

HyperInverter

High Performance Air-Conditioning



FD
series

Inverter Packaged Air Conditioners

eco touch REMOTE



Simple setting by **tapping button** only

Run / Stop

High power operation

- Maximum capacity operation (Max 15 minutes)
- Increased compressor speed
 - Increased air flow

Energy-saving operation

- Changes set temperature at 28°C in cooling mode and 22°C in heating mode, 25°C in auto mode.
- Operation correction by outdoor temperature

Main functions

Energy management

- Peak cut timer • Automatic temperature set back • Weekly timer • Set ON/OFF timer by hour
• Set ON/OFF timer by clock • Fan only operation • Sleep timer

Comfort

- Individual flap control • High power operation • External ventilation ON/OFF • Warm up operation
Automatic fan speed • Temperature increment setting by 0.5°C

CONTROL

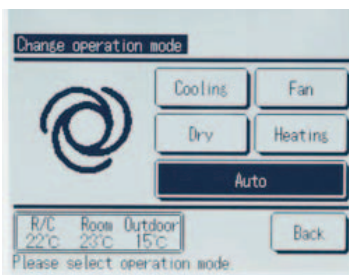
Advanced touch screen panel with full dot **Liquid Crystal Display**

Basic operation

All settings done by **tapping touch screen panel**



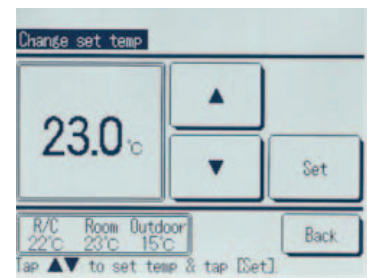
Operation mode setting screen



The operation mode can be selected by simply tapping this button.



Setting temperature screen



You can select the desired temperature by tapping the ▲▼ button.

Operation mode



Convenience

- LCD contrast setting • Back light setting • Filter clean sign • Control sound • Outdoor silent mode
- Summer time setting • Home leave mode • Indoor & outdoor temperature display
- Heating standby display • Defrosting operation display • Auto cooling/heating display • °C/°F display
- Administrator settings • Room name setting

Service

- Error code display • Operation data display • Next service data display • Contact company display
- USB connection (mini-B)

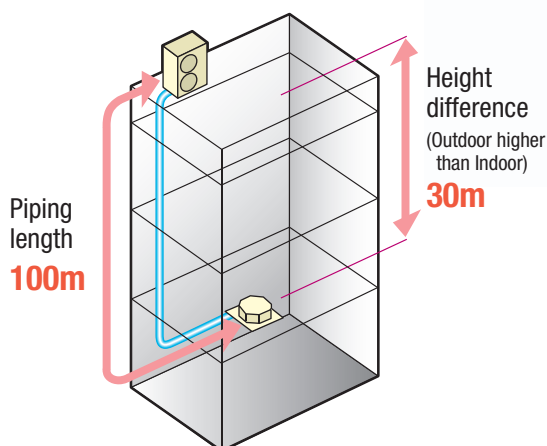
Hyper Inverter

Our advanced technology has allowed us to achieve high efficiency, powerful heating and long distance refrigerant piping specifications.

This feature permits installation of the units when a heating operation under temperature conditions down to -20°C is required. Design flexibility has been improved by an extension of the refrigerant piping length to 100m (12.5 & 14.0kW).

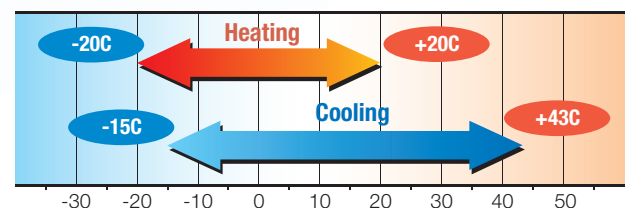


Long piping (in case of 12.5 & 14.0kW)



Strong heating (in case of 7.1~14.0kW)

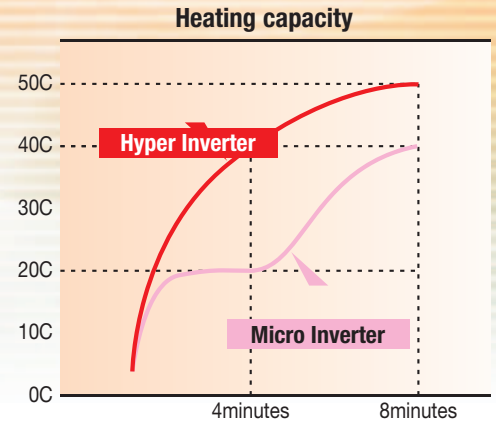
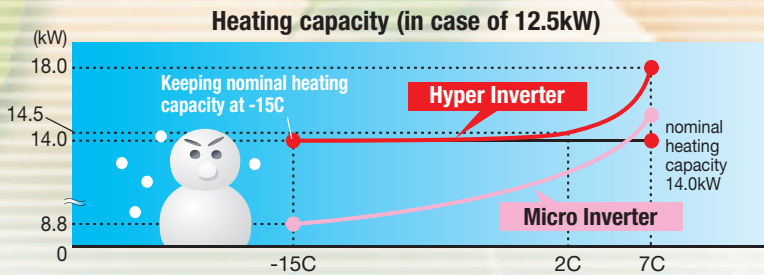
- 20C** : Heating operation down to -20°C
- 15C** : Nominal heating capacity maintained at -15°C



Powerful heating capacity

Maximum heating capacity has been increased by optimising refrigeration control, the use of electronic expansion valves and our twin rotary compressors. The Hyper Inverter series can reach the set temperature very quickly. Normal heating capacity can be maintained when the outdoor temperature is -15°C. It is very effective for use in cold areas.

Temperature of supply air can reach 40°C in 4 minutes after start up under low temperature operation conditions (at both indoor and outdoor temperature of 2°C) and can reach 50°C in 8 minutes after that.



Micro Inverter

Compact design of outdoor units

FDC100VN 10.0kW

Our single fan micro 10.0kW condenser is one of the most compact in the industry being only 845(h)x970(w)x370(d)

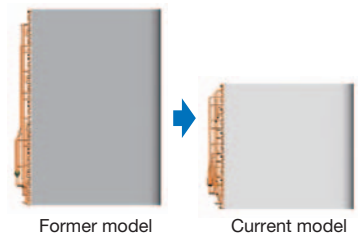
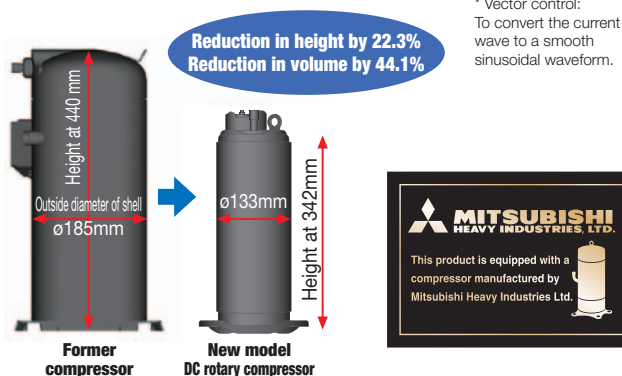


Size reduction and high efficiency performance of the DC twin rotary compressor

The DC twin rotary compressor can operate at speeds as high as 120 rps to achieve the required capacity. Vector control provides perfect compressor control. Starting current has reduced significantly and vibration has been minimized.

Improved efficiency of the heat exchanger

Re-designing the fins to a straight shape has reduced the pressure loss of the air flow in the heat exchanger. A new surface treatment on the fins has enhanced the frost resistance capacity compared to former models. A high speed fan motor has increased the airflow which allows cooling capacity to be maintained even at high outdoor air temperatures.



Protection

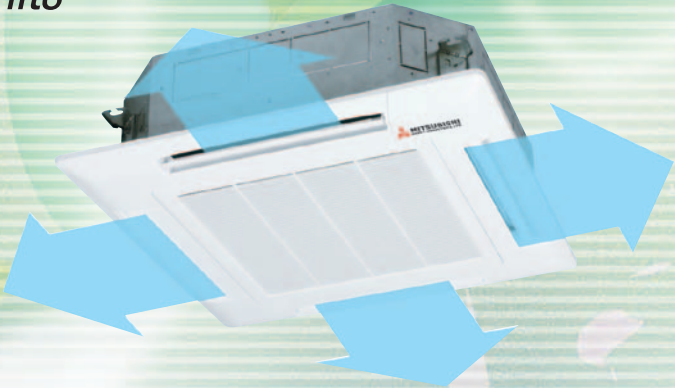
Improved operation of the electronic expansion valve allows for more reliable oil return and this assists to protect the compressor.

Ceiling Cassette - 4way - Indoor units

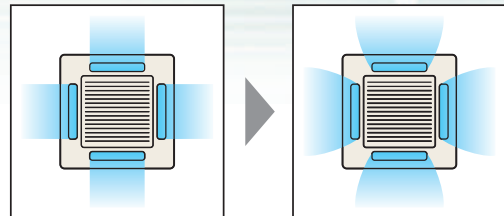
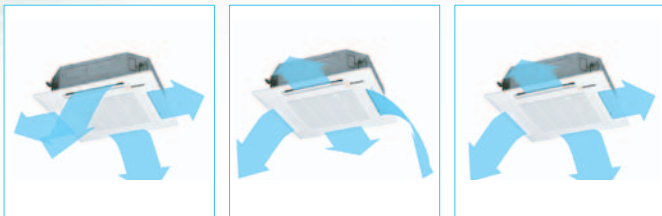
FDT-FDTC

Individual flap control system

Individual flap control is available even after installation. This means that the installation area has become wider than before.



The outlet design has been perfected to allow sufficient air flow that can reach a long distance from the indoor unit.



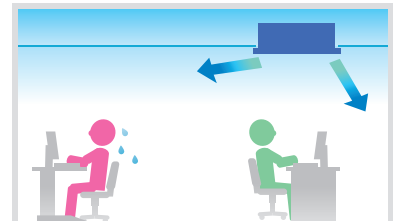
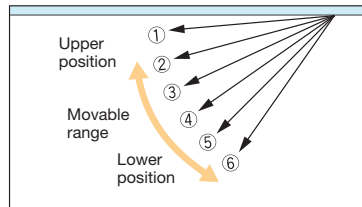
Previous

Current

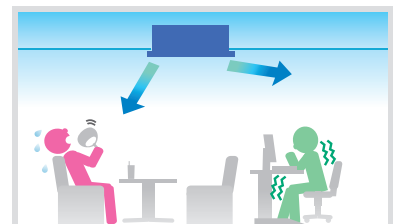
Flap control system

The design of the heat exchanger has changed from 2 parts to a single piece. The height of the indoor unit has been reduced significantly.

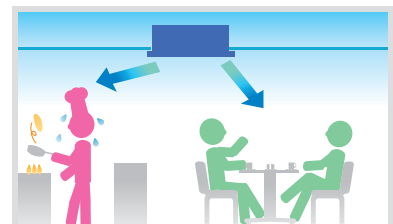
*RCH-E3 is not applicable to the Individual flap control system and the Flap control system.



For person who is far from the indoor unit



For both persons who are feeling hot or cold



Can cool both the kitchen and the guests

The thinnest design

The design of the heat exchanger has changed from 2 parts to 1 part, the height of indoor unit is reduced.

DC fan motors are used to increase efficiency. Weight has been reduced and as a result the unit has become one of the most compact in the industry.

FDT125~140

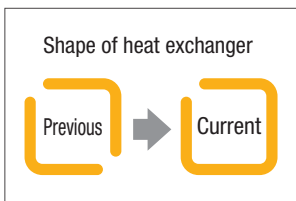


18% reduction!!

FDT71

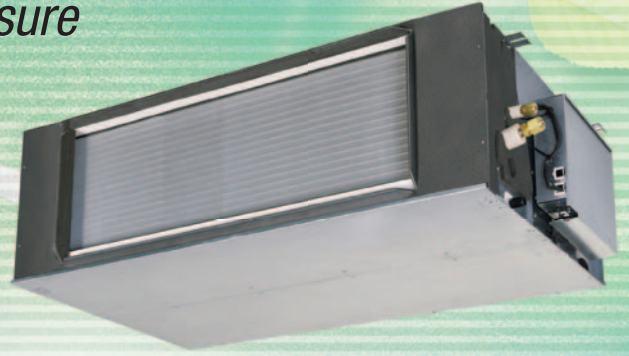


9% reduction!!



Duct Connected - Middle Static pressure

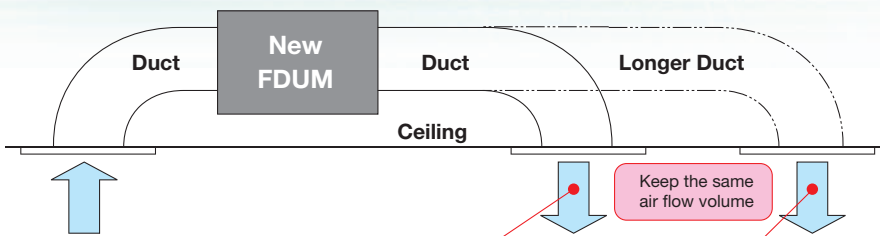
FDUM



Automatic external static pressure (E.S.P.) control

By using a DC motor, the optimum air flow volume can be achieved by this automatic control.

The indoor unit will recognize external static pressure automatically and keep rated air flow volume.



Setting No.	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10
E.S.P.	10Pa	20Pa	30Pa	40Pa	50Pa	60Pa	70Pa	80Pa	90Pa	100Pa

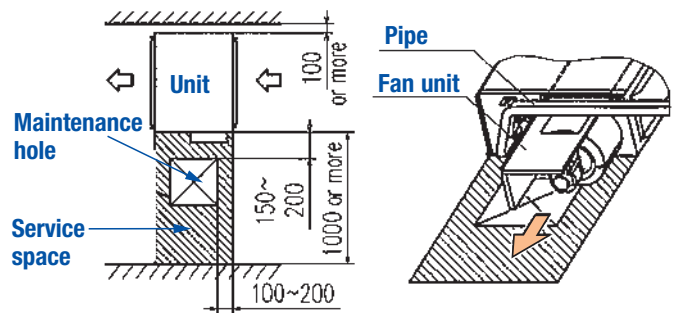


E.S.P. button

External static pressure can be set by E.S.P. button.

Improved servicing

Fan unit (impeller and motor) can be pulled out from the right side of the unit. Maintenance is available from the right side or from beneath.



Improvement of low tap noise dB(A)

Air flow sound has been reduced by a new fan and casing design. Refrigerant flow sound was decreased by advanced refrigerant distributor design.

Indoor model name	FDUM50VF	FDUM60VF	FDUM71VF	FDUM100VF	FDUM125VF	FDUM140VF
Nominal cooling capacity	5.0kW	6.0kW	7.1kW	10.0kW	12.5kW	14.0kW
NEW FDUM	26	25	25	30	30	30
Current FDUM	28	28	29	32	33	33
Improvement	-2	-3	-4	-2	-3	-3

FDT CEILING CASSETTE -4way-



FDT 60/125/140VD
FDT 71/100VF

Remote control (Option)

Wired



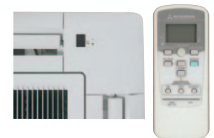
RC-EX1A



RC-E5



RCH-E3

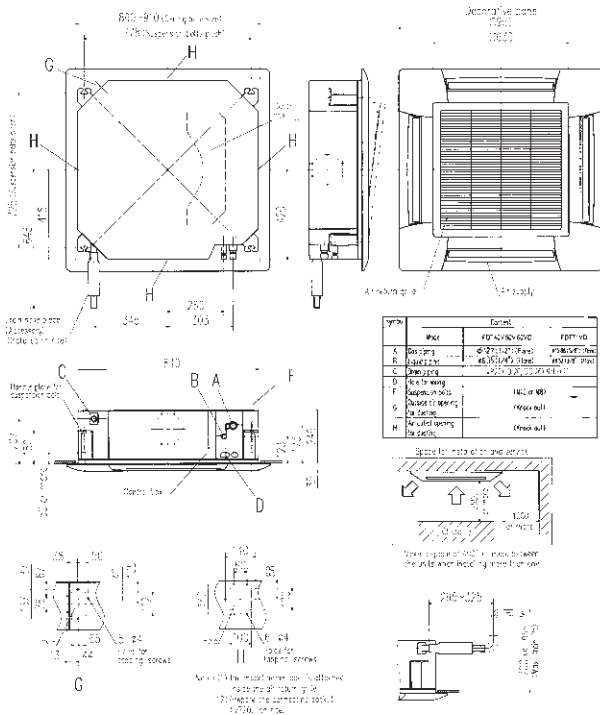


RCN-T-36W-E

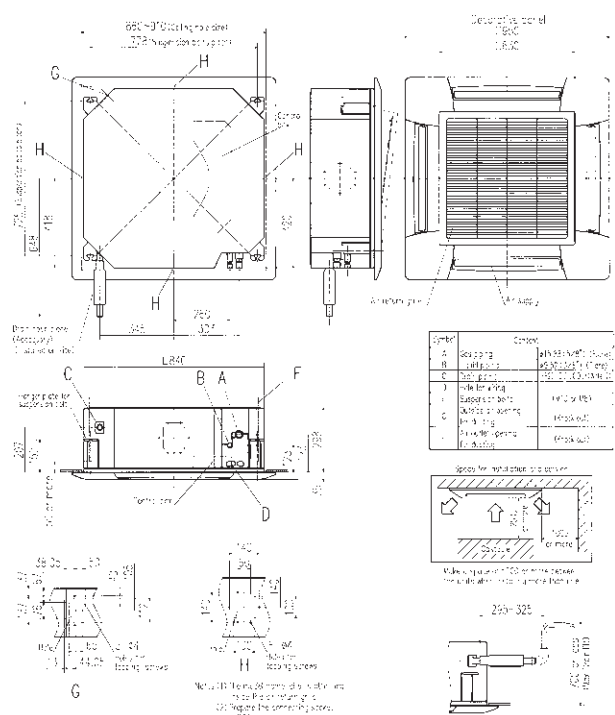
Wireless

Outline drawing (Unit:mm)

Model FDT 60,71VD



Model 100,125,140VD



Point 1

Installation

Detachable covers at each corner allows for easy alignment and balance. The panel does not need to be removed. Installation time is reduced.


Point 2

Infrared control option

For wireless control simply insert the infrared receiver kit on the corner.

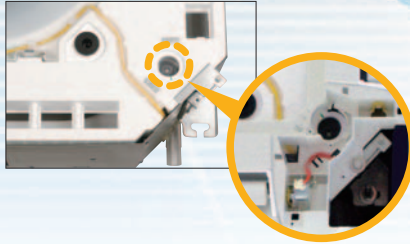


wireless remote control
RCN-T-36W-E

Point 3

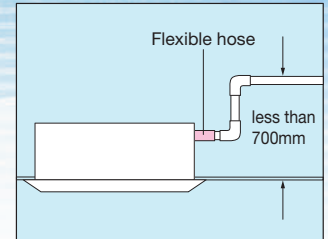
Easy checking of drain pan

To check the drain pan simply remove the corner lid.


Point 4

700mm Drain Pump

Drain can be discharged upwards by 700mm from the ceiling surface. The 260mm flexible hose is supplied as standard equipment.



FDT Series

			FDT60ZJXVD	FDT71VNXVF	FDT100VNVF	FDT125VNXVD	FDT140VNXVD	
Indoor			FDT60VD	FDT71VF	FDT100VF	FDT125VD	FDT140VD	
Outdoor			SRC60ZJX-S	FDC71VNX	FDC100VN	FDC125VNX	FDC140VNX	
Power supply	Indoor Unit	1 Phase 230V 50Hz						
Capacity	Cooling T1	kW	5.6 (2.8-6.3)	7.1 (3.2-8.0)	10.0 (4.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)	
	Heating H1		6.7 (3.1-7.1)	8.0 (3.6-9.0)	11.2 (4.0-12.5)	14.0 (4.0-17.0)	16.0 (4.0-18.0)	
	Heating H2		N/A	7.2	N/A	15.6	16	
Input	Cooling T1	kW	1.52	2.04	2.76	3.28	4.19	
	Heating H1		1.70	1.94	2.74	3.43	4.2	
EER	Cooling T1		3.68	3.48	3.62	3.81	3.34	
COP	Heating H1		3.94	4.12	4.08	4.08	3.81	
Sound pressure level (JIS C9612)	Indoor	dB (A)	P-Hi:46 Hi:33 Me:31 Lo:30	P-Hi:46 Hi:35 Me:33 Lo:31	P-Hi:51 Hi:40 Me:37 Lo:35	P-Hi:51 Hi:42 Me:40 Lo:37	P-Hi:51 Hi:43 Me:41 Lo:38	
	Outdoor		54	51	49	50	52	
Sound power level (JIS C9612)	Outdoor	dB(A)	64	66	70	70	72	
Airflow	Indoor	l/s	P-Hi: 466 Hi: 300 Me: 266 Lo: 233	P-Hi: 466 Hi: 350 Me: 316 Lo: 283	P-Hi: 616 Hi: 450 Me: 400 Lo: 333	P-Hi: 616 Hi: 500 Me: 450 Lo: 383	P-Hi: 616 Hi: 500 Me: 450 Lo: 383	
Panel		mm	T-PSA-3AW-E (35 x 950 x 950)	T-PSA-3BW-E (35 x 950 x 950)		T-PSA-3AW-E (35 x 950 x 950)		
External dimensions (HXWXD)	Indoor	mm	246 x 840 x 840			298 x 840 x 840		
	Outdoor		640 x 800(+71) x 290	750 x 880(+88) x 340	845 x 970 x 370	1300 x 970 x 370		
Net weight	Indoor	kg	Unit 24 Panel 5.5			Unit 27 Panel 5.5		
	Outdoor		45	60	81	105		
Refrigerant piping	Liquid line	mm	Ø6.35		Ø9.52			
	Gas line		Ø12.7		Ø15.88			
	Connection method		Flare connection					
Refrigerant R410A	Quantity	kg	1.5	2.95	3.8	4.5		
	Pre charged to pipe length	m	15			30		
Maximum Pipe Length		m	30	50			100	
Controller			RC-E5, RC-EX1 or RCN-T-36W-E					

VF model may be supplied in lieu.

FDTC CEILING CASSETTE

-4way Compact (600 X 600mm)-



Fits into standard 600 x 600 ceiling

FDTC50VF

Remote control (Option)

Wired

Wireless



RC-EX1A

RC-E5

RCH-E3

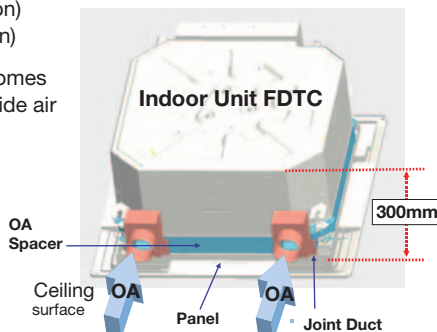
RCN-TC-24W-ER

Point 1 Taking OA (Outside air) into inside

OA Spacer TC-OAS-E (option)
Joint Duct TC-OAD-E (option)

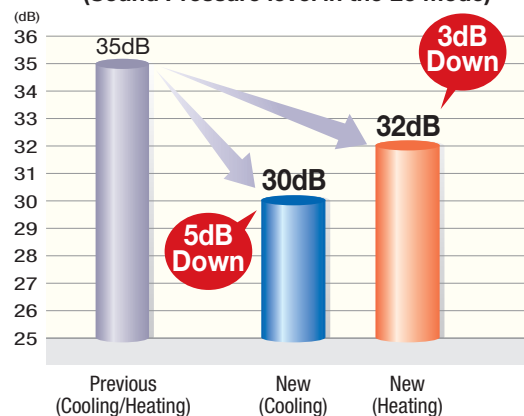
Utilizing OA spacer which comes as optional equipment, outside air can be taken into inside.

Using 1 joint duct:
OA comes up to 1.3m³/min.
Using 2 joint ducts:
OA comes from 1.3 to 2.6m³/min.

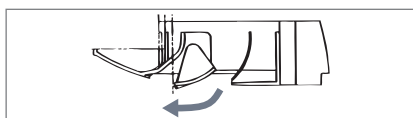
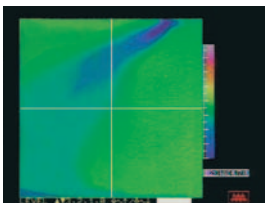


Point 2 Quiet operation

(Sound Pressure level in the Lo mode)



Point 3 "CLEARER" Air Flow



New shape & angled louver redirects the air current away from the ceiling, to reduce ceiling stains

Point 4 Installation Workability



For wireless control simply insert the infrared receiver kit on a corner of the panel



wireless remote control RCN-TC-24W-ER

Point 5 Compact and Convenient

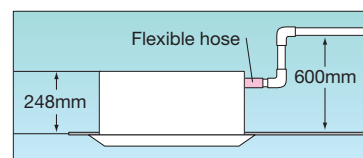
• 600mm Drain Pump

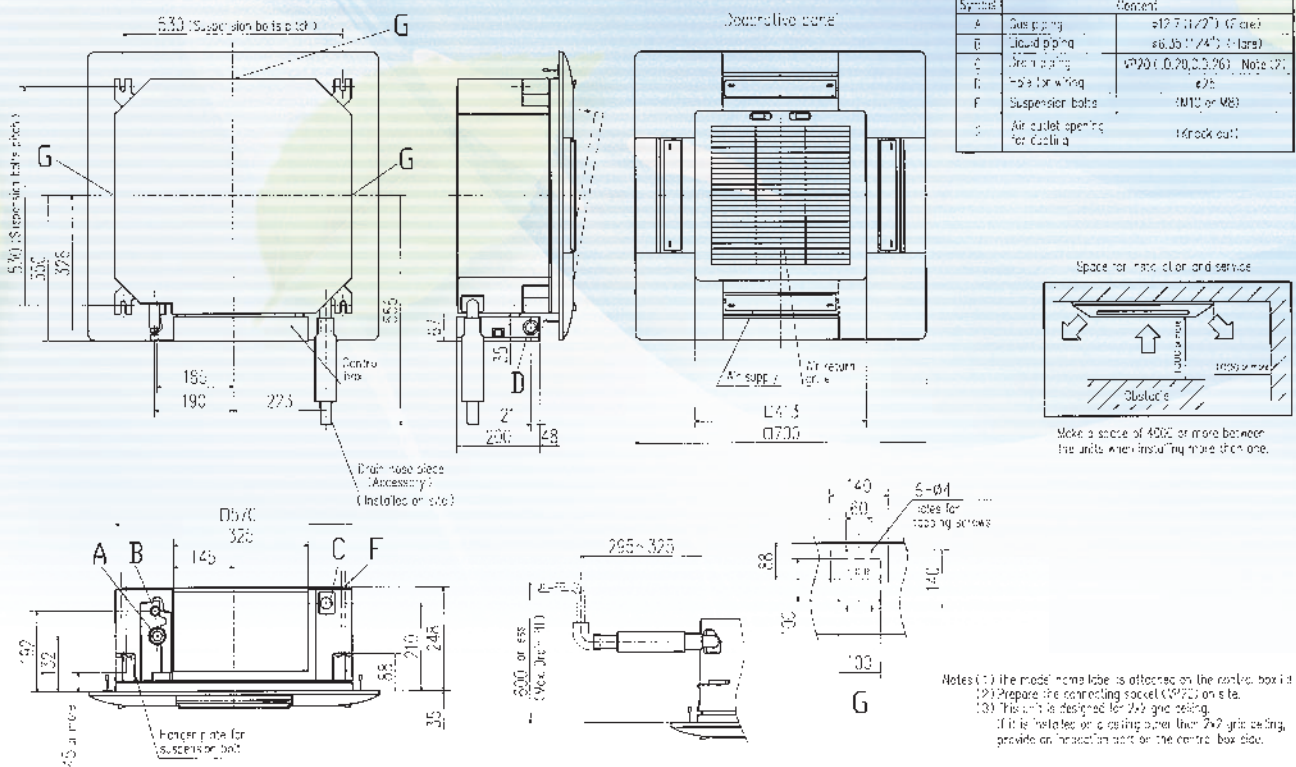
Drain can be discharged upward by 600 mm from the ceiling surface close to the indoor unit.

It allows a piping layout with a high degree of freedom depending on the installation location.

• 600 x 600 ceiling

Indoor unit size (W:570 x D:570) brings easy installation for 600 x 600 ceiling and Panel size (700 x 700) is suitable for 600 x 600 ceiling. Height is one of the industry's lowest level at 248mm and weight is 16.5kg only.



Outline drawing (Unit:mm)

FDTC Series

		FDTC50ZJXVD	
Indoor		FDTC50VD	
Outdoor		SRC50ZJX-S	
Power supply	Outdoor Unit	1 Phase 230V 50Hz	
Capacity	Cooling T1	kW	5.0(1.1-5.6)
	Heating H1		5.4(0.6-6.3)
	Heating H2		5.10
Input	Cooling T1	kW	1.56
	Heating H1		1.45
EER	Cooling T1		3.20
COP	Heating H1		3.72
Sound pressure level (JIS C9612)	Indoor	dB (A)	P-Hi:47 Hi:42 Me:36 Lo:30
	Outdoor		54
Sound power level (JIS C9612)	Outdoor	dB(A)	63
Airflow	Indoor	l/s	P-Hi: 225 Hi: 191 Me: 150 Lo: 133
Panel	TC-PSA-25W-E	mm	35 x 700 x 700
External dimensions (HXWXD)	Indoor	mm	248 x 570 x 570
	Outdoor		640 x 800(+71) x 290
Net weight	Indoor	kg	Unit 15 Panel 3.5
	Outdoor		45
Refrigerant piping	Liquid line	mm	Ø6.35
	Gas line		Ø12.7
	Connection method		Flare connection
Refrigerant R410A	Quantity	kg	1.5
	Pre charged to pipe length	m	15
Maximum Pipe Length		m	30
Controller			RC-RE, RC-EX1 or RCN-TC-24W-ER

VF model may be supplied in lieu.

FDU DUCT CONNECTED -High Static pressure-

LIMITED STOCK



FDU 100/125/140VD

Wired remote control



RC-E5 RCH-E3
(Option) (Option)

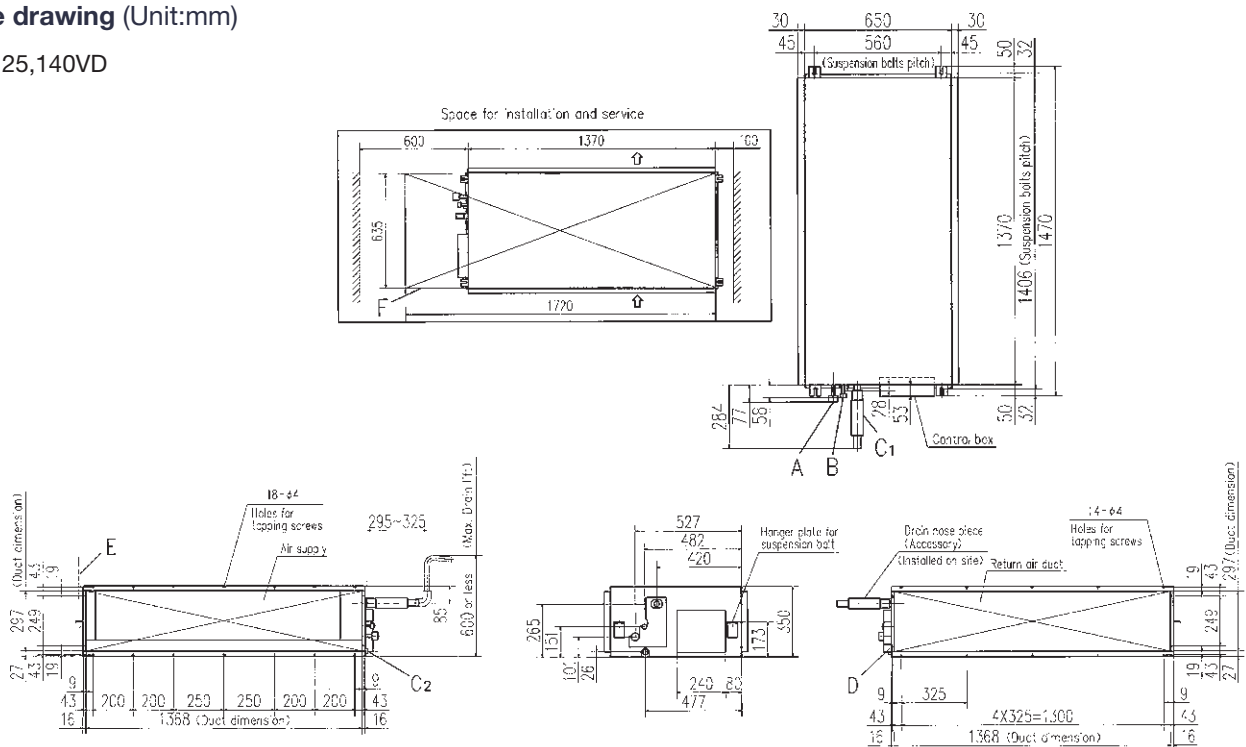
Wireless remote control



RCN-KIT3-E
(Option)

Outline drawing (Unit:mm)

FDU100,125,140VD



Symbol	Content
A	Gas piping (ø15.88 (5/8") (Flare))
B	Liquid piping (ø9.52 (3/8") (Flare))
C1	Drain piping (PP2000 20 (ø20) (Net))
C2	Drain piping (Scredy drainage) (PP2000 20 (ø20) (Net))
D	Idle for wiring
E	Suspension bolts (ø10)
F	Inspection hole (ø35x20)

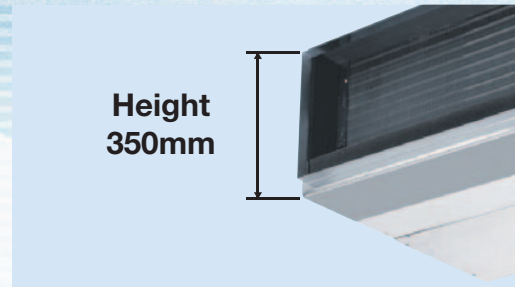
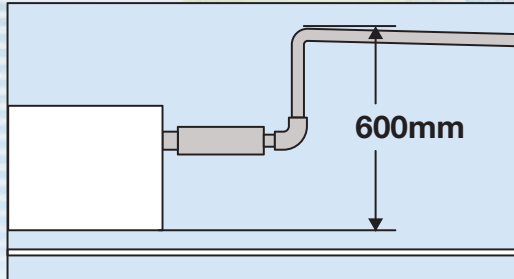
Notes (1) The model name label is attached on the lid of the control box.
(2) Prepare the connecting socket (VP20) on site.

**Point
1**

Installation features

Quiet, Lightweight and Compact

A drain pump is fitted to all units as standard and can be used in the event that gravity drainage is not possible. Remote sensors are recommended to be used with series to ensure optimum operation.



FDU Series

			FDU100VNVD	FDU125VNVD	FDU140VNVD
Indoor			FDU100VD	FDU125VD	FDU140VD
Outdoor			FDC100VN*	FDC125VNX	FDC140VNX
Power supply	Outdoor Unit	1 Phase 230V 50Hz			
Capacity	Cooling T1	kW	10.0 (4.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-16.0)
	Heating H1		11.2 (4.0-12.5)	14.0 (4.0-17.0)	16.0 (4.0 -18.0)
	Heating H2		8.5	14.3	14.4
Input	Cooling T1	kW	2.88	3.44	4.20
	Heating H1		2.99	3.67	4.30
EER	Cooling T1		3.47	3.63	3.33
COP	Heating H1		3.74	3.81	3.72
Sound pressure level (JIS C9612)	Indoor	dB (A)	Hi:42 Lo:37	Hi: 43 Lo: 38	Hi: 43 Lo: 38
	Outdoor		49	50	52
Sound power level (JIS C9612)	Outdoor	dB(A)	70	70	72
Airflow	Indoor	l/s	Hi:566 Lo:450	Hi: 700 Lo:558	
External Static Pressure	Indoor	Pa	60/130@566 l/s	60/130@700 l/s	
External dimensions (HXWXD)	Indoor	mm	350 x 1370 x 650		
	Outdoor		845 x 970 x 370	1300 x 970 x 370	
Net weight	Indoor	kg	63		
	Outdoor		81	105	
Refrigerant piping	Liquid line	mm	Ø9.52		
	Gas line		Ø15.88		
	Connection method		Flare Connection		
Refrigerant R410A	Quantity	kg	3.8	4.5	
	Pre charged to pipe length	m	30		
Maximum Pipe Length		m	50	100	
Return % Supply Air Connection	Flange	mm	290 x 1368		
Controller			RC-E5, RC-EX1 or RCN-KIT3-E		

FDUM

DUCT CONNECTED
-Middle Static pressure-

Remote control (Option)
Wired



RC-EX1A RC-E5 RCH-E3

Wireless



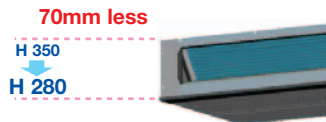
RCN-KIT3-E



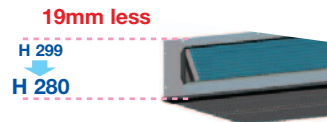
FDUM 50/60/71/100/125/140VF

Point 1 Thin design

The height of all FDUM models is only 280mm.



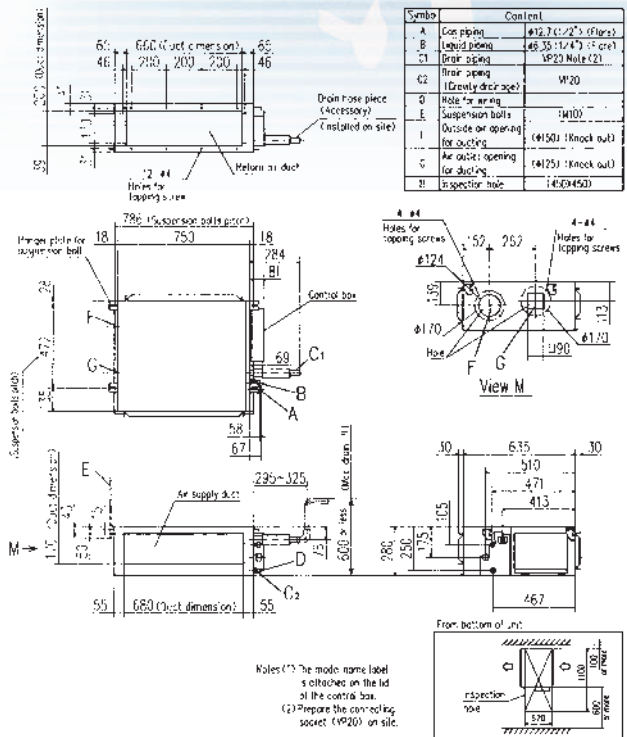
FDUM100/125/140VF



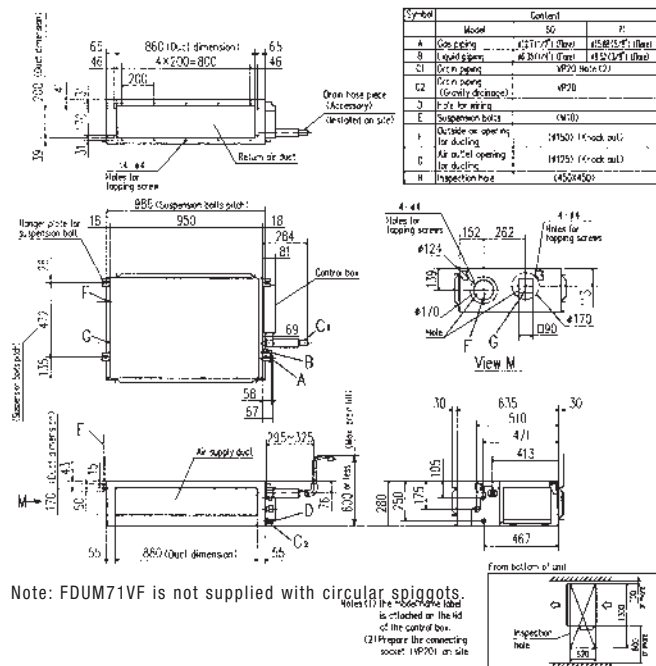
FDUM50/60/71VF

Outline drawing (Unit:mm)

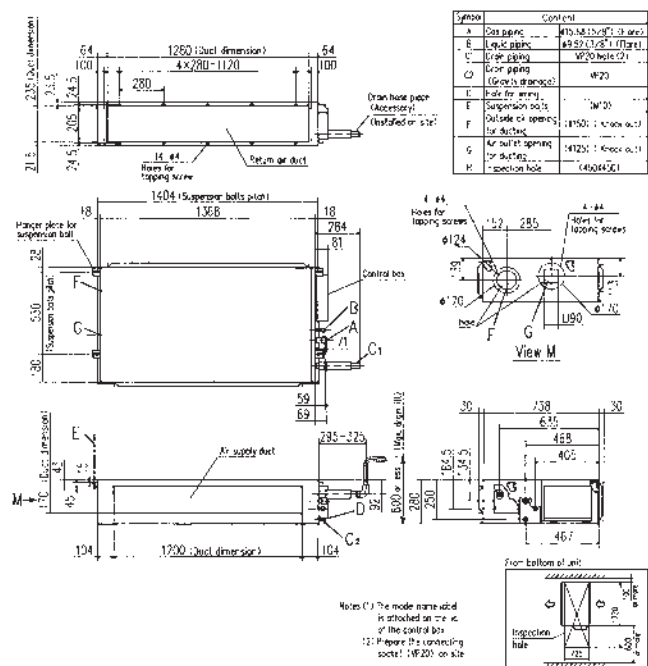
Model FDUM50VF



Models FDUM60,71VF



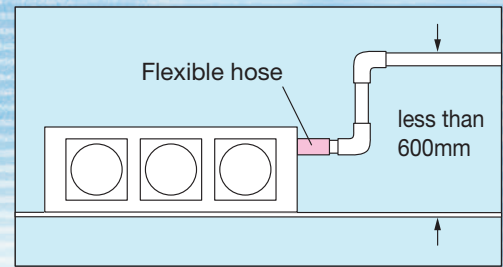
Models FDUM100,125,140VF



Point
2

600mm Drain Pump

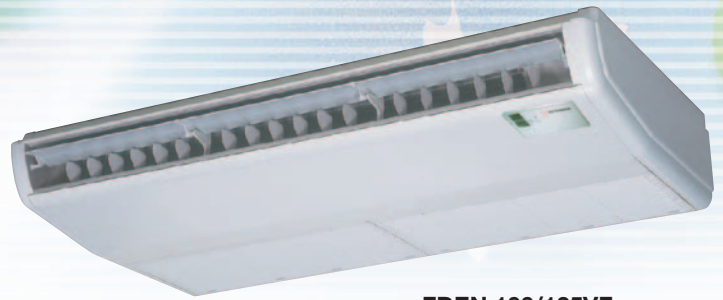
Drain can be discharged upwards by 600mm from the ceiling surface. It allows a piping layout with a high degree of freedom depending on the installation location.



FDUM Series

			FDUM50ZJXVF	FDUM60ZJXVF	FDUM71VNXVF	FDUM100VNVF	FDUM125VNXVF	FDUM140VNXVF
Indoor			FDUM50VF	FDUM60VF	FDUM71VF	FDUM100VF	FDUM125VF	FDUM140VF
Outdoor			SRC50ZJX-S	SRC60ZJX-S	FDC71VNX	FDC100VN	FDC125VNX	FDC140VNX
Power supply	Outdoor Unit	1 Phase 230V 50Hz						
Capacity	Cooling T1	kW	5.0 (2.2-5.6)	5.6 (2.8-6.3)	7.1 (3.2-8.0)	10.0 (4.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-14.5)
	Heating H1		5.4 (0.6-6.3)	6.7 (0.6-7.1)	8.0 (3.6-9.0)	11.2 (4.0-12.5)	14.0 (4.0-17.0)	16.0 (4.0-18.0)
	Heating H2		4.2	4.8	6.9	N/A	5.2	5.2
Input	Cooling T1	kW	1.56	1.75	2.20	2.92	3.60	4.40
	Heating H1		1.70	2.00	2.20	3.20	3.90	4.54
EER	Cooling T1		3.21	3.20	3.23	3.42	3.47	3.18
COP	Heating H1		3.18	3.35	3.64	3.50	3.59	3.52
Sound pressure level (JIS C9612)	Indoor	dB (A)	P-Hi:37 Hi:32 Me:29 Lo:26	P-Hi:36 Hi:31 Me:28 Lo:25	P-Hi:38 Hi:33 Me:29 Lo:25	P-Hi:44 Hi:38 Me:36 Lo:30	P-Hi:45 Hi:40 Me:34 Lo:29	P-Hi:47 Hi:40 Me:35 Lo:30
	Outdoor		50	54	60	49	50	49
Sound power level (JIS C9612)	Outdoor	dB(A)	63	64	66	70	70	72
Airflow	Indoor	l/s	P-Hi: 217 Hi: 167 Me: 150 Lo: 133	P-Hi:333 Hi:250 Me:217 Lo:167	P-Hi: 400 Hi: 316 Me: 250 Lo: 166	P-Hi:600 Hi:467 Me:417 Lo:317	P-Hi:650 Hi:533 Me:433 Lo:333	P-Hi:800 Hi:583 Me:467 Lo:367
External Static Pressure		Pa	100@217 l/s	100@333 l/s	100@400 l/s	100@600 l/s	100@650 l/s	100@800 l/s
External dimensions (HXWxD)	Indoor	mm	280 x 750 x 635	280 x 950 x 635	280 x 950 x 635	280 x 1370 x 740	280 x 1370 x 740	280 x 1370 x 740
	Outdoor		640 x 800(+71) x 290	640 x 800(+71) x 290	750 x 880(+88) x 340	840 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370
Net weight	Indoor	kg	29	34	34	54	54	54
	Outdoor		45	45	60	81	105	105
Refrigerant piping	Liquid line	mm	Ø6.35	Ø6.35	Ø9.52	Ø9.52	Ø9.52	Ø9.52
	Gas line		Ø12.7	Ø12.7	Ø15.88	Ø15.88	Ø15.88	Ø15.88
	Connection method		Flare Connection					
Refrigerant R410A	Quantity	kg	1.5	1.5	2.95	3.8	4.5	4.5
	Pre charged to pipe length	m	15	15	30	30	30	30
Maxium Pipe Length		m	30	30	50	50	100	100
Supply Air Connection		mm	170 x 680	170 x 880	170 x 880	170 x 1200	170 x 1200	170 x 1200
Return Air Connection		mm	200 x 660	200 x 860	200 x 860	235 x 1280	235 x 1280	235 x 1280
Controller			RC-E5, RC-EX1 or RCN-KIT3-E					

F DEN CEILING SUSPENDED



F DEN 100/125VF

Remote control (Option)

Wired

Wireless



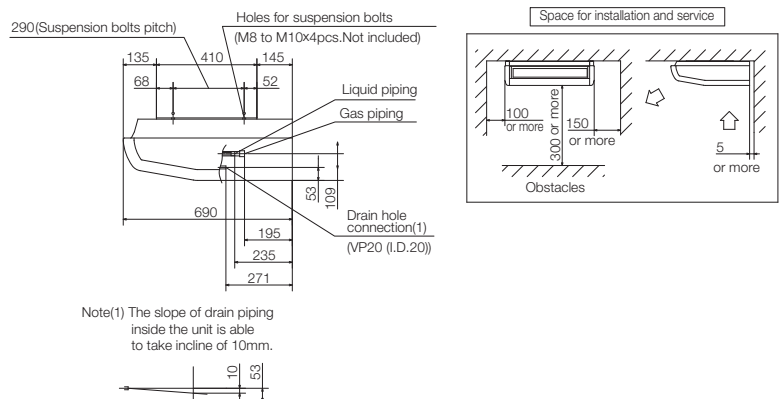
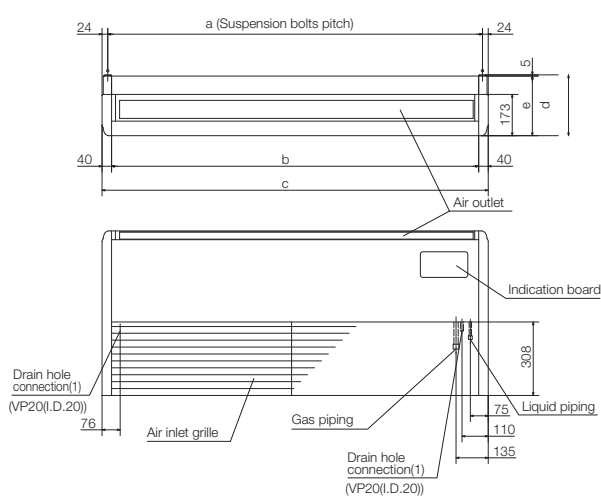
RC-EX1A

RC-E5

RCH-E3

RCN-E1R

Outline drawing (Unit:mm)



Dimension Table

model	a	b	c	d	e
F DEN100~125	1572	1540	1620	255	250

Point 1
Improved installation workability
Increased freedom of a piping layout


The refrigerant pipe from the unit can be arranged in three directions, rear, right and up. The drain pipe can be arranged in two directions, left and right. This will allow a free layout of piping for various installation conditions. The unit can only be serviced from below.

Point 2
Compact and modern design


All models fit compactly on ceiling. (Height-210mm or 250mm). Plain, modern design featuring rounded edges gives room a comfortable atmosphere.

FDEN Series

			FDEN100VND	FDEN125VNXVD
Indoor			FDEN100VD	FDEN125VD
Outdoor			FDC100VN	FDC125VNX
Power supply	Outdoor Unit	1 Phase 230V 50Hz		
Capacity	Cooling T1	kW	10 (4.0-11.2)	12.5 (5.0-14.0)
	Heating H1		11.2 (4.0-12.5)	14.0 (4.0-17.0)
	Heating H2		8.7	15.0
Input	Cooling T1	kW	2.85	3.86
	Heating H1		2.97	3.77
EER	Cooling T1		3.51	3.23
COP	Heating H1		3.77	3.71
Energy Label	Cooling T1	Stars	2	1
	Heating H1		2.5	2
Sound pressure level (JIS C9612)	Indoor	dB (A)	P-Hi:46 Hi:44 Me:41 Lo:39	
	Outdoor		49	50
Sound power level (JIS C9612)	Outdoor	dB(A)	70	70
Airflow	Indoor	l/s	P-Hi:466 Hi:433 Me:383 Lo:350	
External dimensions (HXWxD)	Indoor	mm	250 x 1620 x 690	
	Outdoor		845 x 970 x 370	1300 x 970 x 370
Net weight	Indoor	kg	49	
	Outdoor		81	105
Refrigerant piping	Liquid line	mm	Ø9.52	
	Gas line		Ø15.88	
	Connection method		Flare Connection	
Refrigerant R410A	Quantity	kg	3.8	4.5
	Pre charged to pipe length	m	30	
Maxium Pipe Length		m	50	100
Controller	RC-E5, RC-EX1 or RCN-E-E			

VF model may be supplied in lieu.



SRC50ZJX-S
SRC60ZJX-S



FDC71VNX



FDC100VN

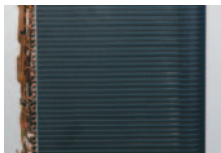
Micro



FDC125VNX
FDC140VNX

Blue Fin 7.1-14.0kW

Due to application of blue coated fins (KS101) for the heat exchanger of the new outdoor unit, corrosion resistance has been improved compared to previous models.



Base heater kit (option)

This kit is recommended to be used in an area where the temperature drops below 0°C.

CW-H-E
applied for
FDC100VN
FDC125~140VNX



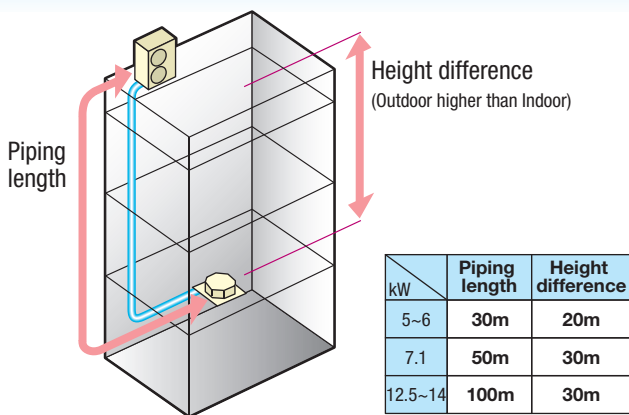
Installation workability

Enhanced installation workability thanks to the extended pipe length – one of the longest levels in the industry. Units are pre-charged with refrigerant.

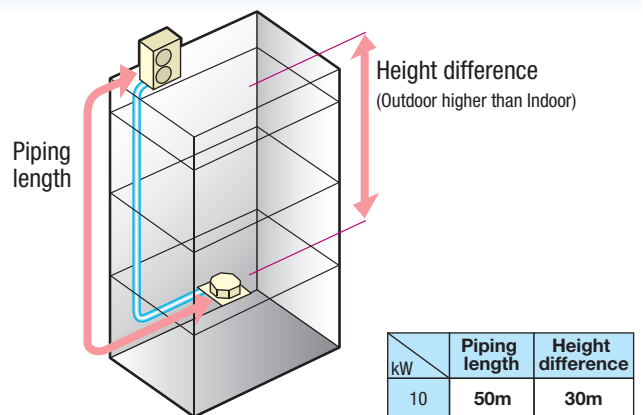
Point 1

Piping length – 100m (Hyper Inverter 12.5~14.0kW)

Hyper Inverter



Micro Inverter



Point 2

Refrigerant precharged piping length extending to 30m

Refrigerant precharged piping length extends up to 30m. (5.0 & 6.0kW up to 15m)

This eliminates the need to add refrigerant on site, which sets it free from the trouble of excessive or insufficient charging of refrigerant, and allows carrying out the installation smoothly.

High efficiency

Reduction of air flow pressure loss

Pressure caused by air flow in the indoor unit is reduced by making the air outlet larger. The reduction of pressure reduces the load on the fan motor so efficiency increases.

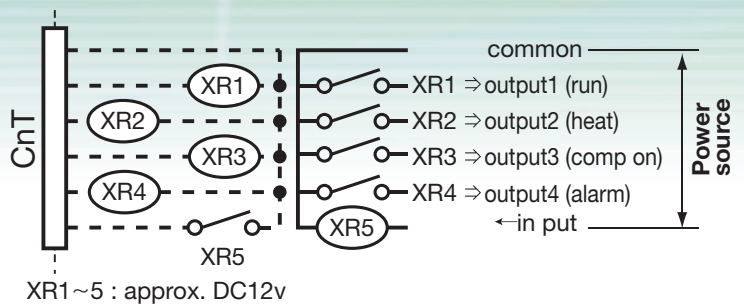
Increase of heat transfer efficiency

Heat transfer efficiency has improved by using high efficiency piping and by the redesign of the heat exchanger from 2 to 1 piece.

Convenience

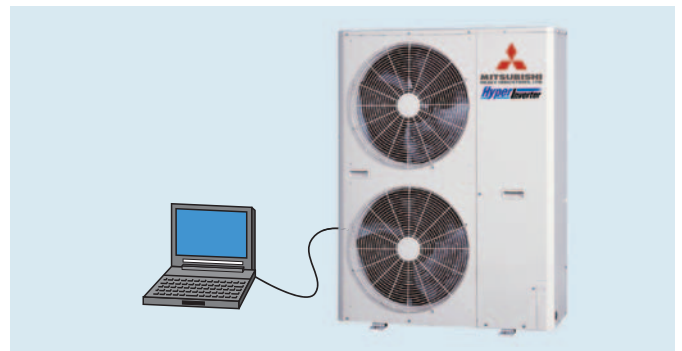
CnT terminal

A dry contact is fitted to each indoor unit which is used when a signal output is required.



Monitoring Function

Condensers are fitted with RS232C so you can connect directly to your PC for monitoring. MHI service software, Mente PC makes service tasks simple.



Remote control RC-E5

The new remote control for all indoor units. Non-polar 2 core wiring is used. Installation is easier.



All models employ R410A with RoHS* directive

Employment of lead free solder

Adapt to RoHS

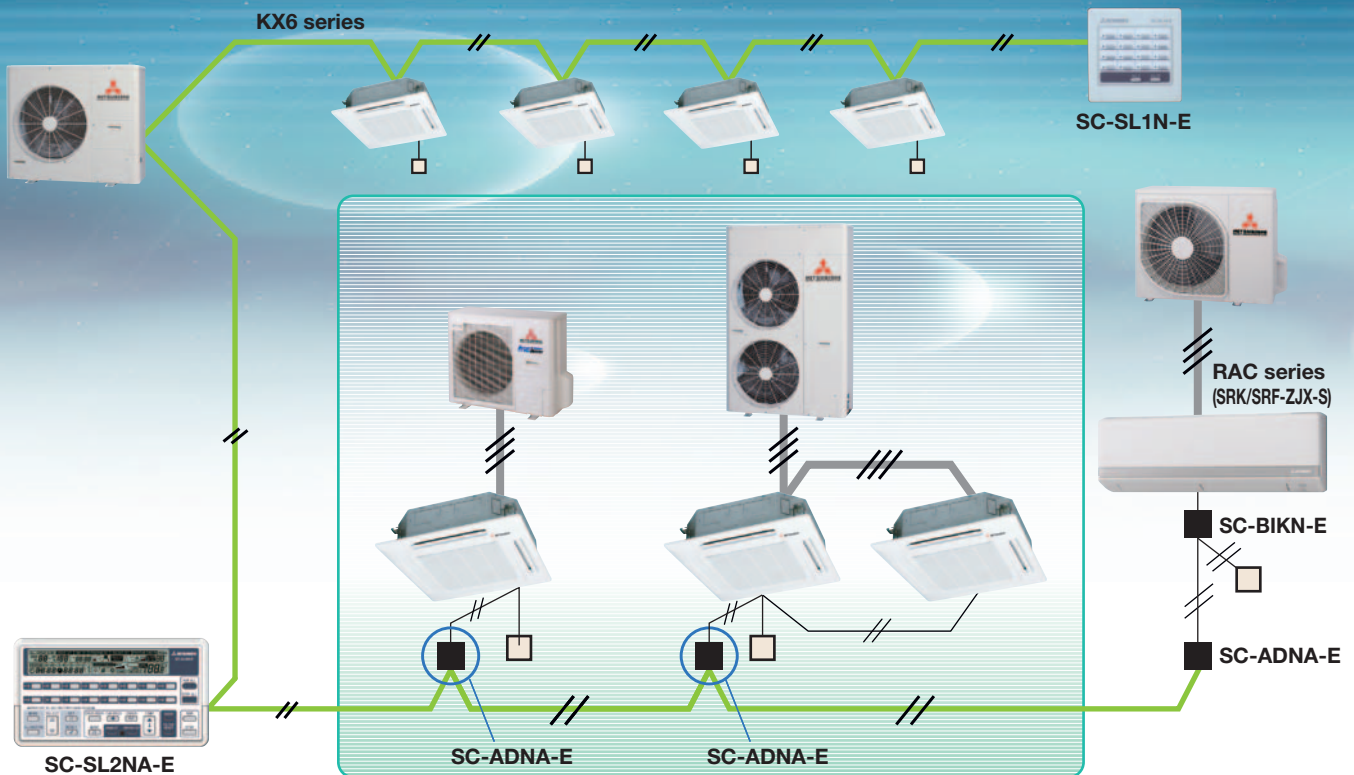
In order to comply with RoHS standard, the new inverter series use lead free solder.

*"RoHS" is the abbreviation of the new European standard, which means Restriction of Hazardous Substances.

Employment of R410A refrigerant

All models of the FD inverter series use refrigerant R410A characterized by the ozone depletion coefficient being 0.

Control System SUPERLINK-II



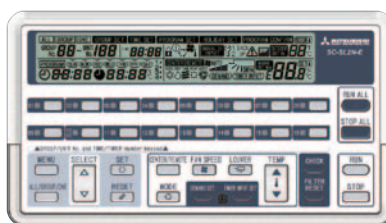
Central Control

SC-SL1N-E



Start/stop control of up to 16 indoor units is possible either individually or collectively. With simple operations, you can effect centralised control.

SC-SL2NA-E



Centralised control of up to 64 indoor units. It can allow connection with a weekly timer without using any interface.

SC-SL3N-AE/BE



Easy operation through the large color LCD and touch panel. Up to 128 indoor units can be controlled, when three SUPERLINK-II systems are connected.

PC windows central control

SC-WGWA-A/B

(SC-WGWA-B has electric power calculation function)



Up to 96 cells (some cells can have two or more indoor units and total number of indoor units can be up to 128 units) are controlled from the Internet. Additional engineering service cost is required. Please consult your dealer when using this central control.

BMS interface unit

SC-BGWN-A/B (BACnet gateway)

(SC-WGWN-B has electric power calculation function)



Up to 96 cells (some cells can have two or more indoor units and total number of indoor units can be up to 128 units) are controlled centrally from a BMS.

Additional engineering service cost is required. In case of SC-BGWN-B, communication test by qualified person regarding electric cost calculation function is required before commissioning. Please consult your dealer when using this gateway.

SC-LGWN-A (LonWorks gateway)



Up to 96 indoor units (48 indoor unit x 2) are linked as an open network. Centrally controlled through LonWorks.

Additional engineering service cost is required. Please consult your dealer when using this gateway.

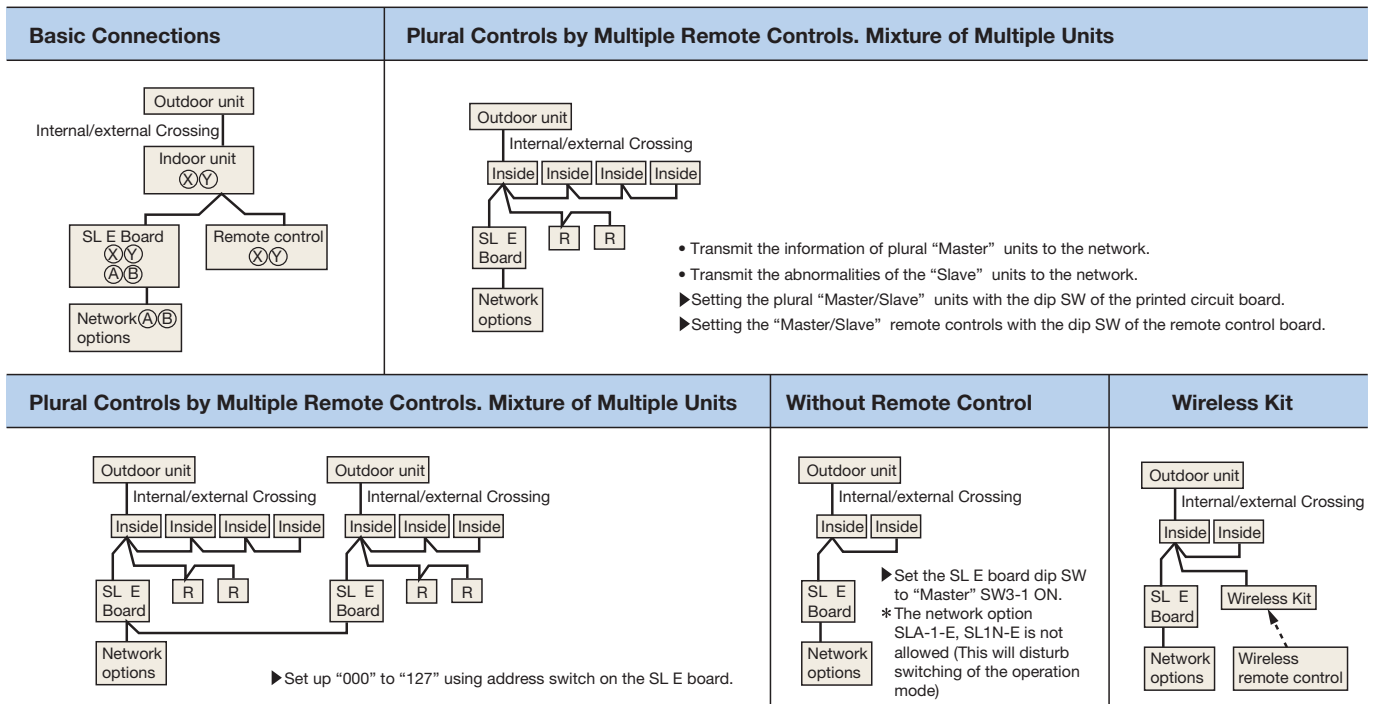
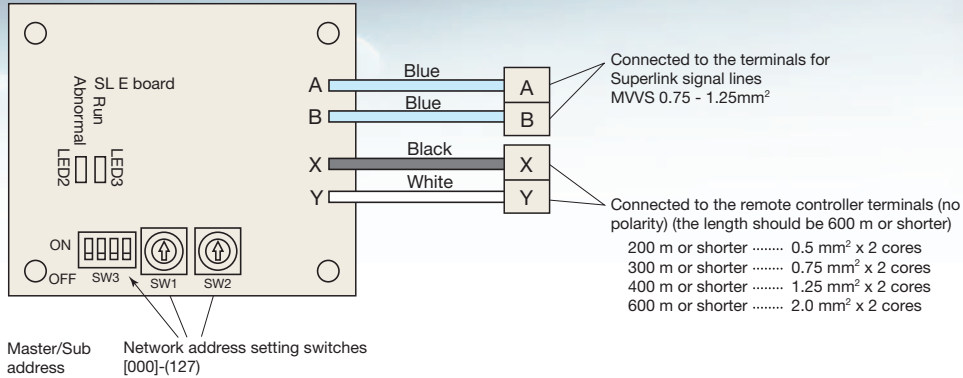
SUPERLINK E BOARD (SC-ADNA-E)

This board is used when conducting control of the single package (wired remote control unit) 1-type series using a network option (SC-SL1N-E, SC-SL2NA-E, etc).

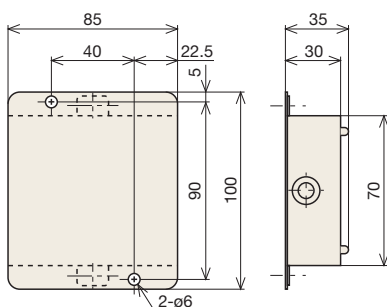
(1) Functions

- (a) Transmits the settings from the network option to the indoor units.
- (b) Returns the priority indoor unit data in response to a data request from the network option.
- (c) Inspects the error status of connected indoor units and transmits the inspection codes to the network option.
- (d) A maximum of 16 units can be controlled (if in the same operation mode).

(2) Wiring connection diagram



(3) Metal box dimension



Control Systems - Individual Control

Remote Control line up

	indoor unit	remote control
wired	all models	RC-E5
		RCH-E3

	indoor unit	remote control
wireless	FDT	RCN-T-36W-E
	FDTC	RCN-TC-24W-ER
	FDUM, FDU	RCN-KIT3-E
	FDEN	RCN-E-E

Wired remote control with weekly timer (option)

RC-E5

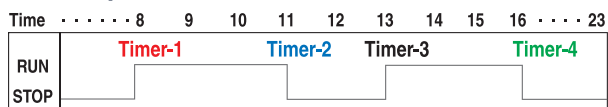


The RC-E5 controller enables extensive access to service and maintenance technical data combined with easy to use functions and a clear LCD display.

Weekly timer function as standard

RC-E5 provides (as a standard feature) a weekly timer, which allows one-week operation schedules to be registered. A user can specify up to four times a day to start/stop the air conditioner. (Temperature setting is also possible with the timer).

Timer operation

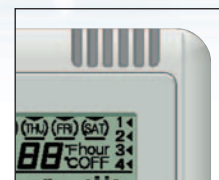


Run hour metres to facilitate maintenance checking

RC-E5 stores operation data when an anomaly occurs and indicates the error on the LCD. It also displays cumulative operation hours of the air conditioner and compressor since commissioning.

Room temperature controlled by the remote control sensor

The temperature sensor is housed in the top section of the remote control unit. This arrangement has improved the sensitivity of the remote control unit's sensor, which permits more finely controlled air conditioning.



Changeable set temperature ranges

RC-E5 allows the upper and lower limits of a set temperature range to be specified separately.

By adjusting a set temperature range, you can ensure energy saving air conditioning by avoiding excessive cooling or heating.

Changeable range	
Upper limit	20~30C(effective for heating operation)
Lower limit	18~26C(effective for non-heating operation)

Simple remote control (option)

RCH-E3 (wired)



Considering specialised usage in hotel rooms, control buttons are limited only to minimum required functions such as ON/OFF, mode, temperature setting and fan speed. It is really simple and easy to use.

RCH-E3 is not applicable to the Individual flap control system and the Flap control system. When RCH-E3 is used, the fan has 3 speed settings (Hi-Me-Lo) only.

Up to 16 units

It can control up to 16 units individually, by pressing the AIR CON No. button.

AUTO restart

This function allows starting the air conditioner automatically when power supply is restored after power failure or by turning on the power switch.

Wireless remote control (option)

For wireless control simply insert the infrared receiver kit on a corner of the panel.

RCN-T-36W-E, RCN-TC-24W-ER

RCN-KIT3-E

RCN-E-E



When wireless remote control is used, the fan has 3 speed settings (Hi-Me-Lo) only.

Thermistor (option)

SC-THB-E3

This sensor is used when individual remote control is not required in each room and the system is under central control. By installing sensors in strategic locations through out the structure greater comfort control is achieved. In many instances one additional sensor is all that is required.

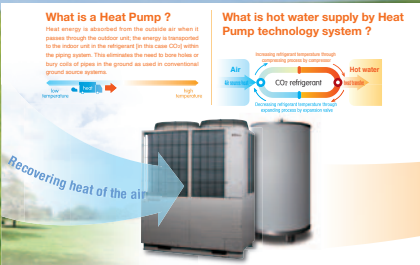


Q-ton Air to Water

Coming Soon

Commercial use Heat Pump Water Heater

Natural refrigerant CO₂ Air to Water System
30kW~480kW (for commercial use)



Easy operation
Advanced touch screen panel with full dot Liquid Crystal display
eco touch REMOTE CONTROL

User friendly

- LCD panel with light tap operation introduced as the industry's first
- Simple interface with only three buttons

High level of visibility

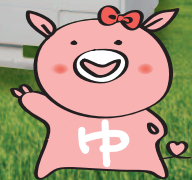
- Big LCD with 3.8 inch full dot display
- Back light function

You can check transition of hot water storage amount at a glance.

RC-Q1E

eco touch

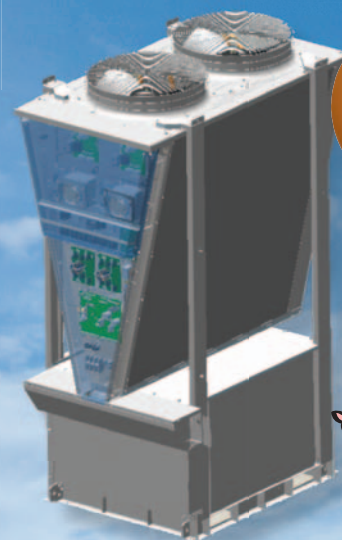
Schedule setting | operation to fill up



V-ton Module Chiller

Coming Soon

Module Chiller System



Module Chiller MVC
Water delivery for cooling & heating
Module Chiller & Fan-coil

• F = No limitation from the outdoor air as the heat source
• No need to use boiler for heating
• Water delivery to the room from the module chiller

Suitable for high-rise building
Suitable for glass-exterior facade building
No need to introduce the outdoor air

Refrigerant: R410A

MITSUBISHI

Specifications & data in this document are current as of January 2012, but subject to change without notice.

Module chiller MVC
Air delivery: Module Chiller & AHU, Ducting

• AHU is conditioned connecting with module chiller
• Conditioned OA is possible to supply through the AHU

Suitable for huge space
Shopping mall, Gymnasium, Air-port terminal, Arena etc.

Water piping (Blue)
Ducting (Yellow)

MITSUBISHI

Specifications & data in this document are current as of January 2012, but subject to change without notice.

Connectable number

Able to operate maximum total 12,000kW on one system

Max connect number: 5 groups
Max connect number: 108 units (6 groups x 18 units)
Max connect number: 108 modules (108 units x 1 module)

Possible to combine operation with the turbo refrigeration system (cooling tower + pump)
→ Control the group as one unit by Eneconductor

Control max 18 units = 72 modules

Eneconductor

Control max 6 groups (1 group = max 18 units)

Control both system of Module chiller & Turbo unit

Enable to connect to WEB system
→ Observation & Control

MITSUBISHI

Specifications & data in this document are current as of January 2012, but subject to change without notice.

Before starting use

Heating performance

The heating performance values (kW) described in catalog are the values obtained by operating at an outdoor temperature of 7C and indoor temperature of 20C as set forth in the ISO Standards. As the heating performance decreases as the outdoor temperature drops, if the outdoor temperature is too low and the heating performance is insufficient, use other heating appliances as well.

Indication of sound values

The sound values are the values (A scale) measured in a chamber such as an anechoic chamber following the ISO Standards. In the actual installation state, the value is normally larger than the values given in the catalog due to the effect of surrounding noise and echo. Take this into consideration when installing.

Use in oil atmosphere

Avoid installing this unit in as atmosphere where oil scatters or builds up, such as in a kitchen or machine factory. If the oil adheres to the heat exchanger, the heat exchanging performance will drop, mist may be generated, and the synthetic resin parts may deform and break.

Use in acidic or alkaline atmosphere

If this unit is used in acidic atmosphere such as hot spring areas having high level of sulfuric gases or in alkaline atmosphere including ammonia or calcium chloride, places where the exhaust of the heat exchanger is sucked in, or at coastal areas where the unit is subject to salt breezes, the outer plate or heat exchanger, etc., will corrode. Please ask a dealer or specialist when you use an air conditioner in places differing from a general atmosphere.

Use in places with high ceilings

If the ceiling is high, install a circulator to improve the heat and air flow distribution when heating.

Refrigerant leakage

The refrigerant (R410A) used for Air conditioner is non-toxic and nonflammable in its original state. However, in consideration of a state where the refrigerant leaks into the room, measures against refrigerant leaks must be taken in small rooms where the tolerable level could be exceeded. Take measures by installing ventilation devices, etc.

Use in snowy areas

Take the following measures when installing the outdoor unit in snowy areas.

Snow prevention

Install a snow-prevention hood so that the snow does not obstruct the air intake port or enter and freeze in the outdoor unit.

Snow piling

In areas with heavy snow fall, the piled snow could block the air intake port. In this case, a frame that is 50cm or higher than the estimated snow fall must be installed underneath the outdoor unit.

Automatic defrosting device

If the temperature is low, and the humidity is high, frost will stick to the heat exchanger of the outdoor unit. If use is continued, the heating performance will drop.

The "Automatic defrosting device" will function to remove this frost. After heating for approx, three to ten minutes, it will stop, and the frost will be removed. After defrosting, hot air will be blown again.

Servicing the air-conditioner

After the air-conditioner is used for several seasons, dirt will build up in the air-conditioner causing the performance to drop. In addition to regular servicing, we recommend the maintenance contract (charged for) by a specialist.

Safety Precautions

Air-conditioner usage target

The air-conditioner described in this catalog is a dedicated cooling/heating device for human use.

Do not use it for special applications such as the storage of foodstuffs, animals or plants, computer server rooms, precision devices or valuable art, etc.

This could cause the quality of the items to drop, etc.

Do not use this for cooling vehicles or ships. Water leakage or current leaks could occur.

Before use

Always read the "User's Manual" thoroughly before starting use.

Installation

Always commission the installation to a dealer or specialist. Improper installation will lead to water leakage, electric shocks and fires.

Make sure that the outdoor unit is stable in installation. Fix the unit to stable base.

Usage place

Do not install in places where combustible gas could leak or where there are sparks.

Installation in a place where combustible gas could be generated, flow or accumulate, or places containing carbon fibers could lead to fires.

Only persons that are qualified and licensed are permitted to install and service products that contain refrigerants in Australia, go to www.arctick.org. Suitable access for service must be provided in compliance with industry standards and local regulations.



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ISO9001

Our Air Conditioning & Refrigeration Systems Headquarters is an ISO9001 approved factory for residential air conditioners and commercial-use air conditioners (including heat pumps).



BIWAJIMA PLANT
Mitsubishi Heavy Industries, Ltd.
Air-conditioning & Refrigeration Systems Headquarters
Certified ISO 9001
Certificate number : JQA-0709



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ISO14001

Our Air Conditioning & Refrigeration Systems Headquarters has been assessed and found to comply with the requirements of ISO14001.



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