

TOSHIBA

HEAT PUMPS

Think Toshiba. Think reliability.



★★★★★
MOST SATISFIED CUSTOMERS
HEAT PUMPS - 2015

LIGHT COMMERCIAL RANGE

Inverter heat pumps suitable for both homes
and commercial premises



Toshiba Heat Pumps. We care about better air.

Toshiba was the first company to incorporate inverter technology into air conditioning systems in 1981 and since then it has maintained a technological advantage over its competitors.

The development of the exclusive DC Hybrid Twin Rotary Inverter Compressor system has reaffirmed this ability to innovate and maintain technological leadership in a very crowded market. But for Toshiba, innovation also means a strong commitment to international institutions that carefully evaluate the impact of new technologies on our environment.

Toshiba combines technological development with care for future generations - the result is a range of energy efficient heat pumps, reducing greenhouse gas emissions at the source.



Our Philosophy

Toshiba Heat Pumps is committed to delivering the highest standard of quality and innovation across our product range and services. For more than 40 years, Toshiba heat pumps has led the world in creating better air conditioning and setting new standards in comfort, ease of use, energy efficiency and climate control.

The Toshiba heat pump product range encompasses a comprehensive inverter range to suit residential and light commercial applications.

Toshiba inverter systems provide excellent energy efficiency, are reliable and run on R410A non-ozone depleting refrigerant.

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Outdoor (SM) Digital Inverter - Series 4

- » R-410A HEAT PUMPS
- » VECTOR IPDU INVERTER
- » DIGITAL INVERTER
- » SUITABLE FOR RE-USE ON EXISTING R-22 PIPES



Extremely light

Both cooling/heating down to -15 °C outside temperature

Extended pipe runs up to 50m



Sizes 304 - 804



Sizes 1104 - 1404



Size 1603

Features

Toshiba's Digital Inverter (DI) series 4 is an advanced solution that can meet the growing market need for ease of installation and increased consumer comfort.

This system, which uses the environmentally responsible refrigerant R410A, can use piping designed for older R22 or R407C refrigerants.*

This 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.

* Provided the existing pipework meets current legislation regarding the pressure rating of R410A.



Key Features

- Excellent EER with significant savings in annual power consumption.
- Compatible with a wide choice of indoor units: hi-wall, compact 4-way cassette, 4-way cassette, ducted and ceiling units.
- Light, compact units: up to 40% height reduction and up to 35% lighter than conventional models (sizes 4 HP and 5 HP) for easier installation.
- The Vector Intelligent Drive Unit (IPDU) technology ensures high performance.



Inverter Control



small Compact dimensions



Cooling at even -15°C ambient temperature



50m Long pipe run



Hot Start



Hydrophilic coil protection

Outdoor (SP) Super Digital Inverter - Series 4

- » R-410A HEAT PUMPS
- » VECTOR IPDU INVERTER
- » SUPER DIGITAL INVERTER
- » SUITABLE FOR RE-USE ON EXISTING R-22 PIPES



COP up to 4.79

**Heating down to -20 °C
outside temperature**

**Extended pipe runs up
to 75m**



Sizes 564 - 804



Sizes 1104 - 1404

Features

The Super Digital Inverter (SDI) series 4 models, with super high energy efficiency ratings and enhanced technological innovations, offer superior characteristics and performance.

This system, which uses the environmentally responsible refrigerant R410A, can use piping designed for older R22 or R407C refrigerants.*

This 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.

* Provided the existing pipework meets current legislation regarding the pressure rating of R410A.



Key Features

- **Highest COP/EER Values:** COP values up to 4.79 in heating mode (3HP). Part load COP of up to 6.51 in heating mode.
- **Increased Energy Efficiency:** 93% of the units have 5 star or better energy rating. 50% energy cost savings, compared with fixed-speed units.
- **Extended Pipe Runs:** 75m length for increased installation flexibility.
- **Vector Intelligent Drive Unit (IPDU):** an increased number of smaller steps for more accurate control.
- **Wider Operating Range:** guaranteed performance down to -15 °C outside temperature in cooling modes and down to -20 °C in heating mode.



Inverter Control



Quiet CDU



Cooling at even -15°C
ambient temperature



75m
Super long
pipe run



Hot Start



Hydrophilic
coil protection

Line Up

DIGITAL INVERTER

DI Series Single Phase



RAV-SM304ATP-A



RAV-SM404ATP-A

Hi-Wall		RAV-SM307KRTP-A	RAV-SM407KRTP-A
Compact 4-Way Cassette		RAV-SM304MUT-E	RAV-SM404MUT-E

DI Series Single Phase



RAV-SM564ATP-A1



RAV-SM804ATP-A1






RAV-SM1104ATP-A1



RAV-SM1404ATP-A1



RAV-SM1603AT-A1

4-Way Cassette		RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E	RAV-SM1404UTP-E	RAV-SM1604UTP-E
Hi-Static Ducted		-	-	-	-	RAV-SM1603DT-A
Hi-Wall		RAV-SM566KRT-A	RAV-SM806KRT-A	-	-	-


DI Series Three Phase



RAV-SM2244AT8-A1



RAV-SM2804AT8-A1

Hi-Static Ducted		RAV-SM2244DTP-E	RAV-SM2804DTP-E
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DI Series Single Phase

Twin Split



RAV-SM1404ATP-A1

4-Way Cassette Twin		RAV-SM804UTP-E
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Line Up

S U P E R
DIGITAL INVERTER

SDI Series Single Phase



RAV-SP564ATP-A1



RAV-SP804ATP-A1



RAV-SP1104AT-A1



RAV-SP1404AT-A1

Compact 4-Way Cassette		RAV-SM564MUT-E	-	-	-
4-Way Cassette		RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E	RAV-SM1404UTP-E
Duct 6 Series		RAV-SM566BTP-E	RAV-SM806BTP-E	RAV-SM1106BTP-E	RAV-SM1406BTP-E
Ceiling 7 Series		RAV-SM567CTP-E	RAV-SM807CTP-E	RAV-SM1107CTP-E	RAV-SM1407CTP-E
Hi-Wall		RAV-SM566KRT-A	RAV-SM806KRT-A	-	-
Hi-Static Ducted		-	-	RAV-SM1130DT-A	RAV-SM1403DT-A

SDI Series Three Phase



RAV-SP1404AT8-A1



RAV-SP1604AT8-A1

4-Way Cassette		RAV-SM1404UTP-E	RAV-SM1604UTP-E
Ducted 6 Series		RAV-SM1406BTP-E	-
Hi-Static Ducted		-	RAV-SM1603DT-A
Ceiling 7 Series		RAV-SM1407CTP-E	RAV-SM1607CTP-E

SDI Series Single Phase

Twin Split



RAV-SP1404AT-A1

Hi-Wall Twin		RAV-SM806KRT-A
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Hi-Wall Type



Models

RAV-SM307KRTP-A
RAV-SM407KRTP-A



Models

RAV-SM566KRT-A
RAV-SM806KRT-A

Optional



RBC-AMS54E-ES
7 Day Weekly
Programmable
Controller



TO-RC-WIFI-1
WIFI Controller

With its clever electronics and powerful performance, the KRT range is well suited to server rooms, offices and hospitality applications. An easy to use infra-red remote controller is included, optional WIFI is available to further enhance control flexibility.

KEY FEATURES

With its slim design, this compact and stylish unit blends into any room setting.

- Enhanced filtration system: Zeolite Plus + Sasa filter to deodorise, Bio-enzyme filter + Ginkgo filter to purify and a new antioxidant Vitamin C filter.
- Auto-louvre mode allows optimum air distribution throughout the room.
- A wireless controller is included.
- Built in TCC 1:1 interface for connection to TCC link for BMS integration using BACnet®, Lonworks® and Modbus.
- Connectable to central controller or Toshiba Smart manager.
- On/Off input and output plus three party alarm connectable.
- Configurable disabling of unwanted modes or fan speeds (optional wired controller required).

Comfort



Inverter
Allows step-less regulation of the air-conditioner's power, which reduces energy consumption and improves comfort.



Hot Start
When using the heater for preheating or defrosting, stops the indoor fan to prevent cold air from being blown into the room.



Auto-turn Louvres
Air outlet grilles move automatically to fill every corner of the room with warm or cool air.



Automatic Cooling/Heating
Automatically switches between cooling and heating mode.

Operativity



On/Off Timer
The operation start and stop times can be set with a digital clock.



Automatic Air Volume Control
Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.

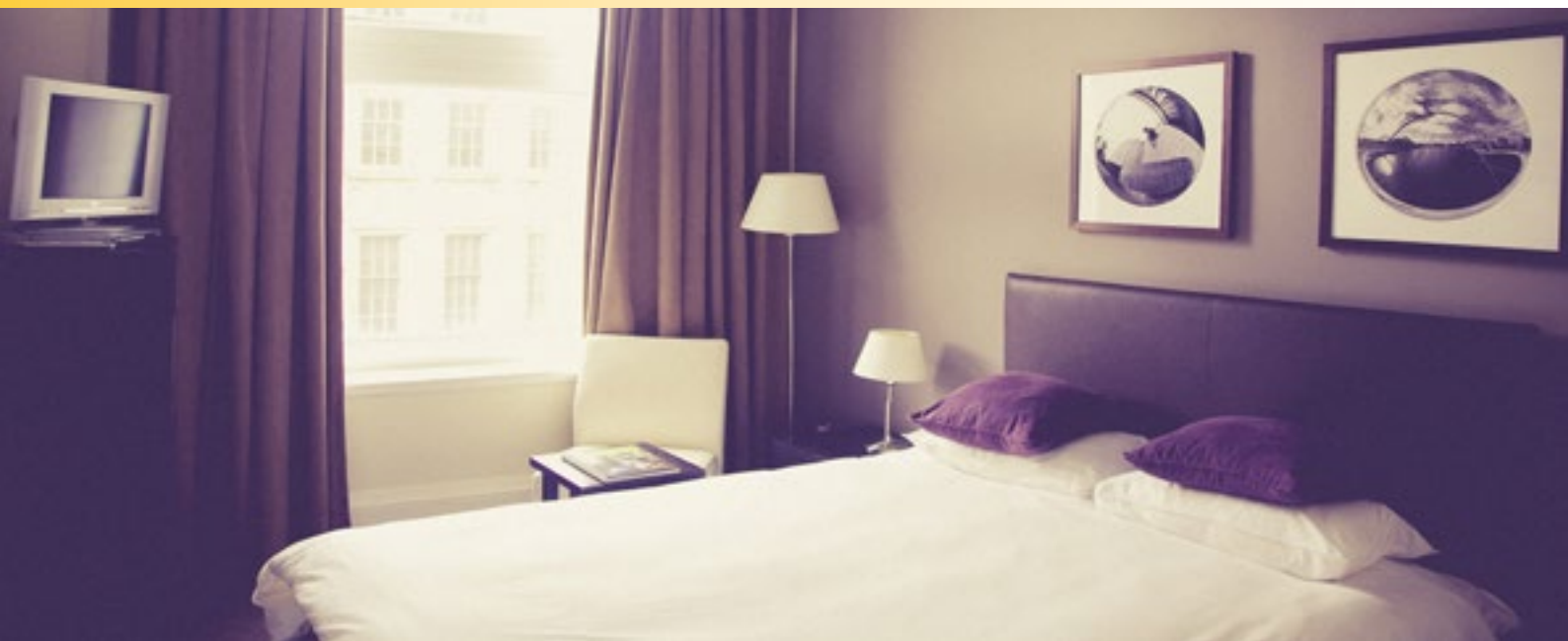
Installation



Cooling at even -15°C ambient temperature



Dry
Gradually dehumidifies the room to create even greater comfort.



Hi-Wall Digital Inverter - Single Phase

DIGITAL INVERTER

SYSTEM CODE			SM307K	SM407K	SM566K	SM806K
INDOOR			RAV-SM307KRTP-A	RAV-SM407KRTP-A	RAV-SM566KRT-A	RAV-SM806KRT-A
OUTDOOR			RAV-SM304ATP-A	RAV-SM404ATP-A	RAV-SM564ATP-A1	RAV-SM804ATP-A1
REFRIGERANT TYPE			R410A			
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz			
Cooling	Capacity - Rated	kW	2.5	3.1	4.6	5.5
	Capacity - Range (min ~ max)	kW	0.9 - 3.0	0.9 - 4.0	1.5 - 5.6	1.5 - 7.0
	Efficiency (rated)	EER	4.10	3.97	3.26	3.24
	Power Input (min ~ rated ~ max)	kW	0.25~0.61~0.82	0.18~0.78~2.00	0.30~1.41~1.86	0.31~1.70~2.85
	Operating Current (rated)	A	3.07	3.85	6.85	7.95
Heating	Capacity - Rated	kW	3.0	3.2	5.3	7.0
	Capacity - Range (min ~ max)	kW	0.8 - 4.5	0.8 - 5.0	1.5 - 6.3	1.5 - 8.5
	Efficiency (rated)	COP	4.23	3.95	3.42	3.33
	Power Input (min ~ rated ~ max)	kW	19.7~58.6~85.6	10.2~40.7~85.0	0.30~1.55~2.44	0.31~2.10~3.30
	Operating Current (rated)	A	3.33	3.80	7.5	9.84
Indoor Unit	Dimension (HxWxD)	mm	275x790x217	275x790x217	320x1050x228	320x1050x228
	Net Weight	kg	10	10	13	13
	Airflow Volume (H/L)	l/s	158/100	192/197	233/183	283/183
	Sound Pressure(H/M/L)	dBA	41/37/31	45/40/32	42/39/36	47/41/36
Outdoor Unit	Dimension (HxWxD)	mm	550x780x290	550x780x290	550x780x290	550x780x290
	Net Weight	kg	33	33	40	44
	Compressor Type		Rotary DC Inverter		DC Twin Rotary	
	Fan Motor Output	W	43	43	43	43
	Cooling Operating Noise (Sound Pressure) (H)	dBA	46	41	46	48
	Heating Operating Noise (Sound Pressure) (H)	dBA	47	50	48	52
	Cooling Usable Temperature Range	°C	-15 to 46			
	Heating Usable Temperature Range	°C	-15 to 24		-15 to 15	
Pipe Size	Liquid Line Ø	mm	6.4	6.4	6.4	9.5
	Gas Line Ø	mm	9.5	12.7	12.7	15.9
	Minimum Length	mm	2	2	5	5
	Maximum Length	m	20	20	30	30
	Chargeless Length	m	15	15	20	20
	Maximum Height Difference	m	10	10	30	30

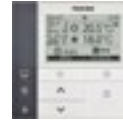
Hi-Wall Type



Models

RAV-SM566KRT-A
RAV-SM806KRT-A

Optional



RBC-AMS54E-ES
7 Day Weekly
Programmable
Controller



TO-RC-WIFI-1
WIFI Controller

With its clever electronics and powerful performance, the KRT range is well suited to server rooms, offices and hospitality applications. An easy to use infra-red remote controller is included, optional WIFI is available to further enhance control flexibility.

KEY FEATURES

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- Enhanced filtration system: Zeolite Plus + Sasa filter to deodorise, Bio-enzyme filter + Gingko filter to purify and a new antioxidant Vitamin C filter.
- Auto-louvre mode allows optimum air distribution throughout the room.
- A wireless controller is included.
- Built in TCC 1:1 interface for connection to TCC link for BMS integration using BACnet®, Lonworks® and Modbus.
- Connectable to central controller or Toshiba Smart manager.
- On/Off input and output plus three party alarm connectable.
- Configurable disabling of unwanted modes or fan speeds (optional wired controller required).

Comfort



Inverter
Allows step-less regulation of the air-conditioner's power, which reduces energy consumption and improves comfort.



Hot Start
When using the heater for preheating or defrosting, stops the indoor fan to prevent cold air from being blown into the room.



Auto-turn Louvres
Air outlet grilles move automatically to fill every corner of the room with warm or cool air.



Automatic Cooling/Heating
Automatically switches between cooling and heating mode.

Operativity



On/Off Timer
The operation start and stop times can be set with a digital clock.



Automatic Air Volume Control
Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.

Installation



Cooling at even -15°C ambient temperature



Dry
Gradually dehumidifies the room to create even greater comfort.



Hi-Wall Super Digital - Single Phase

S U P E R
DIGITAL INVERTER

SYSTEM CODE			SP566K	SP806K
INDOOR			RAV-SM566KRT-A	RAV-SM806KRT-A
OUTDOOR			RAV-SP564ATP-A1	RAV-SP804ATP-A1
REFRIGERANT TYPE			R410A	
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz	
Cooling	Capacity - Rated	kW	5.0	6.6
	Capacity - Range (min ~ max)	kW	1.2 - 5.6	1.9 - 8.0
	Efficiency (rated)	EER	3.47	3.46
	Power Input (min ~ rated ~ max)	kW	0.21~1.44~2.05	0.30~1.91~2.88
	Operating Current (rated)	A	3.47	9.04
Heating	Capacity - Rated	kW	5.6	8.0
	Capacity - Range (min ~ max)	kW	0.9 - 7.3	1.3 - 10.6
	Efficiency (rated)	COP	3.73	3.42
	Power Input (min ~ rated ~ max)	kW	0.17~1.50~2.57	0.27~2.34~3.87
	Operating Current (rated)	A	6.98	9.04
Indoor Unit	Dimension (HxWxD)	mm	320x1050x228	320x1050x228
	Net Weight	kg	12	12
	Airflow Volume (H/L)	l/s	233/183	283/183
	Fan Motor Output	W	30	30
	Sound Pressure(H/M/L)	dB(A)	42/39/36	47/41/36
Outdoor Unit	Dimension (HxWxD)	mm	550x780x290	890x900x320
	Net Weight	kg	44	66
	Compressor Type		DC Twin Rotary	
	Fan Motor Output	W	43	63
	Cooling Operating Noise (Sound Pressure) (H)	dB(A)	47	48
	Heating Operating Noise (Sound Pressure) (H)	dB(A)	48	49
	Cooling Usable Temperature Range	°C	-15 to 43	
	Heating Usable Temperature Range	°C	-20 to 15	
Pipe Size	Liquid Line Ø	mm	6.4	9.5
	Gas Line Ø	mm	12.7	15.9
	Maximum Length	m	50	50
	Chargeless Length	m	20	30
	Maximum Height Difference	m	30	30

S U P E R
DIGITAL INVERTER

Hi-Wall - Twin Split



SYSTEM CODE			TW-SP1404K
INDOOR			RAV-SM806KRT-A x 2
OUTDOOR			RAV-SP1404AT-A1
REFRIGERANT TYPE			R410A
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz
Cooling	Capacity - Rated	kW	12.3
	Capacity - Range (min ~ max)	kW	2.6 - 13.5
	Efficiency (rated)	EER	3.17
	Power Input (min ~ rated ~ max)	kW	0.64~3.88~4.40
	Operating Current (rated)	A	18.0
Heating	Capacity - Rated	kW	14.0
	Capacity - Range (min ~ max)	kW	2.4 - 16.5
	Efficiency (rated)	COP	3.66
	Power Input (min ~ rated ~ max)	kW	3.86
	Operating Current (rated)	A	17.76
Indoor Unit	Dimension (HxWxD)	mm	320x1050x228
	Net Weight	kg	12
	Airflow Volume (H/L)	l/s	308.4/203.4
	Fan Motor Output	W	30
	Sound Pressure(H/M/L)	dBA	42/39/36
Outdoor Unit	Dimension (HxWxD)	mm	1340x900x320
	Net Weight	kg	93
	Compressor Type		DC Twin Rotary
	Fan Motor Output	W	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dBA	49
	Heating Operating Noise (Sound Pressure) (H)	dBA	50
	Cooling Usable Temperature Range	°C	-15 to 43
	Heating Usable Temperature Range	°C	-20 to 15
Pipe Size	Liquid Line Ø	mm	9.5
	Gas Line Ø	mm	15.9
	Maximum Length	m	50
	Chargeless Length	m	30
	Maximum Height Difference	m	30

4-Way Compact Cassette Type



Model

RAV-SM304MUT-E
RAV-SM404MUT-E
RAV-SM564MUT-E



Panel

RBC-UM11PG(W)-E



Controller

RBC-AMS54E-ES

Optional



TO-RC-WIFI-1
WIFI Controller

Perfect for Grid System Ceiling

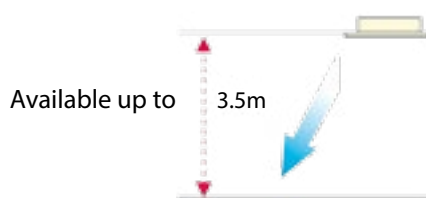
- This compact unit (575mm x 575mm) fits perfectly into ceilings and matches standard architectural modules, without the need to cut ceiling tiles.
- The compact and stylish panel design is ideal for fashionable restaurants, shops and offices.
- The louvres fold tightly against the ceiling when its operation stops.

Designed for simple & easy installation and maintenance

- The slim design is only 268mm in height allowing it to blend into the surrounding environment neatly.
- The ceiling type offers easy installation and maintenance, since the electrical box is located inside the unit.
- Easy installation can also be achieved using the panel adjust pocket.
- Long drain pump height of 850mm.
- Available for ceilings up to 3.5m.
- The drain-check viewing cavity make it possible to view the drain pan.



Drain checking viewing cavity



Available up to 3.5m

Comfort



Inverter
Allows step-less regulation of the air-conditioner's power, which reduces energy consumption and improves comfort.



Long-life Filter
Built-in long-life filter makes maintenance easier.



Auto-turn Louvres
Air outlet grilles move automatically to fill every corner of the room with warm or cool air.



Hot Start
When using the heater for preheating or defrosting, stops the indoor fan to prevent cold air from being blown into the room.



Automatic Air Volume Control
Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.



Automatic Cooling/Heating
Automatically switches between cooling and heating mode.

Operativity



Filter Sign
Automatic displays on the remote controller say when to perform maintenance for the indoor unit filter.



Limit Timer
Uses a 168-hour timer with three modes — "ON timer", "OFF timer" and "Repeat OFF timer".



Dry
Gradually dehumidifies the room to create even greater comfort.

Installation



Cooling at even -15°C ambient temperature



Built-in Drain Pump
The built-in drain pump makes draining easier. (In the ceiling cassette type, it is built in to the main unit.)



Compact Cassette - Single Phase

DIGITAL INVERTER

SUPER
DIGITAL INVERTER

SYSTEM CODE			SM304MU	SM404MU	SP564MU
INDOOR			RAV-SM304MUT-E	RAV-SM404MUT-E	RAV-SM564MUT-E
OUTDOOR			RAV-SM304ATP-A	RAV-SM404ATP-A	RAV-SP564ATP-A1
REFRIGERANT TYPE			R410A		
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz		
Cooling	Capacity - Rated	kW	2.5	3.6	4.7
	Capacity - Range (min ~ max)	kW	0.9 - 3.0	0.9 - 4.0	1.2 - 5.6
	Efficiency (rated)	EER	4.24	4.00	3.38
	Power Input (rated)	kW	0.59	1.00	1.39
	Operating Current (rated)	A	3.45	5.05	6.45
Heating	Capacity - Rated	kW	3.4	4.0	5.6
	Capacity - Range (min ~ max)	kW	0.8 - 4.5	0.8 - 5.0	0.9 - 7.4
	Efficiency (rated)	COP	4.47	4.21	3.64
	Power Input (rated)	kW	0.76	0.97	1.54
	Operating Current (rated)	A	NK	4.79	6.45
Indoor Unit	Dimension (HxWxD)	mm	268x575x575	268x575x575	268x575x575
	Net Weight	kg	16	16	16
	Airflow Volume (H/L)	l/s	178/122	183/130	221.7/151.7
	Sound Pressure(H/M/L)	dBA	40/36/31	40/36/31	43/39/34
Outdoor Unit	Dimension (HxWxD)	mm	550x780x290	550x780x290	550x780x290
	Net Weight	kg	33	39	44
	Compressor Type		Rotary DC Inverter		DC Twin Rotary
	Fan Motor Output	W	43	43	43
	Cooling Operating Noise (Sound Pressure) (H)	dBA	46	49	47
	Heating Operating Noise (Sound Pressure) (H)	dBA	47	50	48
	Cooling Usable Temperature Range	°C	-15 to 46		-15 to 43
	Heating Usable Temperature Range	°C	-15 to 24		-20 to 15
Pipe Size	Liquid Line Ø	mm	6.4	6.4	6.4
	Gas Line Ø	mm	9.5	12.7	12.7
	Maximum Length	m	20	20	50
	Chargeless Length	m	7.5	7.5	20
	Maximum Height Difference	m	10	10	30

4-Way Cassette Type



Model

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



Panel

RBC-U31PGP(W)-E



Controller

RBC-AMS54E-ES



Optional

RBC-AX32U(W)-E
Wireless remote controller kit



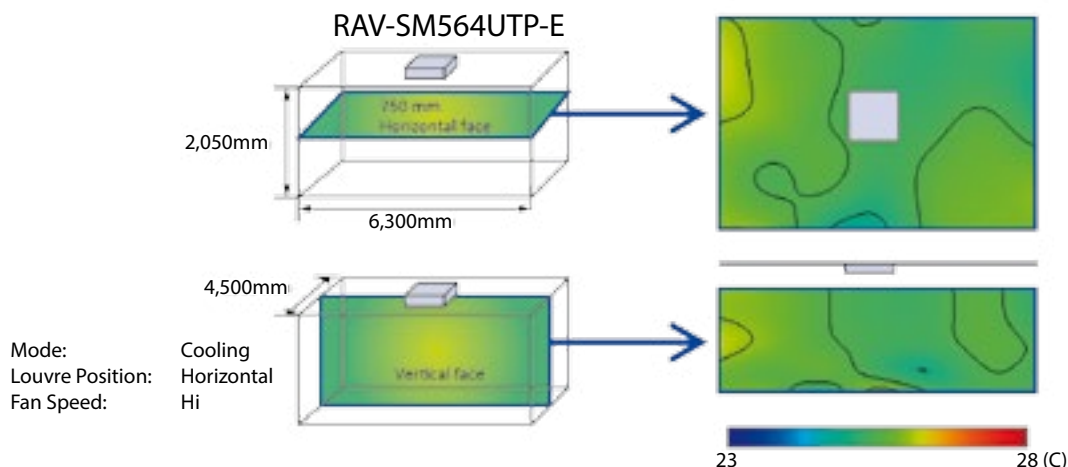
TO-RC-WIFI-1
WIFI Controller

Easy Installation



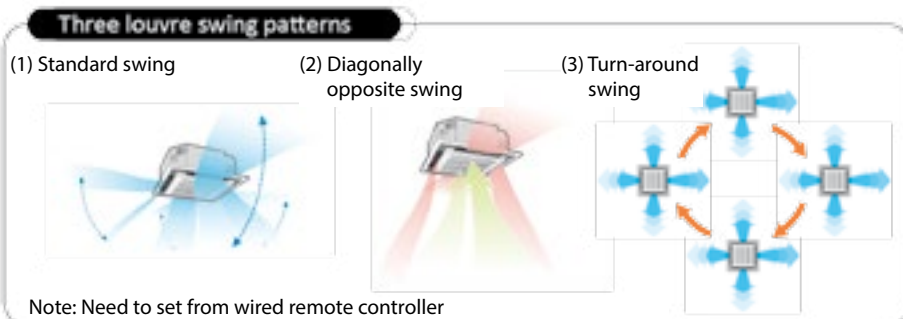
The panel is attached using the bolt that is already installed on the indoor unit.

Temperature Conditioning



Individual Louvre Control

- The angles of each of the four louvres can be set individually.
- Three different choices of swing patterns; Standard, Diagonally Opposite and Turn-around swing.



Comfort



Inverter
Allows step-less regulation of the air-conditioner's power, which reduces energy consumption and improves comfort.



Long-life Filter
Built-in long-life filter makes maintenance easier.



Filter Sign
Automatic displays on the remote controller say when to perform maintenance for the indoor unit filter.



Cooling at even -15°C ambient temperature



Individual louvre control
Enables airflows to be chosen according to user preferences.



Hot Start
When using the heater for preheating or defrosting, stops the indoor fan to prevent cold air from being blown into the room.



Limit Timer
Uses a 168-hour timer with three modes — "ON timer", "OFF timer" and "Repeat OFF timer".



Built-in Drain Pump
The built-in drain pump makes draining easier. (In the ceiling cassette type, it is built in to the main unit.)



Auto-turn Louvres
Air outlet grilles move automatically to fill every corner of the room with warm or cool air.



Automatic Cooling/Heating
Automatically switches between cooling and heating mode.



Automatic Air Volume Control
Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.



Dry
Gradually dehumidifies the room to create even greater comfort.



4-Way Cassette Digital - Single Phase

DIGITAL INVERTER

SYSTEM CODE			SM564U	SM804U	SM1104U	SM1404U	SM1603U	
INDOOR			RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E	RAV-SM1404UTP-E	RAV-SM1604UTP-E	
OUTDOOR			RAV-SM564ATP-A1	RAV-SM804ATP-A1	RAV-SM1104ATP-A1	RAV-SM1404ATP-A1	RAV-SM1603AT-A1	
REFRIGERANT TYPE			R410A					
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz					
Cooling	Capacity - Rated	kW	5.3	6.2	10.0	11.2	14.0	
	Capacity - Range (min ~ max)	kW	1.5 - 5.6	1.5 - 8.0	3.0 - 11.2	3.0 - 12.5	3.0 - 16.0	
	Efficiency (rated)	EER	3.29	3.26	3.31	3.00	3.12	
	Power Input (min ~ rated ~ max)	kW	0.26~1.46~1.88	0.26~1.87~2.60	0.60~3.02~4.10	0.60~3.60~4.71	0.65~4.49~5.70	
	Operating Current (rated)	A	7.05	8.75	14.60	17.20	21.48	
Heating	Capacity - Rated	kW	5.6	8.0	11.2	14.0	16.0	
	Capacity - Range (min ~ max)	kW	1.5 - 6.3	1.5 - 8.5	3.0 - 13.0	3.0 - 15.0	3.0 - 18.0	
	Efficiency (rated)	COP	3.90	3.74	3.82	3.73	3.61	
	Power Input (min ~ rated ~ max)	kW	0.26~1.36~2.08	0.26~1.87~2.7	0.60~2.93~4.30	0.60~3.27~4.50	0.65~4.43~6.51	
	Operating Current (rated)	A	6.56	8.75	14.17	16.30	21.20	
Indoor Unit	Dimension (HxWxD)	mm	256x840x840	256x840x840	319x840x840	319x840x840	319x840x840	
	Net Weight	kg	20	20	24	24	24	
	Airflow Volume (H/L)	l/s	291.7/216.7	341.7/225.0	558.4/325.1	583.5/341.7	591.8/350.1	
	Fan Motor Output	W	14	20	68	72	72	
	Sound Pressure(H/M/L)	dBa	32/29/28	35/31/28	43/38/33	44/38/34	45/40/36	
Outdoor Unit	Dimension (HxWxD)	mm	550x780x290	550x780x290	890x900x320	890x900x320	1340x900x320	
	Net Weight	kg	40	44	68	68	99	
	Compressor Type		DC Twin Rotary					
	Fan Motor Output	W	43	43	100	100	100+100	
	Cooling Operating Noise (Sound Pressure) (H)	dBa	46	48	53	54	51	
	Heating Operating Noise (Sound Pressure) (H)	dBa	48	52	54	55	53	
	Cooling Usable Temperature Range	°C	-15 to 46					-15 to 43
	Heating Usable Temperature Range	°C	-15 to 15					
Pipe Size	Liquid Line Ø	mm	6.4	9.5	9.5	9.5	9.5	
	Gas Line Ø	mm	12.7	15.9	15.9	15.9	15.9	
	Maximum Length	m	30	30	50	50	50	
	Chargeless Length	m	20	20	30	30	30	
	Maximum Height Difference	m	30	30	30	30	30	

S U P E R
DIGITAL INVERTER

4-Way Cassette Super Digital - Single Phase



SYSTEM CODE			SP564U	SP804U	SP1104U	SP1404U
INDOOR			RAV-SM564UTP-E	RAV-SM804UTP-E	RAV-SM1104UTP-E	RAV-SM1404UTP-E
OUTDOOR			RAV-SP564ATP-A1	RAV-SP804ATP-A1	RAV-SP1104AT-A1	RAV-SP1404AT-A1
REFRIGERANT TYPE			R410A			
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz			
Cooling	Capacity - Rated	kW	5.3	7.1	10.0	12.5
	Capacity - Range (min ~ max)	kW	1.2 - 5.6	1.9 - 8.0	2.6 - 12.0	2.6 - 14.0
	Efficiency (rated)	EER	3.61	3.82	4.52	3.96
	Power Input (min ~ rated ~ max)	kW	0.20~1.47~1.95	0.30~1.86~2.52	0.64~2.21~3.60	0.64~3.16~4.40
	Operating Current (rated)	A	6.82	8.72	10.36	14.66
Heating	Capacity - Rated	kW	5.6	8.0	11.2	14.0
	Capacity - Range (min ~ max)	kW	0.9 - 8.1	1.3 - 11.3	2.4 - 13.0	2.4 - 16.5
	Efficiency (rated)	COP	4.63	4.19	4.79	4.36
	Power Input (min ~ rated ~ max)	kW	0.15~1.21~2.4	0.25~1.91~3.52	0.52~2.34~4.20	0.52~3.21~4.50
	Operating Current (rated)	A	6.82	8.72	10.96	14.89
Indoor Unit	Dimension (HxWxD)	mm	256x840x840	256x840x840	319x840x840	319x840x840
	Net Weight	kg	20	20	24	24
	Airflow Volume (H/L)	l/s	291.7/216.7	341.7/225.0	558.4/325.1	583.5/341.7
	Fan Motor Output	W	14	20	68	72
	Sound Pressure(H/M/L)	dBA	32/29/28	35/31/28	43/38/33	44/38/34
Outdoor Unit	Dimension (HxWxD)	mm	550x780x290	890x900x320	1340x900x320	1340x900x320
	Net Weight	kg	44	66	93	93
	Compressor Type		DC Twin Rotary			
	Fan Motor Output	W	43	63	100+100	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dBA	47	48	49	51
	Heating Operating Noise (Sound Pressure) (H)	dBA	48	49	50	52
	Cooling Usable Temperature Range	°C	-15 to 43			
	Heating Usable Temperature Range	°C	-20 to 15			
Pipe Size	Liquid Line Ø	mm	6.4	9.5	9.5	9.5
	Gas Line Ø	mm	12.7	15.9	15.9	15.9
	Maximum Length	m	50	50	75	75
	Chargeless Length	m	20	30	30	30
	Maximum Height Difference	m	30	30	30	30



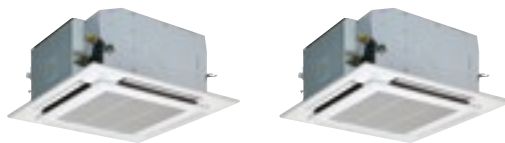
4-Way Cassette Super Digital - Three Phase

S U P E R
DIGITAL INVERTER

SYSTEM CODE			SP1404AT8U	SP1604AT8U
INDOOR			RAV-SM1404UTP-E	RAV-SM1604UTP-E
OUTDOOR			RAV-SP1404AT8-A1	RAV-SP1604AT8-A1
REFRIGERANT TYPE			R410A	
POWER SUPPLY/PH/FREQ		UNITS	380-415V/3φ/50Hz	
Cooling	Capacity - Rated	kW	12.5	14.0
	Capacity - Range (min ~ max)	kW	2.6 - 14.0	2.6 - 16.0
	Efficiency (rated)	EER	3.61	3.12
	Power Input (min ~ rated ~ max)	kW	0.66~3.46~4.40	0.66~4.49~5.70
	Operating Current (rated)	A	6.03	7.55
Heating	Capacity - Rated	kW	14.0	16.0
	Capacity - Range (min ~ max)	kW	2.4 - 18.0	2.4 - 19.0
	Efficiency (rated)	COP	4.09	3.72
	Power Input (min ~ rated ~ max)	kW	0.53~3.42~5.50	0.53~4.30~6.51
	Operating Current (rated)	A	6.03	7.55
Indoor Unit	Dimension (HxWxD)	mm	319x840x840	319x840x840
	Net Weight	kg	24	24
	Airflow Volume (H/L)	l/s	583.5	591.8
	Fan Motor Output	W	72	72
	Sound Pressure(H/M/L)	dBA	44/34	45/36
Outdoor Unit	Dimension (HxWxD)	mm	1340x900x320	1340x900x320
	Net Weight	kg	95	95
	Compressor Type		DC Twin Rotary	
	Fan Motor Output	W	100+100	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dBA	51	51
	Heating Operating Noise (Sound Pressure) (H)	dBA	52	53
	Cooling Usable Temperature Range	°C	-15 to 46	
	Heating Usable Temperature Range	°C	-20 to 15	
Pipe Size	Liquid Line Ø	mm	9.5	9.5
	Gas Line Ø	mm	15.9	15.9
	Maximum Length	m	75	75
	Chargeless Length	m	30	30
	Maximum Height Difference	m	30	30

DIGITAL INVERTER

4 Way Cassette - Twin Split



SYSTEM CODE			TW-SM1404U
INDOOR			RAV-SM804UTP-E x 2
OUTDOOR			RAV-SM1404ATP-A1
REFRIGERANT TYPE			R410A
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz
Cooling	Capacity - Rated	kW	11.2
	Capacity - Range (min ~ max)	kW	3.0 - 13.2
	Efficiency (rated)	EER	3.34
	Power Input (min ~ rated ~ max)	kW	0.65~3.35~4.50
	Operating Current (rated)	A	15.70
Heating	Capacity - Rated	kW	14.0
	Capacity - Range (min ~ max)	kW	3.0 - 16.0
	Efficiency (rated)	COP	3.68
	Power Input (min ~ rated ~ max)	kW	0.65~3.80~4.50
	Operating Current (rated)	A	17.81
Indoor Unit	Dimension (HxWxD)	mm	256x840x840
	Net Weight	kg	54
	Airflow Volume (H/L)	l/s	550.1/385.1
	Fan Motor Output	W	120
	Sound Pressure(H/M/L)	dB(A)	35/31/28
Outdoor Unit	Dimension (HxWxD)	mm	795x900x320
	Net Weight	kg	77
	Compressor Type		DC Twin Rotary
	Fan Motor Output	W	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dB(A)	54
	Heating Operating Noise (Sound Pressure) (H)	dB(A)	54
	Cooling Usable Temperature Range	°C	-15 to 43
	Heating Usable Temperature Range	°C	-15 to 15
Pipe Size	Liquid Line Ø	mm	9.5
	Gas Line Ø	mm	15.9
	Maximum Length	m	50
	Chargeless Length	m	30
	Maximum Height Difference	m	30

Duct Type - Versatile and Clever



Model

RAV-SM566BTP-E
RAV-SM806BTP-E
RAV-SM1106BTP-E
RAV-SM1406BTP-E



Controller

RBC-AMS54E-ES

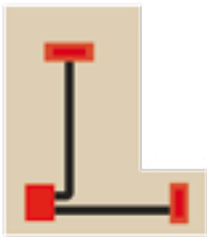
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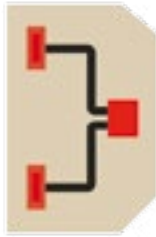
TO-RC-WIFI-1
WiFi Controller

Wide Range of Applications

The use of ducts allows air outlets to be conveniently installed anywhere on the ceiling, eliminating the conspicuous presence of the air conditioner in the center of the room. Not only can this be applied to a wide variety of layouts from narrow spaces to polygonal rooms; it also greatly improves the aesthetics of a room with its unobtrusive presence.



Polygonal Rooms



Narrow Rooms



Rooms with fixtures
and obstacles

High Static Pressure

External static pressure can be raised as high as 120 Pa, so that all areas of the room can be reached for even temperature distribution, no matter how complex the layout.

High-Lift Drain Pump

The BTP ducted comes with a built in drain pump for easy flow of water.

Operativity

Installation



Inverter
Allows step-less regulation of the air-conditioner's power, which reduces energy consumption and improves comfort.



Hot Start
When using the heater for preheating or defrosting, stops the indoor fan to prevent cold air from being blown into the room.



Filter Sign
Automatic displays on the remote controller say when to perform maintenance for the indoor unit filter.



Cooling at even -15°C ambient temperature



Automatic Air Volume Control
Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.



Automatic Cooling/Heating
Automatically switches between cooling and heating mode.



Limit Timer
Uses a 168-hour timer with three modes —“ON timer”, “OFF timer” and “Repeat OFF timer”.



Built-in Drain Pump
The built-in drain pump makes draining easier. (In the ceiling cassette type, it is built in to the main unit.)



Long-life Filter
Built-in long-life filter makes maintenance easier.



Dry
Gradually dehumidifies the room to create even greater comfort.



Ducted Super Digital - Single Phase

S U P E R
DIGITAL INVERTER

SYSTEM CODE			SP566B	SP806B	SP1106B	SP1406B
INDOOR			RAV-SM566BTP-E	RAV-SM806BTP-E	RAV-SM1106BTP-E	RAV-SM1406BTP-E
OUTDOOR			RAV-SP564ATP-A1	RAV-SP804ATP-A1	RAV-SP1104AT-A1	RAV-SP1404AT-A1
REFRIGERANT TYPE			R410A			
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz			
Cooling	Capacity - Rated	kW	5.0	7.1	10.0	12.5
	Capacity - Range (min ~ max)	kW	1.2 - 5.6	1.9 - 8.0	2.6 - 12.0	2.6 - 14.0
	Efficiency (rated)	EER	3.25	3.45	3.79	3.26
	Power Input (min ~ rated ~ max)	kW	0.21~1.51~2.26	0.30~2.06~2.88	0.64~2.64~3.80	0.64~3.83~4.47
	Operating Current (rated)	A	7.00	9.65	12.30	17.70
Heating	Capacity - Rated	kW	5.6	8.0	11.2	14.0
	Capacity - Range (min ~ max)	kW	0.9 - 7.4	1.3 - 10.6	2.4 - 13.0	2.4 - 16.5
	Efficiency (rated)	COP	3.61	3.62	4.04	3.81
	Power Input (min ~ rated ~ max)	kW	0.17~1.55~2.34	0.27~2.21~3.50	0.52~2.77~4.00	0.52~3.67~4.50
	Operating Current (rated)	A	7.18	10.3	12.90	17.00
Indoor Unit	Dimension (HxWxD)	mm	275x700x750	275x1000x750	275x1400x750	275x1400x750
	Net Weight	kg	23	30	40	40
	Airflow Volume (H/L)	l/s	222/133	333/200	583/350	583/350
	Fan Motor Output	W	150	150	250	250
	Sound Pressure(H/M/L)	dBA	33/29/25	34/30/26	40/36/33	40/36/33
Outdoor Unit	Dimension (HxWxD)	mm	550x780x290	890x900x320	1340x900x320	1340x900x320
	Net Weight	kg	44	66	93	93
	Compressor Type		DC Twin Rotary			
	Fan Motor Output	W	43	63	100+100	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dBA	47	48	49	51
	Heating Operating Noise (Sound Pressure) (H)	dBA	48	49	50	52
	Cooling Usable Temperature Range	°C	-15 to 43			
	Heating Usable Temperature Range	°C	-20 to 15			
Pipe Size	Liquid Line Ø	mm	6.4	9.5	9.5	9.5
	Gas Line Ø	mm	12.7	15.9	15.9	15.9
	Maximum Length	m	50	50	75	75
	Chargeless Length	m	20	30	30	30
	Maximum Height Difference	m	30	30	30	30

S U P E R
DIGITAL INVERTER



Ducted Super Digital - Three Phase

SYSTEM CODE			SP1404AT8B
INDOOR			RAV-SM1406BTP--E
OUTDOOR			RAV-SP1404AT8-A1
REFRIGERANT TYPE			R410A
POWER SUPPLY/PH/FREQ		UNITS	380-415V/3φ/50Hz
Cooling	Capacity - Rated	kW	12.5
	Capacity - Range (min ~ max)	kW	2.6 - 14.0
	Efficiency (rated)	EER	3.24
	Power Input (min ~ rated ~ max)	kW	0.66~3.86~4.89
	Operating Current (rated)	A	6.74
Heating	Capacity - Rated	kW	14.0
	Capacity - Range (min ~ max)	kW	2.4 - 18.0
	Efficiency (rated)	COP	3.81
	Power Input (min ~ rated ~ max)	kW	0.53~3.67~5.71
	Operating Current (rated)	A	6.74
Indoor Unit	Dimension (HxWxD)	mm	275x1400x750
	Net Weight	kg	40
	Airflow Volume (H/L)	l/s	583
	Fan Motor Output	W	250
	Sound Pressure(H/M/L)	dB(A)	40/33
Outdoor Unit	Dimension (HxWxD)	mm	1340x900x320
	Net Weight	kg	95
	Compressor Type		DC Twin Rotary
	Fan Motor Output	W	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dB(A)	51
	Heating Operating Noise (Sound Pressure) (H)	dB(A)	52
	Cooling Usable Temperature Range	°C	-15 to 46
	Heating Usable Temperature Range	°C	-20 to 15
Pipe Size	Liquid Line Ø	mm	9.5
	Gas Line Ø	mm	15.9
	Maximum Length	m	75
	Chargeless Length	m	30
	Maximum Height Difference	m	30

Hi-Static Duct Type



Model

RAV-SM1103DT-A
RAV-SM1403DT-A
RAV-SM1603DT-A
RAV-SM2244DTP-E
RAV-SM2804DTP-E



Controller
RBC-AMS54E-ES

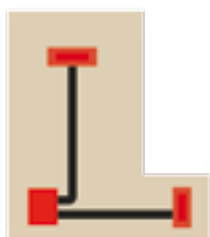
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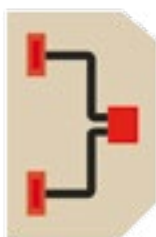
TO-RC-WIFI-1
WIFI Controller

Wide Range of Applications

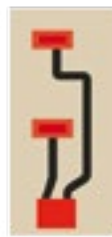
The use of ducts allows air outlets to be conveniently installed anywhere on the ceiling, eliminating the conspicuous presence of the air conditioner in the center of the room. Not only can this be applied to a wide variety of layouts from narrow spaces to polygonal rooms; it also greatly improves the aesthetics of a room with its unobtrusive presence.



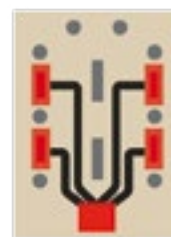
Polygonal Rooms



Narrow Rooms



Rooms with fixtures and obstacles













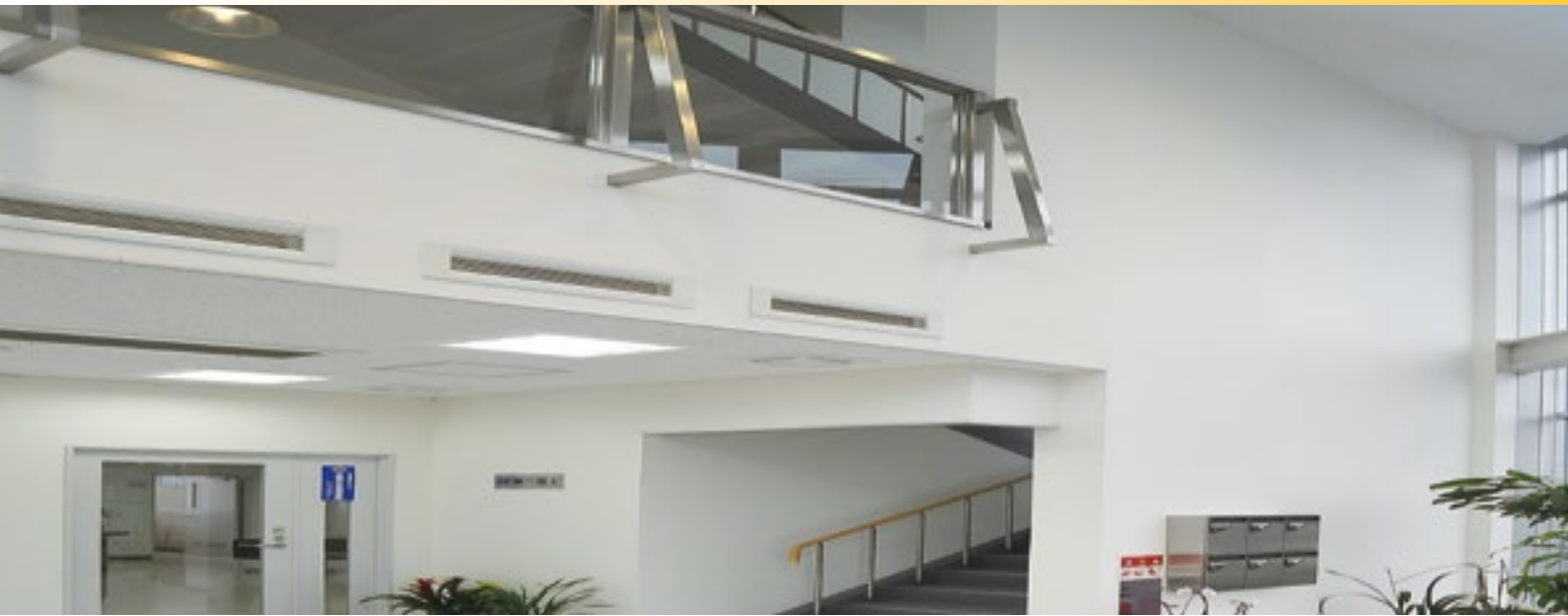
High Static Pressure

External static pressure can be raised as high as 250 Pa, so that all areas of the room can be reached for even temperature distribution, no matter how complex the layout.

High-Lift Drain Pump

The flexible piping layout is made possible by an optionally available drain-pump kit that raises the drain piping up to 270mm from the drain port.

Operativity		Installation	
 <p>Inverter Allows step-less regulation of the air-conditioner's power, which reduces energy consumption and improves comfort.</p>	 <p>Hot Start When using the heater for preheating or defrosting, stops the indoor fan to prevent cold air from being blown into the room.</p>	 <p>Filter Sign Automatic displays on the remote controller say when to perform maintenance for the indoor unit filter.</p>	 <p>Cooling at even -15°C ambient temperature</p>
 <p>Automatic Air Volume Control Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.</p>	 <p>Automatic Cooling/Heating Automatically switches between cooling and heating mode.</p>	 <p>Limit Timer Uses a 168-hour timer with three modes — "ON timer", "OFF timer" and "Repeat OFF timer".</p>	 <p>Built-in Drain Pump The built-in drain pump makes draining easier. (In the ceiling cassette type, it is built in to the main unit.)</p>
 <p>Long-life Filter Built-in long-life filter makes maintenance easier.</p>	 <p>Dry Gradually dehumidifies the room to create even greater comfort.</p>		



Hi-Static Ducted - Single Phase

DIGITAL INVERTER

S U P E R
DIGITAL INVERTER

SYSTEM CODE			SP1103D	SP1403D	SM1603D
INDOOR			RAV-SM1103DT-A	RAV-SM1403DT-A	RAV-SM1603DT-A
OUTDOOR			RAV-SP1104AT-A1	RAV-SP1404AT-A1	RAV-SM1603AT-A1
REFRIGERANT TYPE			R410A		
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz		
Cooling	Capacity - Rated	kW	10.4	12.5	13.5
	Capacity - Range (min ~ max)	kW	3.3 - 12.1	3.3 - 14.1	3.6 - 16.0
	Efficiency (rated)	EER	3.30	3.42	3.29
	Power Input (min ~ rated ~ max)	kW	0.90~3.15~3.99	0.90~3.66~4.98	1.30~4.10~6.01
	Operating Current (rated)	A	14.8	17.2	19.62
Heating	Capacity - Rated	kW	11.3	14.0	16.0
	Capacity - Range (min ~ max)	kW	4.2 - 17.0	4.2 - 18.0	4.6 - 18.0
	Efficiency (rated)	COP	4.38	4.14	3.5
	Power Input (min ~ rated ~ max)	kW	0.80~2.58~4.84	0.80~3.38~4.91	1.26~4.57~7.08
	Operating Current (rated)	A	12.1	15.8	21.87
Indoor Unit	Dimension (HxWxD)	mm	380x1050x600	380x1050x600	380x1050x600
	Net Weight	kg	57	57	57
	Airflow Volume (H/L)	l/s	693.3/693.5	916.9/916.9	966.9/966.9
	Fan Motor Output	W	600	600	600
	Sound Pressure(H/M/L)	dB(A)	49	49	50
Outdoor Unit	Dimension (HxWxD)	mm	1340x900x320	1340x900x320	1340x900x320
	Net Weight	kg	93	93	93
	Compressor Type		DC Twin Rotary		
	Fan Motor Output	W	100+100	100+100	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dB(A)	49	51	51
	Heating Operating Noise (Sound Pressure) (H)	dB(A)	50	52	52
	Cooling Usable Temperature Range	°C	-15 to 43		
	Heating Usable Temperature Range	°C	-20 to 15		
Pipe Size	Liquid Line Ø	mm	9.5	9.5	9.5
	Gas Line Ø	mm	15.9	15.9	15.9
	Maximum Length	m	75	75	75
	Chargeless Length	m	30	30	30
	Maximum Height Difference	m	30	30	30

DIGITAL INVERTER

 S U P E R
 DIGITAL INVERTER


Hi-Static Ducted - Three Phase

SYSTEM CODE			SP1604AT8D	SM2204D	SM2804D
INDOOR			RAV-SM1603DT-A	RAV-SM2244DTP-E	RAV-SM2804DTP-E
OUTDOOR			RAV-SP1604AT8-A1	RAV-SM2244AT8-A1	RAV-SM2804AT8-A1
REFRIGERANT TYPE			R410A		
POWER SUPPLY/PH/FREQ		UNITS	380-415V/3φ/50Hz		
Cooling	Capacity - Rated	kW	13.6	16.8	20.0
	Capacity - Range (min ~ max)	kW	3.3 - 16.0	9.8 - 22.4	9.8 - 27.0
	Efficiency (rated)	EER	3.30	3.27	3.23
	Power Input (min ~ rated ~ max)	kW	0.90~4.12~6.23	3.26~5.10~9.09	3.36~6.20~12.76
	Operating Current (rated)	A	7.03	4.81	4.81
Heating	Capacity - Rated	kW	16.0	22.4	27.0
	Capacity - Range (min ~ max)	kW	4.2 - 19.0	9.8 - 25.0	9.8 - 31.5
	Efficiency (rated)	COP	3.61	3.45	3.31
	Power Input (min ~ rated ~ max)	kW	0.80~4.43~6.71	2.57~6.49~7.45	2.57~8.15~11.01
	Operating Current (rated)	A	7.71	4.81	4.81
Indoor Unit	Dimension (HxWxD)	mm	380x1050x600	448x1400x900	448x1400x900
	Net Weight	kg	57	97	97
	Airflow Volume (H/L)	l/s	967	1055	1333
	Fan Motor Output	W	600	370x3	370x3
	Sound Pressure(H/M/L)	dBA	50	44/40/36	46/42/38
Outdoor Unit	Dimension (HxWxD)	mm	1340x900x320	1540x900x320	1540x900x320
	Net Weight	kg	95	134	134
	Compressor Type		DC Twin Rotary		
	Fan Motor Output	W	100+100	100+100	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dBA	51	56	57
	Heating Operating Noise (Sound Pressure) (H)	dBA	53	57	58
	Cooling Usable Temperature Range	°C	-15 to 46		
	Heating Usable Temperature Range	°C	-20 to 15		
Pipe Size	Liquid Line Ø	mm	9.5	12.7	12.7
	Gas Line Ø	mm	15.9	28.6	28.6
	Maximum Length	m	50	70	70
	Chargeless Length	m	30	30	30
	Maximum Height Difference	m	30	30	30

Under Ceiling Type - Quiet and Comfortable



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



Controller
RBC-AMS54E-ES



Optional

RBC-AX22CE2
Wireless Remote
Controller Kit



TO-RC-WIFI-1
WIFI Controller

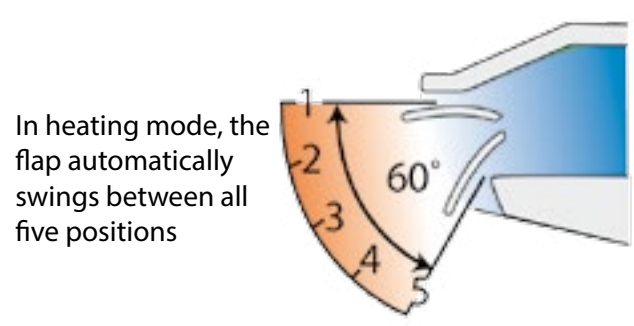
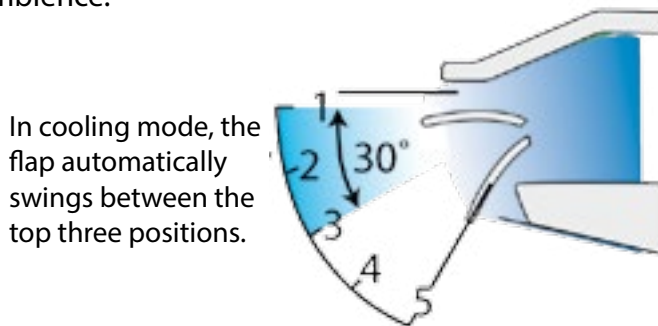
Comfortable Ambience

Very Quiet Operation

Greatly reduces the noise level to half that of conventional units. Operation is always whisper-quiet.

Flap Control

The airflow angle is automatically set to the most suitable setting according to your cooling or heating needs, and an automatic swing mode enables airflow to reach all areas of the room to create a comfortable ambience.



Installation Efficiency

Suspending the unit from the ceiling saves the complex installation procedures. It can be suspended simply by adjusting two screws on the intake grill. Compared to units which involve a dozen screws, installation is further simplified.

Comfort



Inverter
Allows step-less regulation of the air-conditioner's power, which reduces energy consumption and improves comfort.



Hot Start
When using the heater for preheating or defrosting, stops the indoor fan to prevent cold air from being blown into the room.



Auto-turn Louvers
Air outlet grilles move automatically to fill every corner of the room with warm or cool air.



Automatic Cooling/Heating
Automatically switches between cooling and heating mode.



Dry
Gradually dehumidifies the room to create even greater comfort.



Long-life Filter
Built-in long-life filter makes maintenance easier.

Operativity



Filter Sign
Automatic displays on the remote controller say when to perform maintenance for the indoor unit filter.



Limit Timer
Uses a 168-hour timer with three modes — "ON timer", "OFF timer" and "Repeat OFF timer".

Installation



Cooling at even -15°C ambient temperature



Automatic Air Volume Control
Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.



Under Ceiling Super Digital - Single Phase

S U P E R
DIGITAL INVERTER

SYSTEM CODE			SP567C	SP807C	SP1107C	SP1407C
INDOOR			RAV-SM567CTP-E	RAV-SM807CTP-E	RAV-SM1107CTP-E	RAV-SM1407CTP-E
OUTDOOR			RAV-SP564ATP-A1	RAV-SP804ATP-A1	RAV-SP1104AT-A1	RAV-SP1404AT-A1
REFRIGERANT TYPE			R410A			
POWER SUPPLY/PH/FREQ		UNITS	220-240V/1/50Hz			
Cooling	Capacity - Rated	kW	5.0	7.1	10.0	12.5
	Capacity - Range (min ~ max)	kW	1.2 - 5.6	1.9 - 8.0	2.6 - 12.0	2.6 - 14.0
	Efficiency (rated)	EER	3.38	3.46	3.75	3.35
	Power Input (min ~ rated ~ max)	kW	0.21~1.39~2.26	0.30~1.91~2.88	0.64~2.67~3.70	0.64~3.73~4.47
	Operating Current (rated)	A	6.35-5.82	8.72-7.99	11.5-10.5	18.1-16.6
Heating	Capacity - Rated	kW	5.6	8.0	11.2	14.0
	Capacity - Range (min ~ max)	kW	0.9 - 7.4	1.3 - 10.6	2.4 - 13.0	2.4 - 16.5
	Efficiency (rated)	COP	4.38	4.17	4.69	3.87
	Power Input (min ~ rated ~ max)	kW	0.17~1.28~2.34	0.27~1.92~3.50	0.52~2.39~4.00	0.52~3.62~4.60
	Operating Current (rated)	A	5.94-5.44	9.0-8.25	11.2-10.3	16.8-15.4
Indoor Unit	Dimension (HxWxD)	mm	235x950x690	235x1270x690	235x1586x690	235x1586x690
	Net Weight	kg	23	29	35	35
	Airflow Volume (H/L)	l/s	250/150	392/208	517/283	567/333
	Fan Motor Output	W	94	94	139	139
	Sound Pressure(H/M/L)	dB(A)	37/35/28	41/36/29	44/38/32	46/41/35
Outdoor Unit	Dimension (HxWxD)	mm	550x780x290	890x900x320	1340x900x320	1340x900x320
	Net Weight	kg	44	66	93	93
	Compressor Type		DC Twin Rotary			
	Fan Motor Output	W	43	63	100+100	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dB(A)	48	49	50	52
	Heating Operating Noise (Sound Pressure) (H)	dB(A)	48	49	50	52
	Cooling Usable Temperature Range	°C	-15 to 43			
	Heating Usable Temperature Range	°C	-20 to 15			
Pipe Size	Liquid Line Ø	mm	6.4	9.5	9.5	9.5
	Gas Line Ø	mm	12.7	15.9	15.9	15.9
	Maximum Length	m	50	50	75	75
	Chargeless Length	m	20	30	30	30
	Maximum Height Difference	m	30	30	30	30

S U P E R
DIGITAL INVERTER



Under Ceiling Super Digital - Three Phase

SYSTEM CODE			SP1404AT8C	SP1604AT8C
INDOOR			RAV-SM1407CTP-E	RAV-SM1607CTP-E
OUTDOOR			RAV-SP1404AT8-A	RAV-SP1604AT8-A
REFRIGERANT TYPE			R410A	
POWER SUPPLY/PH/FREQ		UNITS	380-415V/3φ/50Hz	
Cooling	Capacity - Rated	kW	12.5	13.9
	Capacity - Range (min ~ max)	kW	2.6 - 14.0	2.6 - 16.0
	Efficiency (rated)	EER	3.26	3.28
	Power Input (min ~ rated ~ max)	kW	0.66~3.83~4.85	0.66~4.24~6.33
	Operating Current (rated)	A	6.67	7.16
Heating	Capacity - Rated	kW	14.0	16.0
	Capacity - Range (min ~ max)	kW	2.4 - 18.0	2.4 - 19.0
	Efficiency (rated)	COP	3.78	3.71
	Power Input (min ~ rated ~ max)	kW	0.53~3.70~5.95	0.53~4.31~6.96
	Operating Current (rated)	A	6.67	7.28
Indoor Unit	Dimension (HxWxD)	mm	235x1586x690	235x1586x690
	Net Weight	kg	35	35
	Airflow Volume (H/L)	l/s	567	567
	Fan Motor Output	W	139	139
	Sound Pressure(H/M/L)	dBA	46//41/35	46//42/36
Outdoor Unit	Dimension (HxWxD)	mm	1340x900x320	1340x900x320
	Net Weight	kg	95	95
	Compressor Type		DC Twin Rotary	
	Fan Motor Output	W	100+100	100+100
	Cooling Operating Noise (Sound Pressure) (H)	dBA	51	51
	Heating Operating Noise (Sound Pressure) (H)	dBA	52	52
	Cooling Usable Temperature Range	°C	-15 to 46	
	Heating Usable Temperature Range	°C	-20 to 15	
Pipe Size	Liquid Line Ø	mm	9.5	9.5
	Gas Line Ø	mm	15.9	15.9
	Maximum Length	m	75	75
	Chargeless Length	m	30	30
	Maximum Height Difference	m	30	30

Controllers

Wired Controller

HEX Basic Controller

IntesisHome WIFI Controller

APPEARANCE			
MODEL NAME	RBC-AMS54E-ES	NRC-01HE	TO-RC-WIFI-1

Wireless Controller Kits

APPEARANCE	 Integral receiver	 Integral receiver	 Standalone receiver
MODEL NAME	RBC-AX32U(W)-E	RBC-AX22CE2	TCB-AX32E2
	For 4-Way Cassette Type	For Under Ceiling Type	

Combinations




Combinations		RBC-AMS54E-ES	NRC-01HE	TCB-AX32E2	RBC-AX32U(W)-E	RBC-AX22CE2	TO-RC-WIFI-1
Compact 4-Way Cassette Series 4	RAV-SM304MUT-E	OK	OK	OK			OK
	RAV-SM404MUT-E	OK	OK	OK			OK
	RAV-SM564MUT-E	OK	OK	OK			OK
4-Way Cassette Series 4	RAV-SM564UTP-E	OK	OK	OK	OK		OK
	RAV-SM804UTP-E	OK	OK	OK	OK		OK
	RAV-SM1104UTP-E	OK	OK	OK	OK		OK
	RAV-SM1404UTP-E	OK	OK	OK	OK		OK
	RAV-SM1604UTP-E	OK	OK	OK	OK		OK
Ducted Series 6	RAV-SM566BTP-E	OK	OK	OK			OK
	RAV-SM806BTP-E	OK	OK	OK			OK
	RAV-SM1106BTP-E	OK	OK	OK			OK
	RAV-SM1406BTP-E	OK	OK	OK			OK
Hi-Static Ducted Series 3 & 4	RAV-SM1103DT-E	OK	OK	OK			OK
	RAV-SM1403DT-E	OK	OK	OK			OK
	RAV-SM1603DT-E	OK	OK	OK			OK
	RAV-SM2244DTP-A	OK	OK	OK			OK
	RAV-SM2804DTP-A	OK	OK	OK			OK
Under Ceiling Series 7	RAV-SM567CTP-E	OK	OK	OK		OK	OK
	RAV-SM807CTP-E	OK	OK	OK		OK	OK
	RAV-SM1107CTP-E	OK	OK	OK		OK	OK
	RAV-SM1407CTP-E	OK	OK	OK		OK	OK
	RAV-SM1607CTP-E	OK	OK	OK		OK	OK
Hi-Wall Series 6 & 7	RAV-SM566KRT-A	OK	OK	OK			OK
	RAV-SM806KRT-A	OK	OK	OK			OK
	RAV-SM307KRTP-A	OK	OK	OK			OK
	RAV-SM407KRTP-A	OK	OK	OK			OK

Controls

Touchscreen Controller

Smart Manager




Central Controller

APPEARANCE			
MODEL NAME	BMS-CT5121E	BMS-SM1280ETLE	TCB-SC642TLE2
FUNCTION	<ul style="list-style-type: none"> Monitoring, control and schedule functions of up to 512 indoor units and 128 outdoor units can be controlled. Maximum of 64 groups with 8 indoor units can be set up and managed. 12.1 TFT multi-touch screen with a resolution of 1024 x 768. Overview of all indoor units. 	<ul style="list-style-type: none"> List view available - displays all units in one screen. Set view available - shows basic indoor unit settings on main screen. Advanced operation & master schedule function available. Up to 4 concurrent users can be connected (via Ethernet). Up to 32 user accounts can be programmed with different levels of access (a minimum of 1 must be administrator level). Can be connected to a single PC or LAN to allow advanced control. Energy monitoring & report functions available. Advanced operation & master schedules can be set on a calendar. Additional digital I/O device available. 	<ul style="list-style-type: none"> Individual control of up to 64 indoor units. Individual control of max. 64 units divided into 1-4 zones (up to 16 units in each zone.) Up to 16 outdoor header units are connectable. 4 types of central control settings to inhibit individual operation by remote controller can be selected. Setting for one of 1-4 zones. Usable with other central control devices (up to 10 central control devices in 1 circuit). Two control mode selectivity (central controller mode/remote controller mode). Setting of simultaneous ON/OFF 3 times per day combined with weekly timer.

Modbus BMS Interface

Analogue BMS Interface




General Purpose Interface

APPEARANCE			
MODEL NAME	TCB-IFMB640TLE	BMS-IFCB640TLE	TCB-IFCB1TLE
FUNCTION	<ul style="list-style-type: none"> Access to 64 units per TCB-IFMB640TLE, 15x TCB-IFMB640TLE's on one Modbus master. Signals & provides the following functions: <ul style="list-style-type: none"> - ON/OFF - Mode: cool/heat/fan - Temperature setting - Air flow/louver setting - Filter reset - Accumulated operation time 	<ul style="list-style-type: none"> Provides access to 4 indoor units. Does not require special network knowledge. Can control each unit on TCC-link (on/off, temperature setting, airflow volume, louver position) and monitor status on 0-10VDC voltage input. Enables relay control & status monitoring of general purpose I/F (TCB-IFCB1TLE). 	<ul style="list-style-type: none"> Controls the operation status of each indoor. ON/OFF control of peripheral equipment via the relay point of Toshiba's BMS (1pt only). Provides 4 channel relay control, 6 channel digital input, 2 channel analogue voltage input & output and 2 channel temperature measurement via Modbus I/F.

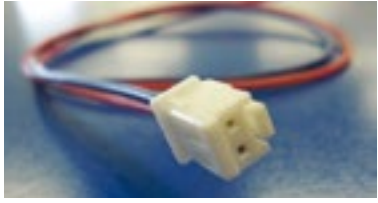


BACnet® BMS Interface


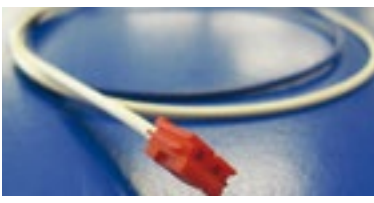

TCS-Net Relay Interface

TCC-Link Adaptor

APPEARANCE			
MODEL NAME	BMS-IFBN640TLE	BMS-IFLSV4E	TCB-PCNT30TLE2
FUNCTION	<ul style="list-style-type: none"> Up to 64 indoor units connectable. BACnet IP - ASHRAE standard 135:2008 (Rev10). TCS-NET relay interface not required. Only basic network knowledge needed. 	<ul style="list-style-type: none"> Relay interface for TCS-Net. 	<ul style="list-style-type: none"> TCC-link adaptor is required on DI and SDI units except KRT hi-walls. 1 per unit for individual control or 1 per group (header/follower configuration).

Connectors

APPEARANCE			
PART NUMBER	TCB-KBCN32VEE (CN32)	TCB-KBCN60OPE (CN60)	TCB-KBCN61HAE (CN61)
FUNCTION	<p>External Vent Control Output Determined by DN Code. Either it can provide a 12Volt DC output when the Indoor Unit is running or it can provide a 12Volt output when the 'Vent' function is chosen on the wired controller.</p>	<p>Operation Status Output Provides a 12Volt DC output for each of the following:</p> <ul style="list-style-type: none"> • Outdoor Unit in Defrost • Compressor is running (also known as 'Thermo On') • Indoor Unit is cooling (cooling mode or dehumidify mode) • Indoor Unit is heating • Indoor Unit has the fan running 	<p>Operation Control Inputs and Status Output Provides control inputs and status outputs (12Volt DC) as follows:</p> <ul style="list-style-type: none"> • On Off Control (INPUT) • Wired controller On Off Lock/Unlock (INPUT) • On Off Status (OUTPUT) • Alarm Status (OUTPUT) • Setting Cooling Set Temp to Max, Setting Heating Set Temp to Min (INPUT)

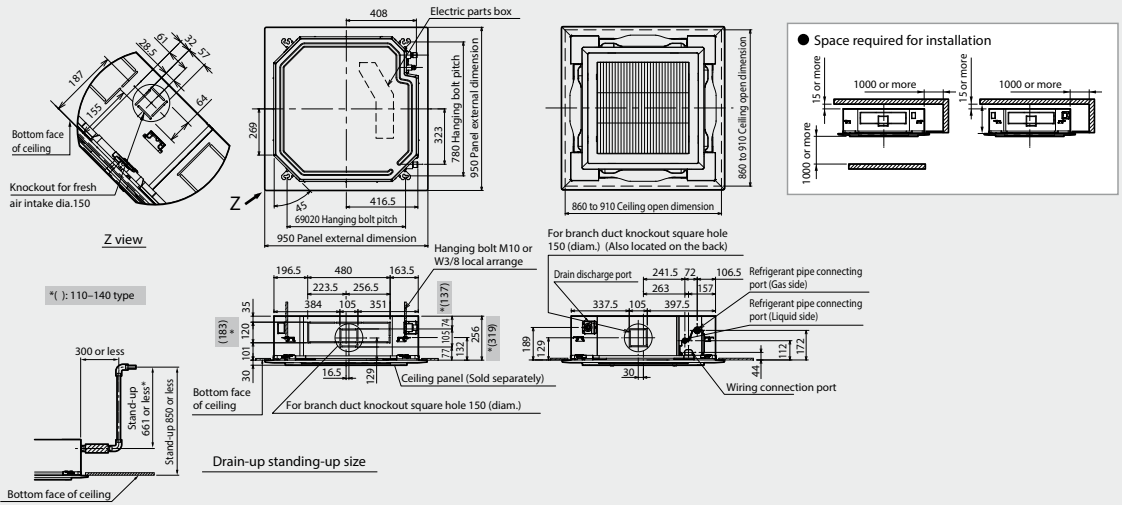
APPEARANCE			
PART NUMBER	TCB-KBCN70OAE (CN70)	TCB-KBCN73DEE (CN73)	TCB-KBCN80EXE (CN80)
FUNCTION	<p>External Alarm Input Allows a flashing error symbol to be displayed on the wired controller even when the machine is not running thus allowing the controller to display an error on a third party piece of equipment.</p>	<p>Forced Compressor Off Input Enables the compressor to be forced off.</p>	<p>Outside Error Input Enables the compressor to be stopped and an error message to be displayed on the wired controller as follows:</p> <ul style="list-style-type: none"> • If the input is made for more than 3 seconds but less than 60 seconds the compressor is forced off. • If the input is made for more than 60 seconds the compressor is forced off and an 'L30' error message is displayed on the wired controller referencing the unit with the input.

Connector to System Compatibility

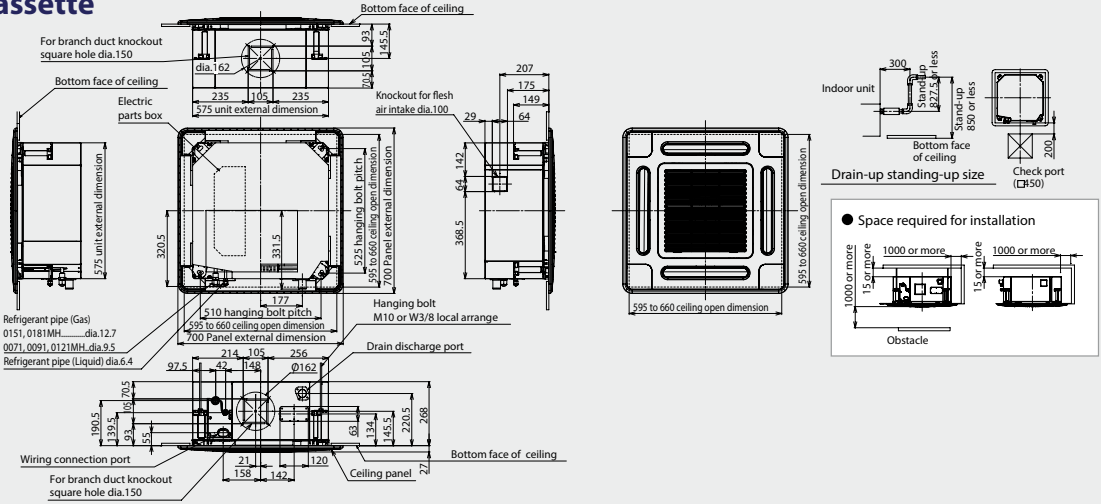
Model	Socket					
	CN32	CN60	CN61	CN70	CN73	CN80
Compact 4-Way Cassette Series 4	Yes	Yes	Yes	Yes	Yes	Yes
4-Way Cassette Series 4	Yes	Yes	Yes	Yes	Yes	Yes
Ducted Series 6	Yes	Yes	Yes	Yes	Yes	Yes
Hi-Static Ducted Series 3 & 4	Yes	Yes	Yes	Yes	Yes	Yes
Under Ceiling Series 7	Yes	No	Yes	No	No	No
Hi-Wall Series 6 & 7	Yes	Yes	Yes	No	Yes	Yes

Indoor Units

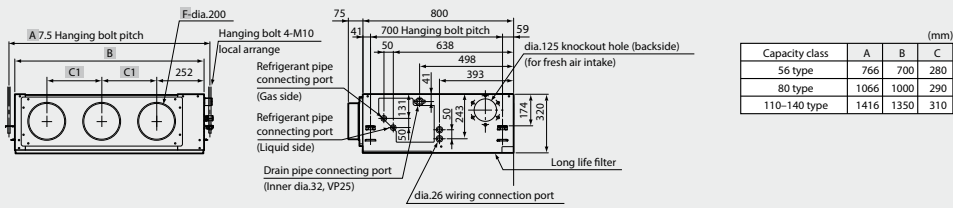
4-Way Cassette



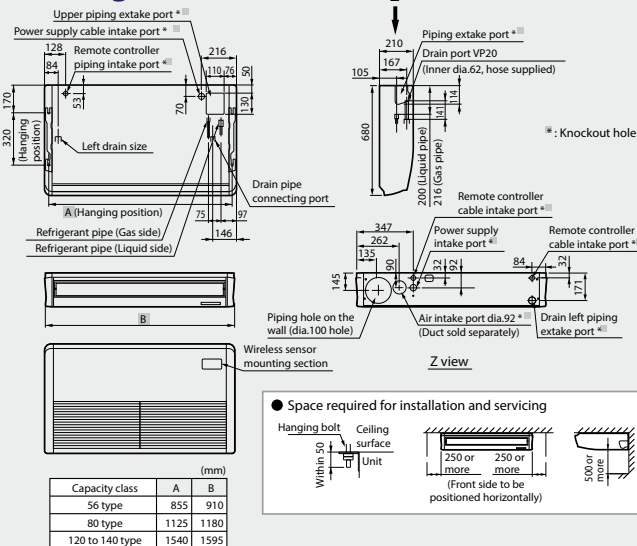
Compact 4-Way Cassette



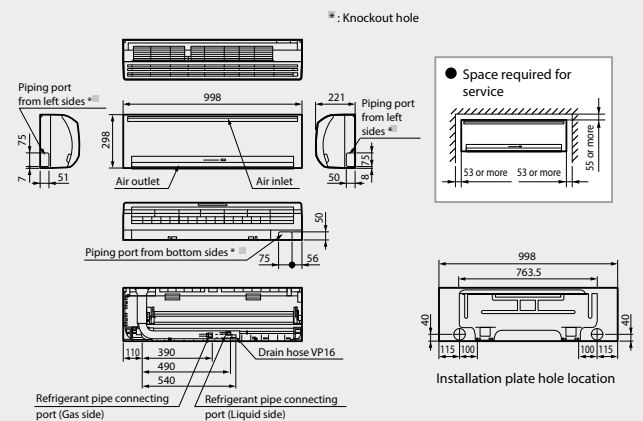
Ducted



Underceiling



Hi-Wall



Air to Air Heat Exchanger



Model

VN-M150HE VN-M650HE
 VN-M250HE VN-M800HE
 VN-M350HE VN-M1000HE
 VN-M500HE



Model

VN-M1500HE
 VN-M2000HE



Controller

NRC-01HE
 (Dip switch adjustment required for standalone operation)

Greater Comfort and Reduced Load

Easily integrated into air conditioning systems of 150m³/h to 2000m³/h air volume. The air-to-air heat exchangers under exhaust air to pre-condition the incoming air, thus reducing the cooling or heating load and the overall size of the required system.

Easy Maintenance

The heat exchange element can be washed in water.

Flexible Control

Supply and exhaust fan speed ratios can be changed for improved air volume control that best matches the needs of the environment and location.

Free Cooling at Night

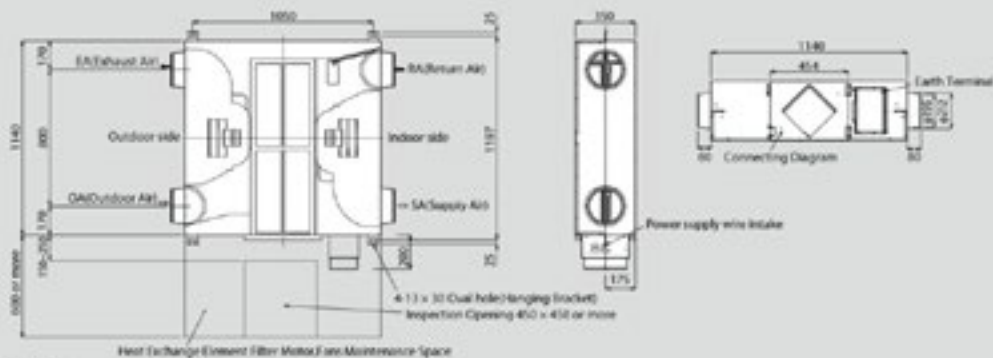
When the outdoor air is cooler at night, the system expels warm air from the room. This reduces the air conditioning load the next day for improved energy efficiency.

Model Name		VNM150HE	VNM250HE	VNM350HE	VNM500HE	VNM650HE	VNM800HE	VNM1000HE	VNM1500HE	VNM2000HE	
Power Supply (V)	Fan Speed	1-phase 50Hz 230V (220-240V) / 1-phase 60Hz 220V (Seperate power supply for indoor units required).									
Power consumption 50Hz/60Hz (W)	Extra High	68-78/76	123-138/131	165-182/209	214-238/260	262-290/307	360-383/446	532-569/622	751-786/928	1084-1154/1294	
	High	59-67/65	99-111/105	135-145/162	176-192/206	240-258/283	339-353/408	494-538/589	708-784/830	1032-1080/1220	
	Low	42-47/45	52-59/54	82-88/94	128-142/144	178-191/206	286-300/333	353-370/411	570-607/660	702-742/818	
Air Volume (m ³ /h)	Extra High	150/150	250/250	350/350	500/500	650/650	800/800	1000/1000	1500/1500	2000/2000	
	High	150/150	250/250	350/350	500/500	650/650	800/800	1000/1000	1500/1500	2000/2000	
	Low	110/110	155/155	210/210	390/390	520/520	700/700	755/755	1200/1200	1400/1400	
External Static Pressure (Pa)	Extra High	82-102/99	80-98/97	114-125/167	134-150/181	91-107/134	142-158/171	130-150/185	135-156/165	124-143/165	
	High	52-78/59	34-65/38	56-83/33	69-99/63	58-82/68	102-132/102	97-122/120	103-129/108	92-116/102	
	Low	47-64/46	28-40/22	65-94/39	62-92/44	61-96/52	76-112/58	84-127/55	112-142/109	110-143/87	
Sound Pressure Level (dBA)	Extra High	26-28/27.5	29.5-30/31.5	34-35/35.5	32.5-34/33.5	34-36/35.5	37-38.5/38	39.5-40.5/41.5	38-39/39.5	41-42.5/42.5	
	High	24-25.5/24.5	25-27/25	30-32/29.5	29.5-31/29	33-34/34	35.5-37/35	38.5-40/39	36.5-37.5/36.5	39.5-41/40	
	Low	20-22/20	21-22/21	27-29/23.5	26-29/24.5	31-32.5/29.5	33.5-35/32.5	34-35.5/33.5	36-37.5/35.5	37-38/36.5	
Temperature Exchange Efficiency (%)	Extra High	81.5/81.5	78/78	74.5/74.5	76.5/76.5	75/75	76.5/76.5	73.5/73.5	76.5/76.5	73.5/73.5	
	High	81.5/81.5	78/78	74.5/74.5	76.5/76.5	75/75	76.5/76.5	73.5/73.5	76.5/76.5	73.5/73.5	
	Low	83/83	81.5/81.5	79.5/79.5	78/78	76.5/76.5	77.5/77.5	77/77	79/79	77.5/77.5	
Enthalpy Exchange Efficiency (%)	Heat	Extra High	74.5/74.5	70/70	65/65	72/72	69.5/69.5	71/71	68.5/68.5	71/71	68.5/68.5
		High	74.5/74.5	70/70	65/65	72/72	69.5/69.5	71/71	68.5/68.5	71/71	68.5/68.5
		Low	76/76	74/74	71.5/71.5	73.5/73.5		71.5/71.5		73.5/73.5	72/72
	Cool	Extra High	69.5/69.5	65/65	60.5/60.5	64.5/64.5	61.5/61.5	64/64	60.5/60.5	64/64	60.5/60.5
		High	69.5/69.5	65/65	60.5/60.5	64.5/64.5	61.5/61.5	64/64	60.5/60.5	64/64	60.5/60.5
		Low	71/71	69/69	67/67	66.5/66.5	64/64	65.5/65.5	64.5/64.5	67/67	65.5/65.5
Dimensions (L x W x H) (mm)		900 x 900 x 290			1140 x 1140 x 350		1189 x 1189 x 400		1189 x 1189 x 810		
Weight (KG)		36		38	53		70		143		
Duct Diameter (mm)		100	150		200		250		Inside: 250 Outside: 283 x 730		
Operating Range	Around Unit	-10 °C to 40 °C 80% RH or less									
	Outdoor Air (OA)	-15 °C to 43 °C RH									
	Return Air (RA)	5 °C to 40 °C 0% RH or less									

* Air Volume can be changed over to high (extra high) mode or low mode.
 * Sound pressure level is measured 1.5 m below the center of the unit.
 * Sound pressure level is the value which was measured at the acoustic room.

* The actual values in an external operating environment are generally higher than the indicated values due to the contribution from ambient noise.
 * Sound pressure level is less than 70dBA.

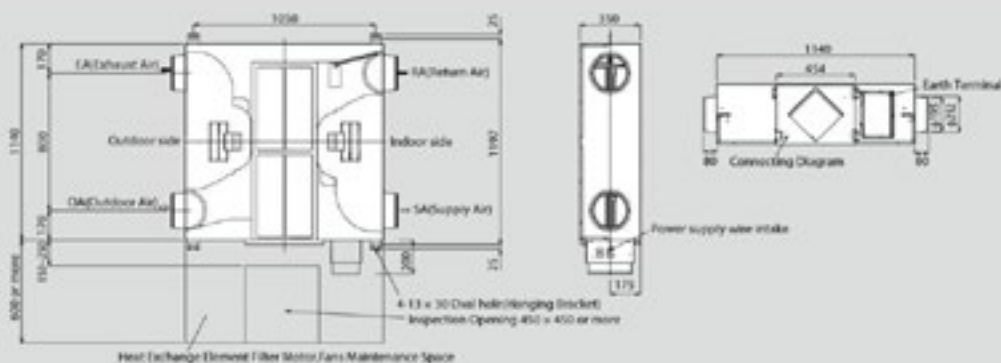
MMD-VNM150HE to VNM350HE



Duct size (Nominal Diameter): ϕ 200

(Unit: mm)

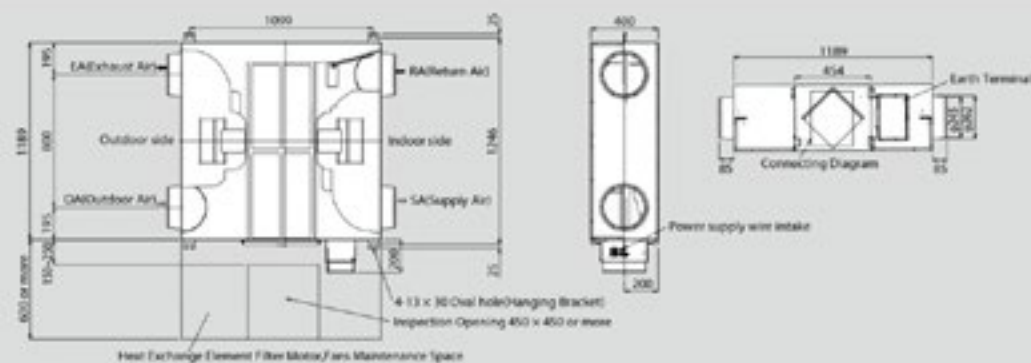
MMD-VNM500HE, VNM650HE



Duct size (Nominal Diameter): ϕ 200

(Unit: mm)

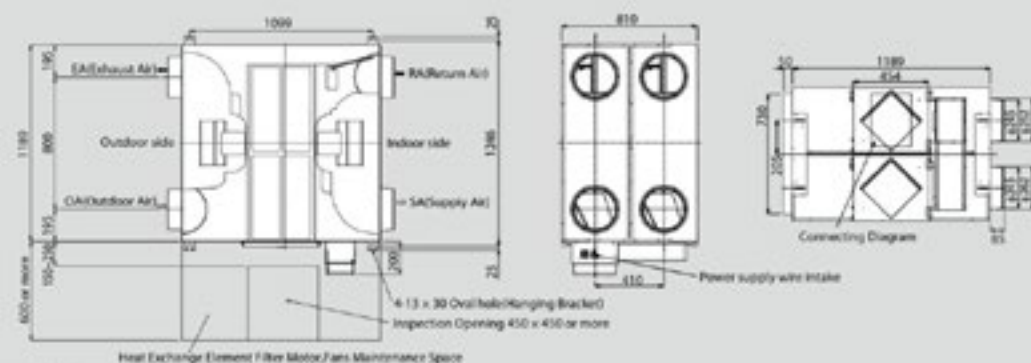
MMD-VNM800HE, VNM1000HE



Duct size (Nominal Diameter): ϕ 250

(Unit: mm)

MMD-VNM1500HE, VNM2000HE



Duct size (Nominal Diameter): ϕ 250

(Unit: mm)

Icon Information



Inverter

DC Hybrid Inverter stepless control of the compressor. Allows step-less regulation of the air conditioners power, which reduces energy consumption and improves comfort.



Guaranteed

Heating and cooling to -15°C outside air temperature (-20°C SDI).



Dry

Gradually dehumidifies the room to create even greater comfort.



Auto Turn Louvres

Air outlet grilles move automatically to fill every corner of the room with warm or cool air.



Individual Louvre Control

Enables airflows to be chosen according to user preferences.



Hot Start

Preheats the indoor coil before switching the indoor fan on to prevent cold air being blown in heating mode.



Compact Dimensions

Reduced dimensions for easier installation into small areas.



Quiet

Designed with multiple sound reduction technologies for the quietest solution possible.



Automatic Air Volume Control

Depending on the difference between the room temperature and the set temperature, switches automatically between High, Low and Very Low.



Automatic Cooling/Heating

Automatically switches between cooling and heating mode.



Long-Life Filter

Built-in long-life filter makes maintenance easier.



Filter Sign

Automatic displays on the remote controller say when to perform maintenance for the indoor unit filter.



Built In Drain Pump

The built in drain pump makes installing the units easier.



On/Off Timer

The operation start and stop times can be set with a digital clock on the infra-red controller.



70m

Super Long Pipe Run

Longer pipe run for greater installation flexibility



Coil Protection

Hydrophilic coil protection to protect the heat exchanger from corrosion, extending the life of the unit.



MOST SATISFIED CUSTOMERS
HEAT PUMPS - 2015



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Notice: Toshiba is committed to continuously improving its product to ensure the highest quality and reliability standards, and to meet local regulations and market requirements. All features and specifications subject to change without prior notice.

Note: All images provided in this catalogue are used for illustration purposes only.

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