2	3,0 - 16,0
Power input (min. - rated - max.)	kW	C	0,26 -1,56 - 1,86	0,26 - 2,22 - 2,60	0,60 - 3,02- 4,10	0,60 -4,29 - 4,71	0,65 - 4,49 - 5,70
EER	W/W		3,21	3,02	3,31	2,80	3,12
SEER			6,14	5,81	5,87	5,36	-
Energy efficiency class		C	A++	A+	A+	A	-
Seasonal electricity consumption	kWh/a	C	285	404	597	783	-
Heating capacity	kW		5,3	7,7	11,2	12,8	16,0
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0	3,0 - 13,0	3,0 - 16,0	3,0 - 18,0
Power input (min. - rated - max.)	kW	H	0,26 -1,36 - 2,08	0,26 -2,13- 3,03	0,60 -2,93 - 4,30	0,60 - 3,40 - 4,50	0,65 - 4,43 - 6,51
COP	W/W		3,90	3,62	3,82	3,76	3,61
SCOP (Average)			4,51	4,05	4,28	4,19	-
Energy efficiency class (Average)		H	A+	A+	A+	A+	-
Seasonal electricity consumption	kWh/a	H	1459	2349	2616	2672	-

SM_UTP

Physical data Indoor unit

Indoor unit		RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E	RAV-SM1404UTP-E	RAV-SM1604UTP-E
Air Flow (h/l)	m3/h - l/s	1050/780 - 291/217	1230/810 - 341/225	2010/1170 - 558/325	2100/1230 - 583/341	2130/1260 - 592/350
Sound pressure level (h-m-l)	dB(A)	32-29-28	35-31-28	43-38-33	44-38-34	45-40-36
Sound power level (h-m-l)	dB(A)	47-44-43	50-46-43	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
Weight	kg	20	20	24	24	24
Panel dimensions (HxWxD)	mm	30×950×950	30×950×950	30×950×950	30×950×950	30×950×950
Panel weight	kg	4,2	4,2	4,2	4,2	4,2

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

Corner pockets opening

Ease of access to the corner pockets facilitates installation and small adjustment of the panel alignment for perfect ceiling fitting.

This 4-way cassette has been especially designed for small commercial apllications where a compact efficient unit is needed.

Fit all standard 600x600 mm grid ceilings; one single chassis dimension for all the available capacities.

Draught prevention, slim function and clean ceiling functions make this unit ideal for a large number of applications.

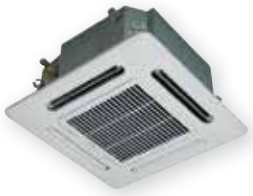
Built-in water condensate discharge drain pump.

TCC Link control panel makes control of the system flexible and simplifies maintenance.

SM_MUT

COMPACT 4-WAY CASSETTE

DI AND SDI INVERTER



INDOOR UNITS

RAV-SM404MUT-E
RAV-SM454MUT-E
RAV-SM564MUT-E

OUTDOOR UNITS

RAV-SP404ATP-E
RAV-SP454ATP-E
RAV-SP564ATP-E

RAV-SM564ATP-E

RAV-SM2244AT8-E
RAV-SM2804AT8-E

REMOTE CONTROLS

Wireless
TCB-AX32E2

Wired
RBC-AMS51E-EN(ES)
RBC-AMS41E
RBC-AMT32E
RBC-AS21E2

SM_MUT + SP_AT

Performance data with Super Digital Inverter / Series 4

Outdoor unit Indoor unit (600X600 Cassette)			RAV-SP404ATP-E RAV-SM404MUT-E	RAV-SP454ATP-E RAV-SM454MUT-E	RAV-SP564ATP-E RAV-SM564MUT-E
Cooling capacity	kW		3,6	4,0	5,0
Cooling range (min. - max.)	kW		1,5 - 4,0	1,5 - 4,5	1,2 - 5,6
Power input (min. - rated - max.)	kW	C	0,36 - 1,00 - 1,49	0,36 - 1,19 - 1,49	0,21 - 1,56 - 2.29
EER	W/W		3,60	3,36	3,21
SEER			5,38	5,30	5,61
Energy efficiency class		C	A	A	A+
Seasonal electricity consumption	kWh/a	C	234	264	312
Heating capacity	kW		4,0	4,5	5,6
Heating range (min. - max.)	kW		1,5 - 5,0	1,5 - 5,6	0,9 - 7,4
Power input (min. - rated - max.)	kW	H	0,36 - 0,97 - 2,20	0,36 - 1,16 - 2,30	0,17 - 1,54 - 2,37
COP	W/W		4,12	3,88	3,64
SCOP (Average)			4,17	4,17	4,20
Energy efficiency class (Average)		H	A+	A+	A+
Seasonal electricity consumption	kWh/a	H	1477	1477	1801

SM_MUT + SM_AT

Performance data with Digital Inverter / Series 4

Outdoor unit Indoor unit (600X600 Cassette)			RAV-SM564ATP-E RAV- SM564MUT-E
Cooling capacity	kW		5,0
Cooling range (min. - max.)	kW		1,5 - 5,6
Power input (min. - rated - max.)	kW	C	0,30 - 1,65 - 1,86
EER	W/W		3,03
SEER			5,48
Energy efficiency class		C	A
Seasonal electricity consumption	kWh/a	C	319
Heating capacity	kW		5,3
Heating range (min. - max.)	kW		1,5 - 6,3
Power input (min. - rated - max.)	kW	H	0,30 - 1,52 -2,40
COP	W/W		3,49
SCOP (Average)			4,16
Energy efficiency class (Average)		H	A+
Seasonal electricity consumption	kWh/a	H	1480

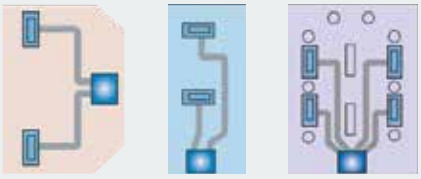
SM_MUT

Physical data Indoor unit

Indoor unit		RAV-SM404MUT-E	RAV-SM454MUT-E	RAV- SM564MUT-E
Air Flow (h/l)	m^3/h - l/s	660/468 - 183/130	660/468 - 183/130	798/546 - 222/152
Sound pressure level (h-m-l)	dB(A)	40-36-31	40-36-31	43-39-34
Sound power level (h-m-l)	dB(A)	55-51-46	55-51-46	58-54-49
Dimensions (HxWxD)	mm	268x575x575	268x575x575	268x575x575
Weight	kg	16	16	16
Panel dimensions (HxWxD)	mm	27x700x700	27x700x700	27x700x700
Panel weight	kg	3	3	3

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

Wide range of applications



The use of ducts ensures flexible installations even in complex room layouts as polygonal rooms, narrow rooms or indoor spaces with fixtures and obstacles.

Whatever the shape of the room, ducted units ensure uniform temperatures in it. It's ideal for hotels, banks and similar applications, where hidden units and very low noise levels are needed.

Compact size. The reduced height of the unit (275mm) extend the number of possible applications.

New DC fan motor for high external static pressure (max 120 Pa).

PC board panel easily accessible from the side of the unit.

Double option for air intake: rear or bottom, plus a pre-punched knockout hole for fresh air supply connection.

High lift drain pump reach up to 290mm enabling flexible condensate removal piping layout design.

S M_B T P

DUCTED

DI AND SDI INVERTER

INDOOR UNITS

RAV-SM406BTP-E
RAV-SM456BTP-E
RAV-SM566BTP-E
RAV-SM806BTP-E
RAV-SM1106BTP-E
RAV-SM1406BTP-E
RAV-SM1606BTP-E

OUTDOOR UNITS

RAV-SP404ATP-E
RAV-SP454ATP-E
RAV-SP564ATP-E
RAV-SP804ATP-E
RAV-SP1104AT-E
RAV-SP1104AT8-E
RAV-SP1404AT-E
RAV-SP1404AT8-E
RAV-SP1604AT8-E
RAV-SM564ATP-E
RAV-SM804ATP-E
RAV-SM1104ATP-E
RAV-SM1404ATP-E
RAV-SM1603AT-E
RAV-SM2244AT8-E
RAV-SM2804AT8-E

REMOTE CONTROLS

Wireless
TCB-AX32E2

Wired
RBC-AMS51E-EN(ES)
RBC-AMS41E
RBC-AMT32E
RBC-AS21E2

SM_BTP + SP_ATP — Performance data with Super Digital Inverter / Series 4

Outdoor unit Indoor unit (Standard Duct)			RAV-SP404ATP-E RAV-SM406BTP-E	RAV-SP454ATP-E RAV-SM456BTP-E	RAV-SP564ATP-E RAV-SM566BTP-E	RAV-SP804ATP-E RAV-SM806BTP-E	RAV-SP1104AT-E RAV-SM1106BTP-E	RAV-SP1104AT8-E RAV-SM1106BTP-E	RAV-SP1404AT-E RAV-SM1406BTP-E	RAV-SP1404AT8-E RAV-SM1406BTP-E	RAV-SP1604AT8-E RAV-SM1606BTP-E
Cooling capacity	kW		3,6	4,0	5,0	7,1	10,0	10,0	12,5	12,5	14,0
Cooling range (min. - max.)	kW		1,5 - 4,0	1,5 - 5,6	1,2 - 5,6	1,9 - 8,0	2,6 - 12,0	2,6 - 12,0	2,6 - 14,0	2,6 - 14,0	2,6 - 16,0
Power input (min. - rated - max.)	kW	C	0,36 - 1,06 - 1,49	0,36 - 1,23 - 1,49	0,21 - 1,56 - 2,05	0,30 - 2,06 - 2,88	0,64 - 2,64 - 3,80	0,66 - 2,64 - 4,01	0,64 - 3,83 - 4,47	0,66 - 3,86 - 4,89	0,66 - 4,65 - 6,50
EER	W/W		3,40	3,25	3,21	3,45	3,79	3,79	3,26	3,24	3,01
SEER			5,12	5,00	4,88	5,88	5,65	5,65	-	-	-
Energy efficiency class		C	A	B	B	A+	A+	A+	-	-	-
Seasonal electricity consumption	kWh/a	C	247	280	359	423	619	619	-	-	-
Heating capacity	kW		4,0	4,5	5,6	8	11,2	11,2	14,0	14,0	16
Heating range (min. - max.)	kW		1,5-5,0	1,5-4,5	0,9 - 7,4	1,3 - 10,6	2,4 - 13,0	2,40 - 15,6	2,4 - 16,5	2,40 - 18,0	2,4 - 19,0
Power input (min. - rated - max.)	kW	H	0,36 - 1,04 - 2,20	0,36 - 1,24 - 2,30	0,17 - 1,55 - 2,51	0,27 - 2,21 - 3,50	0,52 - 2,77 - 4,00	0,53 - 2,77 - 4,42	0,52 - 3,67 - 4,50	0,53 - 3,67 - 5,71	0,53 - 4,60 - 6,96
COP	W/W		3,85	3,63	3,61	3,62	4,04	4,04	3,81	3,81	3,48
SCOP (Average)			4,02	3,93	4,01	4,00	3,87	3,87	-	-	-
Energy efficiency class (Average)		H	A+	A	A+	A+	A	A	-	-	-
Seasonal electricity consumption	kWh/a	H	1533	1675	1884	2448	3906	3906	-	-	-

SM_BTP + SP_ATP — Performance data with Digital Inverter / Series 4

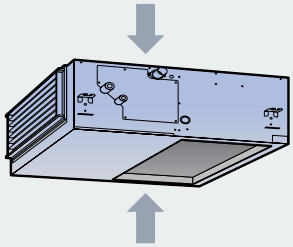
Outdoor unit Indoor unit (Standard Duct)			RAV-SM564ATP-E RAV-SM566BTP-E	RAV-SM804ATP-E RAV-SM806BTP-E	RAV-SM1104ATP-E RAV-SM1106BTP-E	RAV-SM1404ATP-E RAV-SM1406BTP-E	RAV-SM1603AT-E RAV-SM1606BTP-E
Cooling capacity	kW		5,0	6,7	10,0	12,1	14,0
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 7,4	3,0 - 11,2	3,0 - 13,2	3,0 - 16,0
Power input (min. - rated - max.)	kW	C	0,31 - 1,83 - 2,05	0,31 -2,38 - 2,76	0,60 - 3,14 - 4,50	0,60 - 4,42 - 4,71	0,65 - 5,13 - 6,50
EER			2,73	2,82	3,18	2,74	2,73
SEER			4,8	5,04	5,03	-	-
Energy efficiency class		C	B	B	B	-	-
Seasonal electricity consumption	kWh/a	C	365	466	696	-	-
Heating capacity	kW		5,3	7,7	11,2	12,8	16,0
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0	3,0 - 12,5	3,0 - 16,0	3,0 - 18,0
Power input (min. - rated - max.)	kW	H	0,31 - 1,62 - 2,47	0,31 -2,32 - 3,18	0,60 - 2,99 - 4,00	0,60 - 3,55 - 4,55	0,65 - 4,69 - 6,89
COP	W/W		3,27	3,32	3,75	3,61	3,41
SCOP (Average)			3,98	3,83	4,14	-	-
Energy efficiency class (Average)		H	A	A	A+	-	-
Seasonal electricity consumption	kWh/a	H	1549	2450	2569	-	-

SM_BTP — Physical data Indoor unit

Indoor unit		RAV-SM406BTP-E	RAV-SM456BTP-E	RAV-SM566BTP-E	RAV-SM806BTP-E	RAV-SM1106BTP-E	RAV-SM1406BTP-E	RAV-SM1606BTP-E
Air Flow (h/l)	m^3/h - l/s	800/480 - 222/133	800/480 - 222/133	800/480 - 222/133	1200/720 - 333/200	2100/1260 - 583/350	2100/1260 - 583/350	2100/1260 - 583/350
Sound pressure level (h-m-l)	dB(A)	33-29-25	33-29-25	33-29-25	34-30-26	40-36-33	40-36-33	40-36-33
Sound power level (h-m-l)	dB(A)	48-44-40	48-44-40	48-44-40	49-45-41	55-51-48	55-51-48	55-51-48
Dimensions (HxWxD)	mm	275 x 700 x 750	275 x 700 x 750	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
Weight	kg	23	23	23	30	40	40	40
External static pressure (stand/upper limit)	Pa	30/120	30/120	30/120	30/120	50/120	50/120	50/120

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

Low height profile



Its slim profile of only 210mm make this product the perfect solution for concealed installation in low ceiling voids.

Very compact design unit designed to distribute air in multiple location form a low hidden false ceiling.

Two choice of selection for the air inlet flow: bottom or back side.

Natural drain discharge port and drain pump (up to 850 mm).

Cleanable prefilter included.

Fresh air inlet possibility via a pre-punched knock hole.

Four steps static pressure set-up.

Easy to combine with different type of air diffusers.

S M_S D T

SLIM DUCT

DI AND SDI INVERTER

INDOOR UNITS

RAV-SM404SDT-E
RAV-SM454SDT-E
RAV-SM564SDT-E

OUTDOOR UNITS

RAV-SP404ATP-E
RAV-SP454ATP-E
RAV-SP564ATP-E

RAV-SM564ATP-E

RAV-SM2244AT8-E
RAV-SM2804AT8-E

REMOTE CONTROLS

Wireless
TCB-AX32E2

Wired
RBC-AMS51E-EN(ES)
RBC-AMS41E
RBC-AMT32E
RBC-AS21E2

SM_SDT + SP_ATP

Performance data with Super Digital Inverter / Series 4

Outdoor unit Indoor unit (Slim duct)			RAV-SP404ATP-E RAV-SM404SDT-E	RAV-SP454ATP-E RAV-SM454SDT-E	RAV-SP564ATP-E RAV-SM564SDT-E
Cooling capacity	kW		3,6	4,0	5,0
Cooling range (min. - max.)	kW		1,5 - 4,0	1,5 - 4,5	1,2 - 5,6
Power input (min. - rated - max.)	kW	C	0,37 - 1,03 - 1,25	0,37 - 1,2 - 1,49	0,21 - 1,56 - 2,29
EER	W/W		3,50	3,33	3,21
SEER			5,11	5,01	5,1
Energy efficiency class		C	A	B	A
Seasonal electricity consumption	kWh/a	C	246	280	343
Heating capacity	kW		4,0	4,5	5,6
Heating range (min. - max.)	kW		1,5 - 5,0	1,5 - 5,6	0,9 - 7,4
Power input (min. - rated - max.)	kW	H	0,37 - 1,00 - 2,20	0,37 - 1,15 - 2,30	0,17 - 1,44 - 2,37
COP	W/W		4,00	3,91	3,89
SCOP (Average)			3,9	3,9	3,83
Energy efficiency class (Average)		H	A	A	A
Seasonal electricity consumption	kWh/a	H	1364	1364	1975

SM_SDT + SM_ATP

Performance data with Digital Inverter / Series 4

Outdoor unit Indoor unit (Slim duct)			RAV-SM564ATP-E RAV-SM564SDT-E
Cooling capacity	kW		5,0
Cooling range (min. - max.)	kW		1,5 - 5,6
Power input (min. - rated - max.)	kW	C	0,32 - 1,91 - 2,75
EER	W/W		2,62
SEER			5,06
Energy efficiency class		C	B
Seasonal electricity consumption	kWh/a	C	346
Heating capacity	kW		5,3
Heating range (min. - max.)	kW		1,5 - 6,3
Power input (min. - rated - max.)	kW	H	0,32 - 1,50 - 2,40
COP	W/W		3,53
SCOP (Average)			4,06
Energy efficiency class (Average)		H	A+
Seasonal electricity consumption	kWh/a	H	1517

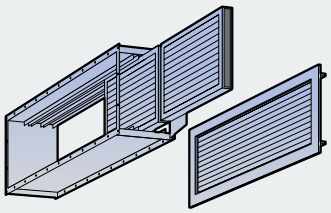
SM_SDT

Physical data Indoor unit

Indoor unit		RAV-SM404SDT-E	RAV-SM454SDT-E	RAV-SM564SDT-E
Air Flow (h/l)	m^3/h - l/s	690/522 - 192/145	690/522 - 192/145	780/582 - 217/162
Sound pressure level (h-m-l)	dB(A)	39-36-33	39-36-33	45-40-36
Sound power level (h-m-l)	dB(A)	54-51-48	54-51-48	60-55-51
Dimensions (HxWxD)	mm	210 x 845 x 645	210 x 845 x 645	210 x 845 x 645
Weight	kg	22	22	22
External static pressure (stand/upper limit)	Pa	5/24	5/24	4/24

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

High efficiency filters



Easy to connect optional filter chamber designed to host standard long life pre-filters and high efficiency filters with a dust collecting effect up to 90% (NBS colorimetric mode).

This is Toshiba's most powerful ducted unit delivering air flows up to 5040 m^3/h.

Unobtrusive unit, it can be installed easily and discretely in any interior. It is the ideal solution for both new and refurbishing buildings.

Inspection hole enables easy access and maintenance.

Wide range of options available: filter chamber, long-life filter, drain pump kit.

Static pressure can be set to 3 levels (68, 137 and 196 Pa).

SM_DT

HI - STATIC PRESSURE DUCTED UNIT

DIGITAL INVERTER

INDOOR UNITS

RAV-SM2242DT-E
RAV-SM2802DT-E

OUTDOOR UNITS

RAV-SM2244AT8-E
RAV-SM2804AT8-E

REMOTE CONTROLS

Wireless

TCB-AX32E2

Wired

RBC-AMS51E-EN(ES)
RBC-AMS41E
RBC-AMT32E
RBC-AS21E2

SM_DT + SM_AT8 — Performance data with Digital Inverter Big / Serie 4

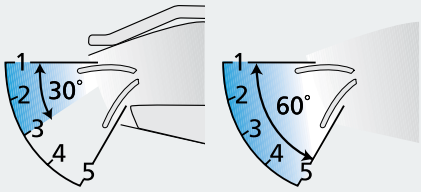
Outdoor unit **Indoor unit (High Static duct)**			RAV-SM2244AT8-E RAV-SM2242DT-E	RAV-SM2804AT8-E RAV-SM2802DT-E
Cooling capacity	kW		20,0	23,0
Cooling range (min. - max.)	kW		9,8 - 22,4	9,8 - 27,0
Power input (min. - rated - max.)	kW	C	3,26 - 7,20 - 9,09	3,36 - 8,75 - 12,76
EER	W/W		2,78	2,63
Annual energy consumption	kWh		3600	4375
Heating capacity	kW		22,4	27,0
Heating range (min. - max.)	kW		9,8 - 25,0	9,8 - 31,5
Power input (min. - rated - max.)	kW	H	2,57 - 6,49 - 7,45	2,57 - 8,15 - 11,01
COP	W/W		3,45	3,31

SM_DT — Physical data Indoor unit

Indoor unit		RAV-SM2242DT-E	RAV-SM2802DT-E
Air Flow (H/L)	m^3/h - l/s	3600 - 1000	4200 - 1167
Sound pressure level	dB(A)	54	55
Sound power level	dB(A)	74	75
Dimensions (HxWxD)	mm	470x1380x1250	470x1380x1250
Weight	kg	160	160
Upper limit / middle / standard	Pa	196/137/68,6	196/137/68,6

C = cooling mode
H = heating mode
H-M-L = High - Medium - Low speed

Automatic louver control



The air flow angle is automatically set to the most suitable setting according to the cooling or heating needs. An automatic swing mode evenly distribute the air flow in the indoor ambient.

These ceiling suspended units are the ideal solution for offices, classrooms and restaurants.

The automatic louvre control and low noise levels are the key characteristics of this state-of-the-art unit.

Drain pan positioned inside the unit ensures the maximum hygiene and is easily recyclable thanks to its stain resistant polypropylene resin body.

The infra-red receiver sensor slot is postioned on the unit for an easier and direct wirelss control.

Installation efficiency: for ceiling mounting, the unit can be suspended simply by adjusting 2 screws on the intake grille.

Self cleaning to prevent the growth of mold inside the unit.

SM_CTP

CEILING

DI AND SDI INVERTER

INDOOR UNITS

RAV-SM567CTP-E
RAV-SM807CTP-E
RAV-SM1107CTP-E
RAV-SM1407CTP-E
RAV-SM1607CTP-E

OUTDOOR UNITS

RAV-SP564ATP-E
RAV-SP804ATP-E
RAV-SP1104AT-E
RAV-SP1104AT8-E
RAV-SP1404AT-E
RAV-SP1404AT8-E
RAV-SP1604AT8-E

RAV-SM564ATP-E
RAV-SM804ATP-E
RAV-SM1104ATP-E
RAV-SM1404ATP-E
RAV-SM1603AT-E

RAV-SM2244AT8-E
RAV-SM2804AT8-E

REMOTE CONTROLS

Wireless
TCB-AX32E2
RBC-AX32CE2

Wired
RBC-AMS51E-EN(ES)
RBC-AMS41E
RBC-AMT32E
RBC-AS21E2

SM_CTP + SP_ATP

Performance data with Super Digital Inverter / Series 4

Outdoor unit Indoor unit (Ceiling)			RAV-SP564ATP-E RAV-SM567CTP-E	RAV-SP804ATP-E RAV-SM807CTP-E	RAV-SP1104AT-E RAV-SM1107CTP-E	RAV-SP1104AT8-E RAV-SM1107CTP-E	RAV-SP1404AT-E RAV-SM1407CTP-E	RAV-SP1404AT8-E RAV-SM1407CTP-E	RAV-SP1604AT8-E RAV-SM1607CTP-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	2,6 - 12,0	2.6 -12.0	2,6 - 14,0	2,6 - 14,0	2,6 - 16.0
Power input (min. - rated - max.)	kW	C	0,21-1,37-2,26	0,30-1,86-2,88	0,64-2,45-3,70	0,66 - 2,37 - 3,81	0,64-3,90-4,47	0,66 - 3,72 - 4,85	0,66 - 4,50 - 6,33
EER			3,65	3,82	4,08	4,22	3,21	3,36	3,11
SEER			5,45	6,21	6,18	6,35	-	-	-
Energy efficiency class		C	A	A++	A++	A++	-	-	-
Seasonal electricity consumption	kWh/a	C	321	400	567	551	-	-	-
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 - 10,6	2,4 - 13,0	2,4-16,5	2,4 - 16,5	2,4-18,0	2,4-19,0
Power input (min. - rated - max.)	kW	H	0,17-1,28-2,34	0,27-1,92-3,50	0,52-2,39-4,00	0,53-2,53-4,26	0,52-3,62-4,60	0,53-3,56-5,95	0,53-4,31-6,96
COP	W/W		4,38	4,17	4,69	4,43	3,87	3,93	3,71
SCOP (Average)			4,28	4,10	4,27	4,41	-	-	-
Energy efficiency class (Average)		H	A+	A+	A+	A+	-	-	-
Seasonal electricity consumption	kWh/a	H	1765	2596	3801	3685	-	-	-

SM_CTP + SM_ATP

Performance data with Digital Inverter / Series 4

Outdoor unit Indoor unit (Ceiling)			RAV-SM564ATP-E RAV-SM567CTP-E	RAV-SM804ATP-E RAV-SM807CTP-E	RAV-SM1104ATP-E RAV-SM1107CTP-E	RAV-SM1404ATP-E RAV-SM1407CTP-E	RAV-SP1603AT-E RAV-SM1607CTP-E
Cooling capacity	kW		5,0	6,9	10,0	12,1	14,0
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 7,4	3,0 - 11,2	3,0 - 13,2	3,0 - 16,0
Power input (min. - rated - max.)	kW	C	0,29-1,61-1,95	0,29-2,38-2,76	0,60-3,11-4,10	0,60-4,42-4,71	0,65-4,65-6,33
EER	W/W		3,11	2,90	3,22	2,74	3,01
SEER			5,41	5,62	5,79	-	-
Energy efficiency class		C	A	A+	A+	-	-
Seasonal electricity consumption	kWh/a	C	324	429	604	-	-
Heating capacity	kW		5,3	7.7	11,2	12,8	16,0
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0	3,0 - 12,5	3,0 - 16,0	3,0 - 18,0
Power input (min. - rated - max.)	kW	H	0,29-1,36-2,40	0,29-2,12-3,20	0,60-2,94-4,10	0,65-3,43-4,60	0,65-4,61-6,89
COP	W/W		3,90	3,62	3,81	3,73	3,47
SCOP (Average)			4,21	4,01	4,27	-	-
Energy efficiency class (Average)		H	A+	A+	A+	-	-
Seasonal electricity consumption	kWh/a	H	1562	2372	2489	-	-

SM_CTP

Physical data Indoor unit

Indoor unit		RAV-SM567CTP-E	RAV-SM807CTP-E	RAV-SM1107CTP-E	RAV-SM1407CTP-E	RAV-SM1607CTP-E
Air Flow (h/l)	m^3/h - l/s	900/540-250/150	1410/750-392/208	1860/1020-517/283	2040/1200-567/333	2040/1200-567/350
Sound pressure level (h-m-l)	dB(A)	37-35-28	41-36-29	44-38-32	46-41-35	46-42-36
Sound power level (h-m-l)	dB(A)	52-50-43	56-51-44	59-53-47	61-56-50	61-57-51
Dimensions (HxWxD)	mm	235 x 950 x 690	235 x 1270 x 690	235 x 1586 x 690	235 x 1586 x690	235 x 1586 x690
Weight	kg	23	29	35	35	35

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

Comfort sleep

By pressing this button, starts the OFF timer operation that automatically adjusts the room temperature and the fan speed.

With its attractive and slim-line design, this high-wall is suitable for offices, restaurants and other applications where elegance is required.

Drain hose can be connected to both side of the unit, increasing the installation flexibility and drain pipe length.

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

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

Auto louvre mode allows optimum and uniform air distribution.

S M _ K R T

HIGH - WALL

DI AND SDI INVERTER

INDOOR UNITS	OUTDOOR UNITS			REMOTE CONTROLS	
RAV-SM566KRT-E RAV-SM806KRT-E	RAV-SP564ATP-E RAV-SP804ATP-E	RAV-SM564ATP-E RAV-SM804ATP-E	RAV-SM2244AT8-E RAV-SM2804AT8-E	Wireless included	Wired RBC-AMS51E-EN(ES) RBC-AMS41E RBC-AMT32E RBC-AS21E2

SM_6KRT + SP_ATP — Performance data with Super Digital Inverter / Series 4

Outdoor unit **Indoor unit**			RAV-SP564ATP-E RAV-SM566KRT-E	RAV-SP804ATP-E RAV-SM806KRT-E
Cooling capacity	kW		5,0	7,1
Cooling range (min. - max.)	kW		1,2 - 5,6	1,9 - 8,0
Power input (min. - rated - max.)	kW	C	0,21 - 1,44 -2,05	0,30 - 2,21 - 2,88
EER	W/W		3,47	3,21
SEER			5,82	5,88
Energy efficiency class		C	A+	A+
Seasonal electricity consumption	kWh/a	C	300	422
Heating capacity	kW		5,6	8,0
Heating range (min. - max.)	kW		0,9 - 7,3	1,3 - 10,6
Power input (min. - rated - max.)	kW	H	0,17 - 1,50 - 2,57	0,27 - 2,34 - 3,87
COP	W/W		3,73	3,42
SCOP (Average)			4,01	3,87
Energy efficiency class (Average)		H	A+	A
Seasonal electricity consumption	kWh/a	H	2027	2534

SM_6KRT + SM_ATP — Performance data with Digital Inverter / Series 4

Outdoor unit **Indoor unit**			RAV-SM564ATP-E RAV-SM566KRT-E	RAV-SM804ATP-E RAV-SM806KRT-E
Cooling capacity	kW		5,0	6,7
Cooling range (min. - max.)	kW		1,5 - 5,6	1,5 - 7,0
Power input	kW	C	0,30 - 1,66 - 1,86	0,31- 2,44 - 2,85
EER	W/W		3,01	3,42
SEER			5,77	5,62
Energy efficiency class		C	A+	A+
Seasonal electricity consumption	kWh/a	C	304	417
Heating capacity	kW		5,3	7,7
Heating range (min. - max.)	kW		1,5 - 6,3	1,5 - 9,0
Power input (min. - rated - max.)	kW	H	0,31 - 2.44 - 2,85	0,31 - 2,61 - 3,30
COP	W/W		2,75	2,95
SCOP(Average)			4,00	4,01
Energy efficiency class (Average)		H	A+	A+
Seasonal electricity consumption	kWh/a	H	1539	2198

SM_6KRT — Physical data Indoor unit

Indoor unit			RAV-SM566KRT-E	RAV-SM806KRT-E
Air Flow (h/l)	m^3/h - l/s		840/660 - 233/183	1020/660 - 283/183
Sound pressure level (h-m-l)	dB(A)		42-39-36	47-41-36
Sound power level (h-m-l)	dB(A)		57-54-51	62-56-51
Dimensions (HxWxD)	mm		320 x 1050 x 228	320 x 1050 x 228
Weight	kg		12	12

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

Air Temperature sensor

Extended 5 meters sensor leads pre-fitted to improve installation time and flexibility.

Enables connection of 3rd Party Air Handling Units (with a DX Coil) to TOSHIBA LC Outdoor units, (DI, SDI and DI-Big).

Universal Interface with a wide range of Cooling Capacities (4.6kW to 27.0kW).

Control achieved using a standard Toshiba remote controller, not supplied with this kit.

Set by DN Code adjustment during installation.

Relay isolated inputs to prevent accidental wiring errors damaging the PCB.

Input/output signal avialable: Operation output, AC Fan Motor output, alarm output, external ON/OFF input, safety cut out input.

DX COIL

AIR HANDLING UNIT

CONNECTION KIT

INDOOR UNITS

RAV-DXC010

OUTDOOR UNITS

Digital Inverter

Super Digital Inverter

Digital Inverter Big

DX Controller unit — Performance data

	RAV-	DXC010	DXC010	DXC010	DXC010	DXC010	DXC010	DXC010
Outdoor Unit Cooling Capacity		2 HP	3 HP	4 HP	5 HP	6 HP	8 HP	10 HP
RANGE	DI	RAV-SM564ATP-E	RAV-SM804ATP-E	RAV-SM1104ATP-E	RAV-SM1404ATP-E	RAV-SM1603AT-E	RAV-SM2244AT8-E	RAV-SM2804AT8-E
	SDI	RAV-SP564ATP-E	RAV-SP804ATP-E	RAV-SP1104AT-E RAV-SP1104AT8-E	RAV-SP1404AT-E RAV-SP1404AT8-E	RAV-SP1604AT8-E		
Cooling capacity (min-rated*-max) DI	kW	4,1 - 5,3 - 5,6	5,4 - 7,1 - 7,4	7,2 - 10,0 - 11,2	10,1 - 12,5 - 13,2	12,6 - 14,0 - 16,0	14,1 - 20,0 - 22,4	20,1 - 23,0 - 27,0
Cooling capacity (min-rated*-max) SDI	kW	4,1 - 5,3 - 5,6	5,4 - 7,1 - 8,0	7,2 - 10,0 - 12,0	10,1 - 12,5 - 14,0			
Heating capacity (min-rated*-max) DI	kW	4,6 - 5,6 - 6,3	7,5 - 8,0 - 9,0	8,1 - 11,2 - 12,5	11,3 - 14,0 - 16,0	14,1 - 16,0 - 19,0	16,1 - 22,4 - 25,0	22,5 - 27,0 - 31,5
Heating capacity (min-rated*-max) SDI	kW	4,6 - 5,6 - 7,4	7,5 - 8,0 - 10,6	8,1 - 11,2 - 13,0	11,3 - 14,0 - 16,5			
AHU Air Volume (min-rated*-max)	m^3/h - l/s	720 - 900 - 1080	1060 - 1320 - 1580	1280 - 1600 - 1920	1680 - 2100 - 2520	1850 - 2800 - 3740	2880 - 3600 - 4320	3360 - 4200 - 5040
Coil Internal Volume (min-max)	dm^3	0,8 - 1,1	1,0 - 1,4	1,5 - 2,1	1,7 - 2,7	1,7 - 3,2	3,0 - 4,2	3,0 - 5,4

DX Controller unit — Physical data

	RAV-	DXC010
Dimensions (HxWxD)	mm	400x300x150
Weight	kg	10
Operating range - Cooling coil "Air on" temp	°C	15°CWB÷24°CWB
Operating range - Heating coil "Air on" temp	°C	15°CDB÷28°CDB
Power supply	V-ph-Hz	220/240-1-50

Cooling and heating output figures are based on calculations and "general" test data. All figures are to taken as approximations. The properties of the third party CX Coil will have an affect on the performance of the outdoor units.
All capacity data shown is based on the following Rated Conditions:-
• Cooling (Rated): Indoor air temperature 27 °C DB/19°C WB, Outdoor air temperature: 35°C DB
• Heating (Rated): Indoor air temperature 20°C DB, Outdoor air temperature: 7 °C DB/6°C WB.

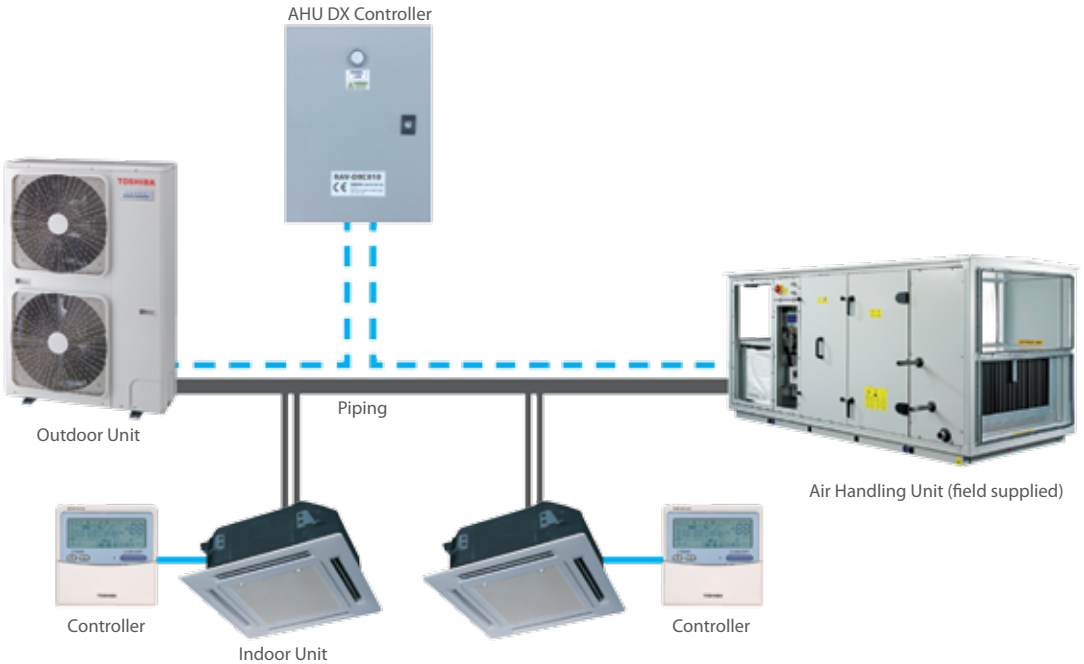
Cooling Mode Coil "Air On" Temp : Minimum 15°CWB (18°CDB) / Maximum 24°CWB (32°CDB)
Air temperatures flowing across the coil below this level, can in some circumstances, cause icing and freezing issues with the coil and eventually forcing the system to shut down and also be detrimental to the outdoor unit itself.

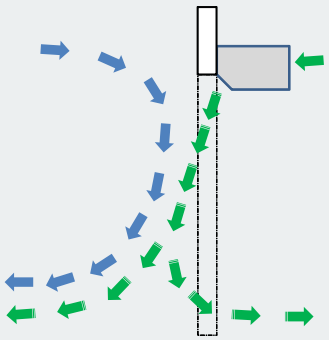
Heating Mode Coil "Air On" Temp : Minimum 15°CDB / Maximum 28°CDB
In the reverse cycle mode when the outdoor unit is producing hot gas, the coil in the AHU is effectively the condenser. Air temperatures flowing across the coil below this level, can cause over condensing of the refrigerant.
This can result in liquid being returned to the compressor which will cause a mechanical failure of the outdoor unit. Low air temperatures will also cause the unit to use it's defrost mode more often.

Fresh Air Intake
If you wish to use Fresh Air which is outside of these Coil "Air On" limits it has to either be pre-conditioned by other equipment, or mixed with return air (or a combination of both) so that it remains inside these limits, in order to ensure reliable operation.

Automatic Mode
Please be aware that frequent mode changes could occur when using Automatic mode.

TA sensor
The TA sensor should be positioned in the return air duct. In case, it's not representative enough of the occupants area temperature, remote temperature sensor TCB-TC21LE2 should be used in the room.





Working principle

This air is accelerated and forced through a narrow discharge along the length of the air curtain creating a laminar airflow.

The door air curtain is used to separate one environment from another. It creates a "curtain" of moving air that is blown over the opening of a doorway. This invisible "wall" barrier will not allow air to flow through it.

The main advantages of this units are:

Energy savings - stops drafts and reduces infiltration of outdoor air into heated or air conditioned areas.

Comfort - protects people indoor (employee and customers) by preventing cold or heat to flow indoor at door openings and at the same time keep the conditioned air inside the building from escaping.

Increase safety - allow easy access to door opening while preventing the flow of undesired smells and blocking the passage of small insects.

AIR CURTAIN

DI AND SDI INVERTER

Toshiba range

Toshiba plan to launch a range of air curtains in four styles:
- Cassette
- Under Ceiling
- Built in
- Recessed

Initially available the 1,5m and 2,5m length models, followed by the introduction of 1m and 2m models.

INDOOR UNITS

Digital Inverter	Super Digital Inverter	Digital Inverter Big

Air Curtain Free-Hanging unit (CH)

Model Code	Outdoor Sizing hp	Heating Capacity kW	Air flow rate m³/h	Power Input Fan only kW	Door Width mm	Max Door Height m	Unit Weight kg	Sound Pressure dBA
RAV-CT100CH-L	3	8	2100	0,82	1000	3,2	57	55
RAV-CT100CH-M	3	8	1520	0,56	1000	3.0	54	54
RAV-CT150CH-L	4	11,2	2800	1,11	1500	3,2	87	56
RAV-CT150CH-M	4	11,2	2280	0,74	1500	3.0	85	55
RAV-CT200CH-L	5	14	4200	1,64	2000	3,2	117	57
RAV-CT200CH-M	5	14	3040	0,93	2000	3.0	115	56
RAV-CT250CH-L	6	16	4900	1,92	2500	3,2	149	58
RAV-CT250CH-M	6	16	3800	1,11	2500	3.0	147	57

Air Curtain Cassette unit (UH)

Model Code	Outdoor Sizing hp	Heating Capacity kW	Air flow rate m³/h	Power Input Fan only kW	Door Width mm	Max Door Height m	Unit Weight kg	Sound Pressure dBA
RAV-CT100UH-L	3,0	8,0	2100	0,82	1000	3,2	52	55
RAV-CT100UH-M	3,0	8,0	1520	0,56	1000	3,0	49	54
RAV-CT150UH-L	4,0	11,2	2800	1,11	1500	3,2	107	56
RAV-CT150UH-M	4,0	11,2	2280	0,74	1500	3,0	105	55
RAV-CT200UH-L	5,0	14,0	4200	1,64	2000	3,2	113	57
RAV-CT200UH-M	5,0	14,0	3040	0,93	2000	3,0	111	56
RAV-CT250UH-L	6,0	16,0	4900	1,92	2500	3,2	137	58
RAV-CT250UH-M	6,0	16,0	3800	1,11	2500	3,0	135	57

Air Curtain Built-in unit (BH)

Model Code	Outdoor Sizing hp	Heating Capacity kW	Air flow rate m³/h	Power Input Fan only kW	Door Width mm	Max Door Height m	Unit Weight kg	Sound Pressure dBA
RAV-CT100BH-L	3,0	8,0	2100	0,82	1000	3,2	80	55
RAV-CT100BH-M	3,0	8,0	1520	0,56	1000	3,0	77	54
RAV-CT150BH-L	4,0	11,2	2800	1,11	1500	3,2	115	56
RAV-CT150BH-M	4,0	11,2	2280	0,74	1500	3,0	113	55
RAV-CT200BH-L	5,0	14,0	4200	1,64	2000	3,2	145	57
RAV-CT200BH-M	5,0	14,0	3040	0,93	2000	3,0	143	56
RAV-CT250BH-L	6,0	16,0	4900	1,92	2500	3,2	187	58
RAV-CT250BH-M	6,0	16,0	3800	1,11	2500	3,0	185	57

Outdoor units combination

Model Code (CH / UH / BH)	Door Width (mm)	Max Door Height (m)	DI - Single phase	SDI- Single phase	SDI - Three phases
RAV-CT100**-L	1000	3,2	RAV-SM804ATP-E	RAV-SP804ATP-E	-
RAV-CT100**-M	1000	3,0	RAV-SM804ATP-E	RAV-SP804ATP-E	-
RAV-CT150**-L	1500	3,2	RAV-SM1104ATP-E	RAV-SP1104AT-E	RAV-SP1104AT8-E
RAV-CT150**-M	1500	3,0	RAV-SM1104ATP-E	RAV-SP1104AT-E	RAV-SP1104AT8-E
RAV-CT200**-L	2000	3,2	RAV-SM1404ATP-E	RAV-SP1404AT-E	RAV-SP1404AT8-E
RAV-CT200**-M	2000	3,0	RAV-SM1404ATP-E	RAV-SP1404AT-E	RAV-SP1404AT8-E
RAV-CT250**-L	2500	3,2	RAV-SM1603AT-E		RAV-SP1604AT8-E
RAV-CT250**-M	2500	3,0	RAV-SM1603AT-E		RAV-SP1604AT8-E

With these kits is possible to connect more than one indoor unit of the same size and capacity to a single outdoor unit in order to improve the air distribution in a large zone.

One unit is designated as the master unit which manage the room temperaturereference for the other indoor units.

The indoor units should be installed in the same room, operate simultaneously and share a single controller.

	SDI	DI	BIG DI
TWIN	✓	✓	✓
TRIPLE	✓	✓	✓
DOUBLE TWIN			✓

Precise capacity control in all conditions.

Ideal for large shops, open-plan offices and other similar application.

User friendly controls.

Twinning requires a connection kit that includes an electromagnetic noise filter and pipe joint.

Triple combination requires a piping connection kit to optimize refrigerant flow.

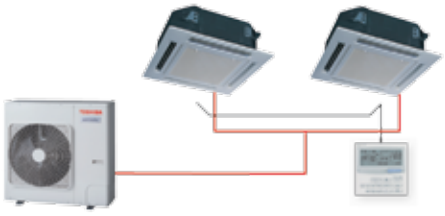
The branching kits operates with all light commercial indoor units.

Check the matching table below for the allowed size/units combinations.

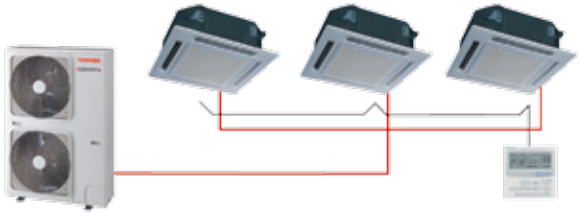
BRANCHING KITS

TWIN, TRIPLE, DOUBLE TWIN

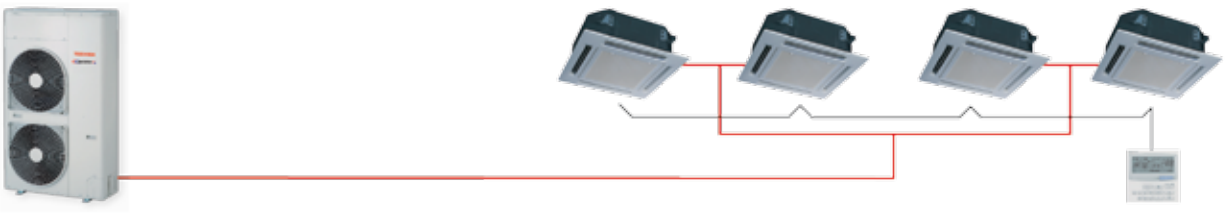
Twin split



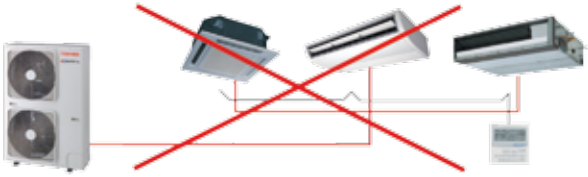
Triple split

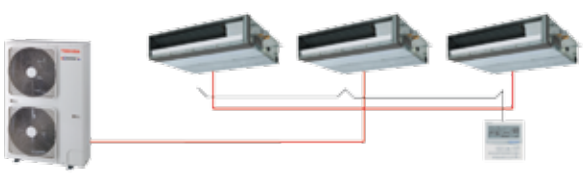


Double twin split



All branching kits must be used with the same type of indoor unit





Cooling — Twin split SDI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	EER	SEER	Energy class
4-way cassette	SP1104AT-E	SM564UTP-E	4	10,0	2,6 - 12,0	2,21	4,52	6,60	A++
4-way cassette	SP1104AT8-E	SM564UTP-E	4	10,0	2,6 - 12,0	2,37	4,22	6,57	A++
4-way cassette	SP1404AT-E	SM804UTP-E	5	12,5	2,6 - 14,0	3,16	3,96	-	-
4-way cassette	SP1404AT8-E	SM804UTP-E	5	12,5	2,6 - 14,0	3,46	3,61	-	-
4-way cassette	SP1604AT8-E	SM804UTP-E	6	14,0	2,6 - 16,0	4,49	3,12	-	-
Compact 4-way cassette	SP804ATP-E	SM404MUT-E	3	7,1	1,9 - 8,0	2,21	3,21	5,6	A+
Compact 4-way cassette	SP1104AT-E	SM564MUT-E	4	10,0	2,6 - 12,0	2,67	3,75	5,67	A+
Compact 4-way cassette	SP1104AT8-E	SM564MUT-E	4	10,0	2,6 - 12,0	2,79	3,58	5,64	A+
Ducted	SP804ATP-E	SM406BTP-E	3	7,1	1,9 - 8,0	2,06	3,45	5,88	A+
Ducted	SP1104AT-E	SM566BTP-E	4	10,0	2,6 - 12,0	2,64	3,79	5,65	A+
Ducted	SP1104AT8-E	SM566BTP-E	4	10,0	2,6 - 12,0	2,64	3,79	5,65	A+
Ducted	SP1404AT-E	SM806BTP-E	5	12,5	2,6 - 14,0	3,83	3,26	-	-
Ducted	SP1404AT8-E	SM806BTP-E	5	12,5	2,6 - 14,0	3,86	3,24	-	-
Ducted	SP1604AT8-E	SM806BTP-E	6	14,0	2,6 - 16,0	4,65	3,01	-	-
Slim duct	SP804ATP-E	SM404SDT-E	3	7,1	1,9 - 8,0	2,21	3,21	5,38	A
Slim duct	SP1104AT-E	SM564SDT-E	4	10,0	2,6 - 12,0	2,77	3,61	5,6	A+
Slim duct	SP1104AT8-E	SM564SDT-E	4	10,0	2,6 - 12,0	2,79	3,58	5,55	A
Ceiling	SP1104AT-E	SM567CTP-E	4	10,0	2,6 - 12,0	2,45	4,08	6,18	A++
Ceiling	SP1104AT8-E	SM567CTP-E	4	10,0	2,6 - 12,0	2,37	4,22	6,35	A++
Ceiling	SP1404AT-E	SM807CTP-E	5	12,5	2,6 - 14,0	3,9	3,21	-	-
Ceiling	SP1404AT8-E	SM807CTP-E	5	12,5	2,6 - 14,0	3,72	3,36	-	-
Ceiling	SP1604AT8-E	SM807CTP-E	6	14,0	2,6 - 16,0	4,5	3,11	-	-
High-wall	SP1104AT-E	SM566KRT-E	4	10,0	2,6 - 12,0	2,77	3,61	5,6	A+
High-wall	SP1104AT8-E	SM566KRT-E	4	10,0	2,6 - 12,0	2,92	3,42	5,51	A
High-wall	SP1404AT-E	SM806KRT-E	5	12,3	2,6 - 13,5	3,88	3,17	-	-
High-wall	SP1404AT8-E	SM806KRT-E	5	12,3	2,6 - 13,5	4,00	3,08	-	-
High-wall	SP1604AT8-E	SM806KRT-E	6	14,0	2,6 - 16,0	5,10	2,75	-	-

Heating — Twin split SDI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	COP	SCOP	Energy class
4-way cassette	SP1104AT-E	SM564UTP-E	4	11,2	2,4 - 13,0	2,34	4,79	4,28	A+
4-way cassette	SP1104AT8-E	SM564UTP-E	4	11,2	2,4 - 15,6	2,42	4,63	4,28	A+
4-way cassette	SP1404AT-E	SM804UTP-E	5	14,0	2,4 - 16,5	3,21	4,36	-	-
4-way cassette	SP1404AT8-E	SM804UTP-E	5	14,0	2,4 - 18,0	3,42	4,09	-	-
4-way cassette	SP1604AT8-E	SM804UTP-E	6	16,0	2,4 - 19,0	4,30	3,72	-	-
Compact 4-way cassette	SP804ATP-E	SM404MUT-E	3	8,0	1,3 - 10,6	2,16	3,70	3,86	A
Compact 4-way cassette	SP1104AT-E	SM564MUT-E	4	11,2	2,4 - 13,0	2,67	4,19	3,9	A
Compact 4-way cassette	SP1104AT8-E	SM564MUT-E	4	11,2	2,4 - 14,0	2,67	4,19	3,9	A
Ducted	SP804ATP-E	SM406BTP-E	3	8,0	1,3 - 10,6	2,21	3,62	4,00	A+
Ducted	SP1104AT-E	SM566BTP-E	4	11,2	2,4 - 13,0	2,77	4,04	3,87	A
Ducted	SP1104AT8-E	SM566BTP-E	4	11,2	2,4 - 15,6	2,77	4,04	3,87	A
Ducted	SP1404AT-E	SM806BTP-E	5	14,0	2,4 - 16,5	3,67	3,81	-	-
Ducted	SP1404AT8-E	SM806BTP-E	5	14,0	2,4 - 18,0	3,67	3,81	-	-
Ducted	SP1604AT8-E	SM806BTP-E	6	16,0	2,4 - 19,0	4,60	3,48	-	-
Slim duct	SP804ATP-E	SM404SDT-E	3	8,0	1,3 - 10,6	2,16	3,70	3,88	A
Slim duct	SP1104AT-E	SM564SDT-E	4	11,2	2,4 - 13,0	2,67	4,19	3,84	A
Slim duct	SP1104AT8-E	SM564SDT-E	4	11,2	2,4 - 14,0	2,67	4,19	3,84	A
Ceiling	SP1104AT-E	SM567CTP-E	4	11,2	2,4 - 13,0	3,7	4,69	4,27	A+
Ceiling	SP1104AT8-E	SM567CTP-E	4	11,2	2,4 - 14,0	3,81	4,43	4,41	A+
Ceiling	SP1404AT-E	SM807CTP-E	5	14,0	2,4 - 16,5	4,47	3,87	-	-
Ceiling	SP1404AT8-E	SM807CTP-E	5	14,0	2,4 - 18,0	4,85	3,93	-	-
Ceiling	SP1604AT8-E	SM807CTP-E	6	16,0	2,4 - 19,0	6,33	3,71	-	-
High-wall	SP1104AT-E	SM566KRT-E	4	11,2	2,4 - 13,0	2,80	4,00	3,87	A
High-wall	SP1104AT8-E	SM566KRT-E	4	11,2	2,4 - 14,0	2,85	3,93	3,87	A
High-wall	SP1404AT-E	SM806KRT-E	5	14,0	2,4 - 16,5	3,83	3,66	-	-
High-wall	SP1404AT8-E	SM806KRT-E	5	14,0	2,4 - 18,0	3,88	3,61	-	-
High-wall	SP1604AT8-E	SM806KRT-E	6	16,0	2,4 - 19,0	4,88	3,28	-	-

Cooling — Twin split DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	EER	SEER	Energy class
4-way cassette	SM1104ATP-E	SM564UTP-E	4	10,0	3,0 - 11,2	3.02	3.31	5,72	A+
4-way cassette	SM1404ATP-E	SM804UTP-E	5	12,0	3,0 - 13,2	4.29	2.80	5,25	A
4-way cassette	SM1603AT-E	SM804UTP-E	6	14,0	3,0 - 16,0	4,49	3,12	-	-
Compact 4-way cassette	SM1104ATP-E	SM564MUT-E	4	10,0	3,0 - 11,2	3.16	3.16	5,04	B
Ducted	SM1104ATP-E	SM566BTP-E	4	10,0	3,0 - 11,2	3.14	3.18	4,99	B
Ducted	SM1404ATP-E	SM806BTP-E	5	12.1	3,0 - 13,2	4.42	2.74	-	-
Ducted	SM1603AT-E	SM806BTP-E	6	14,0	3,0 - 16,0	5,13	2,73	-	-
Slim duct	SM1104ATP-E	SM564SDT-E	4	10,0	3,0 - 11,2	3.18	3.14	5,09	B
Ceiling	SM1104ATP-E	SM567CTP-E	4	10,0	3,0 - 11,2	3.11	3.22	5,70	A+
Ceiling	SM1404ATP-E	SM807CTP-E	5	12.1	3,0 - 13,2	4.42	2.74	-	-
Ceiling	SM1603AT-E	SM807CTP-E	6	14,0	3,0 - 16,0	4.65	3.01	-	-
High-wall	SM1104ATP-E	SM566KRT-E	4	10,0	3,0 - 11,2	3.13	3.19	5,13	A
High-wall	SM1404ATP-E	SM806KRT-E	5	12,1	3,0 - 13,0	4.71	2.57	-	-
High-wall	SM1603AT-E	SM806KRT-E	6	14,0	3,0 - 16,0	5.10	2.75	-	-

Heating — Twin split DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	COP	SCOP	Energy class
4-way cassette	SM1104ATP-E	SM564UTP-E	4	11,2	3,0 - 13,0	2,93	3,82	4,28	A+
4-way cassette	SM1404ATP-E	SM804UTP-E	5	12.8	3,0 - 16,0	3.40	3.76	4,19	A+
4-way cassette	SM1603AT-E	SM804UTP-E	6	16,0	3,0 - 18,0	4,43	3,61	-	-
Compact 4-way cassette	SM1104ATP-E	SM564MUT-E	4	11,2	3,0 - 13,0	2.99	3.75	4,17	A+
Ducted	SM1104ATP-E	SM566BTP-E	4	11,2	3,0 - 12,5	2.99	3.75	4,14	A+
Ducted	SM1404ATP-E	SM806BTP-E	5	12.8	3,0 - 16,0	3.55	3.61	-	-
Ducted	SM1603AT-E	SM806BTP-E	6	16,0	3,0 - 18,0	4.69	3.41	-	-
Slim duct	SM1104ATP-E	SM564SDT-E	4	11,2	3,0 - 12,5	2.99	3.75	4,16	A+
Ceiling	SM1104ATP-E	SM567CTP-E	4	11,2	3,0 - 12,5	2.94	3.81	4,27	A+
Ceiling	SM1404ATP-E	SM807CTP-E	5	12.8	3,0 - 16,0	3.43	3.73	-	-
Ceiling	SM1603AT-E	SM807CTP-E	6	16,0	3,0 - 18,0	4.61	3.47	-	-
High-wall	SM1104ATP-E	SM566KRT-E	4	11,2	3,0 - 12,5	4.10	3.75	4,18	A+
High-wall	SM1404ATP-E	SM806KRT-E	5	14,0	3,0 - 16,0	4,24	3.37	-	-
High-wall	SM1603AT-E	SM806KRT-E	6	16,0	3,0 - 18,0	4,98	3.21	-	-

Cooling — Twin split Big DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	EER
4-way cassette	SM2244AT8-E	SM1104UTP-E	8	20,0	9,8 - 22,4	6,24	3,21
4-way cassette	SM2804AT8-E	SM1404UTP-E	10	23,0	9,8 - 27,0	8,19	2,81
Ducted	SM2244AT8-E	SM1106BTP-E	8	20,0	9,8 - 22,4	7,12	2,81
Ducted	SM2804AT8-E	SM1406BTP-E	10	23,0	9,8 - 27,0	9,55	2,41
Ceiling	SM2244AT8-E	SM1107CTP-E	8	20,0	9,8 - 22,4	7,12	2,81
Ceiling	SM2804AT8-E	SM1407CTP-E	10	23,0	9,8 - 27,0	9,55	2,41

Heating — Twin split Big DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	COP
4-way cassette	SM2244AT8-E	SM1104UTP-E	8	22,4	9,8 - 25,0	5,82	3,85
4-way cassette	SM2804AT8-E	SM1404UTP-E	10	27,0	9,8 - 31,5	7,48	3,61
Ducted	SM2244AT8-E	SM1106BTP-E	8	22,4	9,8 - 25,0	6,40	3,50
Ducted	SM2804AT8-E	SM1406BTP-E	10	27,0	9,8 - 31,5	7,92	3,41
Ceiling	SM2244AT8-E	SM1107CTP-E	8	22,4	9,8 - 25,0	6,40	3,50
Ceiling	SM2804AT8-E	SM1407CTP-E	10	27,0	9,8 - 31,5	7,92	3,41

Cooling — Triple split SDI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	EER	Energy class
4-way cassette	SP1604AT8-E	SM564UTP-E	6	14,0	2,6 - 16,0	4,49	3,12	-
Compact 4-way cassette	SP1604AT8-E	SM564MUT-E	6	14,0	2,6 - 16,0	4,99	2,81	-
Ducted	SP1604AT8-E	SM566BTP-E	6	14,0	2,6 - 16,0	4,65	3,01	-
Slim duct	SP1604AT8-E	SM564SDT-E	6	14,0	2,6 - 16,0	4,99	2,81	-
Ceiling	SP1604AT8-E	SM567CTP-E	6	14,0	2,6 - 16,0	4.50	3.11	-
High-wall	SP1604AT8-E	SM566KRT-E	6	14,0	2,6 - 16,0	5,10	2,75	-

Heating — Triple split SDI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	COP	Energy class
4-way cassette	SP1604AT8-E	SM564UTP-E	6	16,0	2,4 - 19,0	4,30	3,72	-
Compact 4-way cassette	SP1604AT8-E	SM564MUT-E	6	16,0	2,4 - 19,0	4,60	3,48	-
Ducted	SP1604AT8-E	SM566BTP-E	6	16,0	2,4 - 19,0	4,60	3,48	-
Slim duct	SP1604AT8-E	SM564SDT-E	6	16,0	2,4 - 19,0	4,60	3,48	-
Ceiling	SP1604AT8-E	SM567CTP-E	6	16,0	2,4 - 19,0	4.31	3.71	-
High-wall	SP1604AT8-E	SM566KRT-E	6	16,0	2,4 - 19,0	4,88	3,28	-

Cooling — Triple split DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	EER	Energy class
4-way cassette	SM1603AT-E	SM564UTP-E	6	14,0	3,0 - 16,0	4,49	3,12	-
Compact 4-way cassette	SM1603AT-E	SM564MUT-E	6	14,0	3,0 - 16,0	4,99	2,81	-
Ducted	SM1603AT-E	SM564BTP-E	6	14,0	3,0 - 16,0	5,12	2,73	-
Ducted	SM1603AT-E	SM566BTP-E	6	14,0	3,0 - 16,0	5,13	2,73	-
Slim duct	SM1603AT-E	SM564SDT-E	6	14,0	3,0 - 16,0	4,99	2,81	-
Ceiling	SM1603AT-E	SM567CT-E	6	14,0	3,0 - 16,0	4.65	3.01	-
High-wall	SM1603AT-E	SM566KRT-E	6	14,0	3,0 - 16,0	5,10	2,75	-

Heating — Triple split DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	COP	Energy class
4-way cassette	SM1603AT-E	SM564UTP-E	6	16,0	3,0 - 18,0	4,43	3,61	-
Compact 4-way cassette	SM1603AT-E	SM564MUT-E	6	16,0	3,0 - 18,0	4,69	3,41	-
Ducted	SM1603AT-E	SM564BTP-E	6	16,0	3,0 - 18,0	4,69	3,41	-
Ducted	SM1603AT-E	SM566BTP-E	6	16,0	3,0 - 18,0	4,69	3,41	-
Slim duct	SM1603AT-E	SM564SDT-E	6	16,0	3,0 - 18,0	4,69	3,41	-
Ceiling	SM1603AT-E	SM567CT-E	6	16,0	3,0 - 18,0	4.61	3.47	-
High-wall	SM1603AT-E	SM566KRT-E	6	16,0	3,0 - 18,0	4,98	3,21	-

Cooling — Triple split Big-DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	EER
4-way cassette	SM2244AT8-E	SM804UTP-E	8	20,0	9,8 - 22,4	6,24	3,21
4-way cassette	SM2804AT8-E	SM804UTP-E	10	23,0	9,8 - 27,0	8,19	2,81
Ducted	SM2244AT8-E	SM806BTP-E	8	20,0	9,8 - 22,4	7,12	2,81
Ducted	SM2804AT8-E	SM806BTP-E	10	23,0	9,8 - 27,0	9,55	2,41
Ceiling	SM2244AT8-E	SM807CTP-E	8	20,0	9,8 - 22,4	7,12	2,81
Ceiling	SM2804AT8-E	SM807CTP-E	10	23,0	9,8 - 27,0	9,55	2,41
High-wall	SM2244AT8-E	SM806KRT-E	8	20,0	9,8 - 22,4	7,12	2,81
High-wall	SM2804AT8-E	SM806KRT-E	10	23,0	9,8 - 27,0	9,55	2,41

Heating — Triple split Big-DI_P

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	COP
4-way cassette	SM2244AT8-E	SM804UTP-E	8	22,4	9,8 -25,0	5,82	3,85
4-way cassette	SM2804AT8-E	SM804UTP-E	10	27,0	9,8 -31,5	7,48	3,61
Ducted	SM2244AT8-E	SM806BTP-E	8	22,4	9,8 -25,0	6,40	3,50
Ducted	SM2804AT8-E	SM806BTP-E	10	27,0	9,8 -31,5	7,92	3,41
Ceiling	SM2244AT8-E	SM807CTP-E	8	22,4	9,8 -25,0	6,40	3,50
Ceiling	SM2804AT8-E	SM807CTP-E	10	27,0	9,8 -31,5	7,92	3,41
High-wall	SM2244AT8-E	SM806KRT-E	8	22,4	9,8 -25,0	6,40	3,50
High-wall	SM2804AT8-E	SM806KRT-E	10	27,0	9,8 -31,5	7,92	3,41

Cooling — Double twin split Big DI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	EER
4-way cassette	SM2244AT8-E	SM564UTP-E	8	20,0	9,8 - 22,4	6,24	3,21
4-way cassette	SM2804AT8-E	SM804UTP-E	10	23,0	9,8 - 27,0	8,19	2,81
Compact 4-way cassette	SM2244AT8-E	SM564MUT-E	8	20,0	9,8 - 22,4	7,12	2,81
Ducted	SM2244AT8-E	SM566BTP-E	8	20,0	9,8 - 22,4	7,12	2,81
Ducted	SM2804AT8-E	SM806BTP-E	10	23,0	9,8 - 27,0	9,55	2,41
Slim duct	SM2244AT8-E	SM564SDT-E	8	20,0	9,8 - 22,4	7,12	2,81
Ceiling	SM2244AT8-E	SM567CTP-E	8	20,0	9,8 - 22,4	7,12	2,81
Ceiling	SM2804AT8-E	SM807CTP-E	10	23,0	9,8 - 27,0	9,55	2,41
High-wall	SM2244AT8-E	SM566KRT-E	8	20,0	9,8 - 22,4	7,12	2,81
High-wall	SM2804AT8-E	SM806KRT-E	10	23,0	9,8 - 27,0	9,55	2,41

Heating — Double twin split Big DI

Indoor unit model	Outdoor unit RAV-	Indoor unit RAV-	HP	capacity nominal kW	capacity min. - max. kW	Power input kW	COP
4-way cassette	SM2244AT8-E	SM564UTP-E	8	22,4	9,8 - 25,0	5,82	3,85
4-way cassette	SM2804AT8-E	SM804UTP-E	10	27,0	9,8 - 31,5	7,48	3,61
Compact 4-way cassette	SM2244AT8-E	SM564MUT-E	8	22,4	9,8 - 25,0	6,40	3,50
Ducted	SM2244AT8-E	SM566BTP-E	8	22,4	9,8 - 25,0	6,40	3,50
Ducted	SM2804AT8-E	SM806BTP-E	10	27,0	9,8 - 31,5	7,92	3,41
Slim duct	SM2244AT8-E	SM564SDT-E	8	22,4	9,8 - 25,0	6,40	3,50
Ceiling	SM2244AT8-E	SM567CTP-E	8	22,4	9,8 - 25,0	6,40	3,50
Ceiling	SM2804AT8-E	SM807CTP-E	10	27,0	9,8 - 31,5	7,92	3,41
High-wall	SM2244AT8-E	SM566KRT-E	8	22,4	9,8 - 25,0	6,40	3,50
High-wall	SM2804AT8-E	SM806KRT-E	10	27,0	9,8 - 31,5	7,92	3,41

THE BUSINESS SOLUTIONS

VRF technology offers the best solution for large commercial and industrial buildings, including hotels, hospitals, leisure and shopping centers.
The dual inverter compressor guarantees high efficiency levels, operating flexibility and reduced maintenance requirements.
Moreover, the wide range of indoor units makes VRF system the most flexible choice to satisfy any kind of requirement and to be ideal for many installations.

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With the innovative and sophisticated Toshiba technology and the use of 3 compressors and 3 inverter SMMSi systems ensures extraordinary flexibility in any application.
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It managed to bridge the gap between the versatile Multi-Split Systems and the larger capacity of the SMMSi.

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- Silence is golden
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TOSHIBA refrigeration and air-conditioning products are designed and manufactured on the assumption tha each product is used with the specific refrigerant specified for that product.
Recently it has been noticed that, in some cases, the type of refrigerant used in a product is different from the one 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 Carrier Corporation 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 that product, or on the label attached to the product itself.
Toshiba Carrier Corporation shall NOT assume any liability for failures, malfunctions or safety issues on any product if an incorrect refrigerant is used in that product.

The capacities in this catalogue are based on Eurovent conditions:

Cooling: Entering indoor air temperature: 27 °C db / 19 °C wb. Outdoor air temperature: 35 °C db / 24 °C wb.
Heating: Entering indoor air temperature: 20 °C db. Outdoor air temperature: 7 °C db / 6 °C wb.
The sound pressure level is given at 1 m distance from outdoor units, and 1,5 m distance from indoor units.
Energy class and annual consumption are determined according to 2002/31/EC Commission Directive.

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* Preliminary data

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