



# FD Series

Inverter Packaged Air Conditioners



MHIAA is proudly sponsoring  
Monika's Doggie Rescue

## FD Series.

Inverter Packaged Air Conditioners.

# *eco touch* REMOTE CONTROL

change  
setting by  
**button taps**  
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

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

## Basic operation

All settings are changed by **tapping the touch screen panel**



### Operation mode setting screen



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



### Temperature setting 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)

# FD Series.

## Hyperinverter.

# HyperInverter

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  $-20^{\circ}\text{C}$  is required. Design flexibility has been improved by an extension of the refrigerant piping length to 100m (12.5 & 14.0kW).



5.0 & 6.0kW



7.1kW

Blue  
Fin

Micro



10.0kW

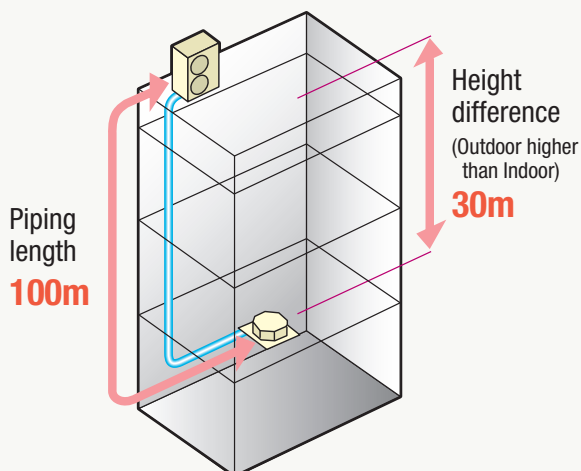


12.5 & 14.0kW

Blue  
Fin

### Long piping

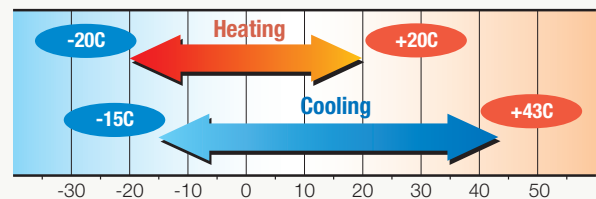
(in case of 12.5 & 14.0kW)



### Strong heating

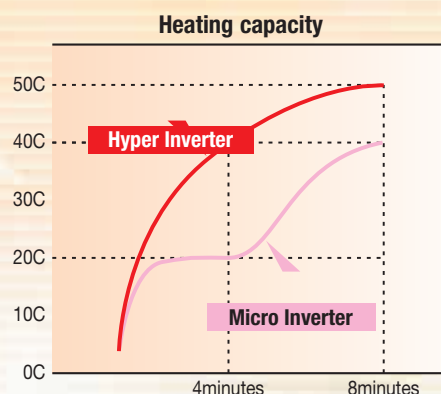
(in case of 7.1~14.0kW)

**-20C** : Heating operation down to  $-20^{\circ}\text{C}$   
**-15C** : Nominal heating capacity maintained at  $-15^{\circ}\text{C}$



## Heating capacity

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

**Reduction in height by 22.3%**  
**Reduction in volume by 44.1%**

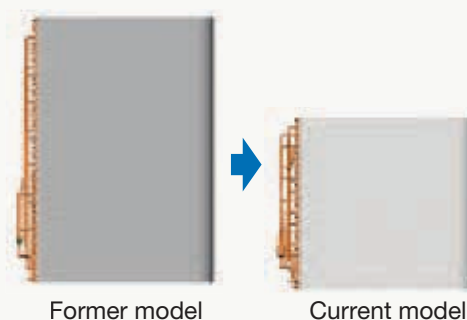
**Former compressor**  
Height at 440 mm  
Outside diameter of shell ø185mm

**New model DC rotary compressor**  
Height at 342mm  
ø133mm

\* Vector control:  
To convert the current wave to a smooth sinusoidal waveform.

## 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.

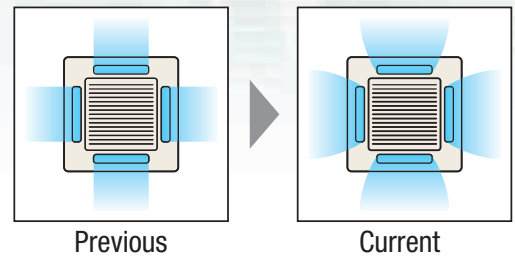
# FDT-FDTC.

## Ceiling Cassette - 4way - Indoor units.

### Individual flap control system

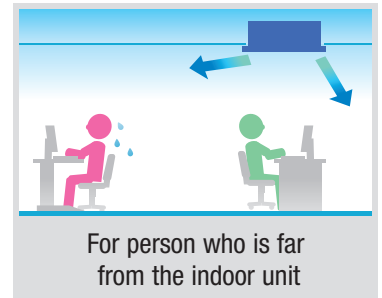
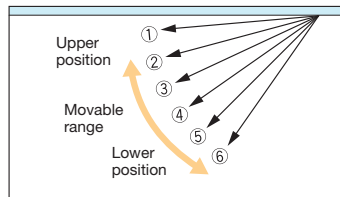
Individual flap control is available even after installation. This means that the installation area has become wider than before.

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



### Flap control system

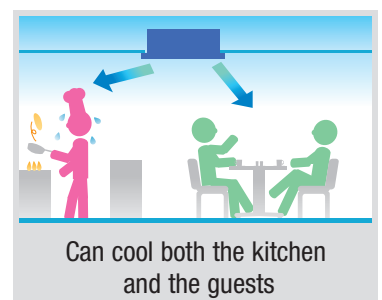
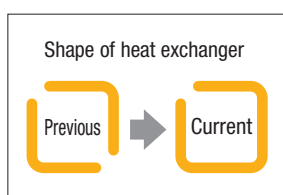
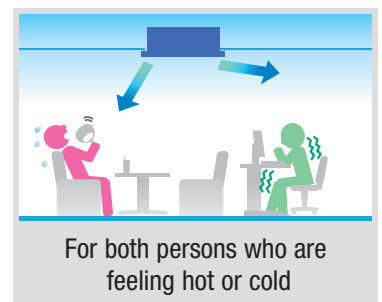
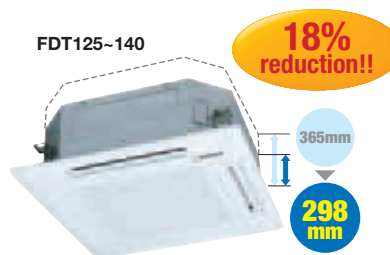
The design of the heat exchanger has changed from 2 parts to a single piece. The height of the indoor unit has been reduced significantly.



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

### 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.



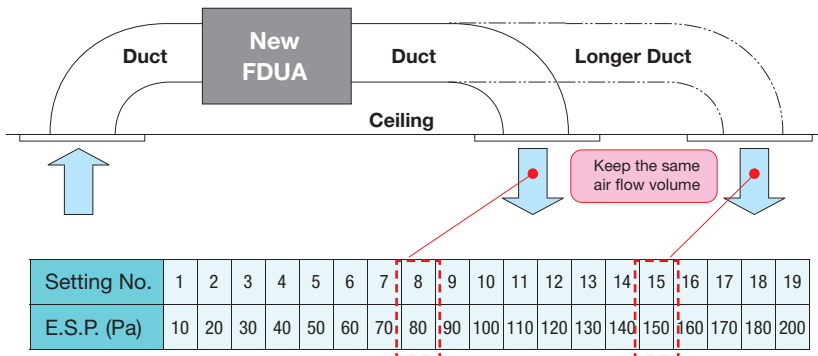
# FDDA Indoor Unit.

Duct Connected - High Static Pressure.



## External static pressure (E.S.P.) control

Selecting the external static pressure setting the optimum air flow volume can be achieved. The indoor unit will recognize the external static pressure setting and keep rated air volume.

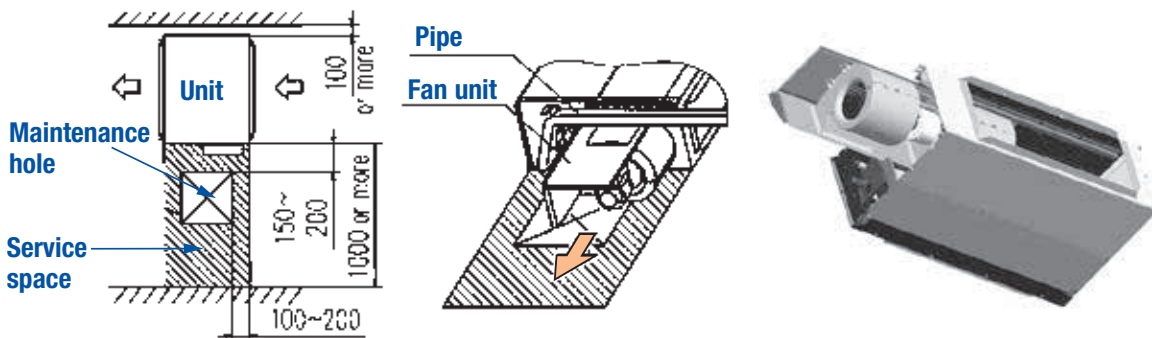


**E.S.P. button**

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

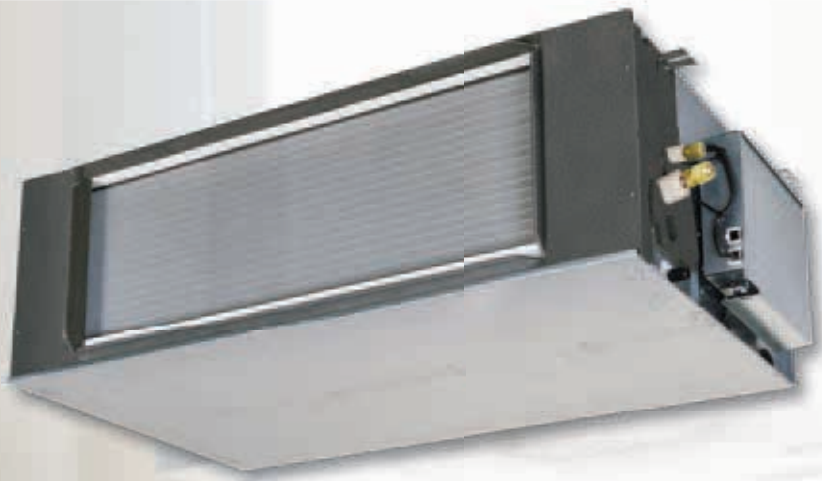
## Improved servicing

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



# FDA Indoor Unit.

Duct Connected - High Static Pressure.



FDA71~160VF

### Wireless Remote Control



RCN-KIT3-E

### Wired Remote Control



RC-EX1A

RC-E5

RCH-E3

## Dimension

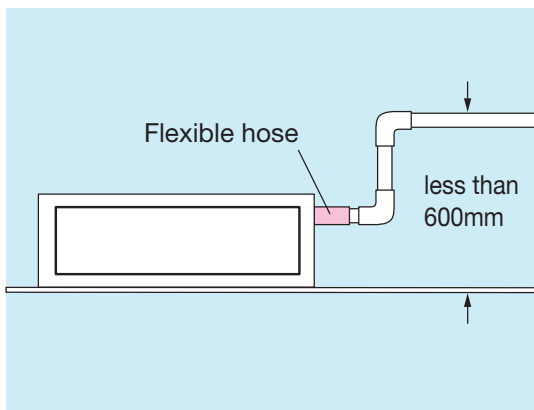


FDA100/125/140/160VF

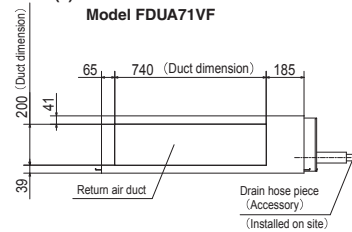
FDA71VF

## 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.

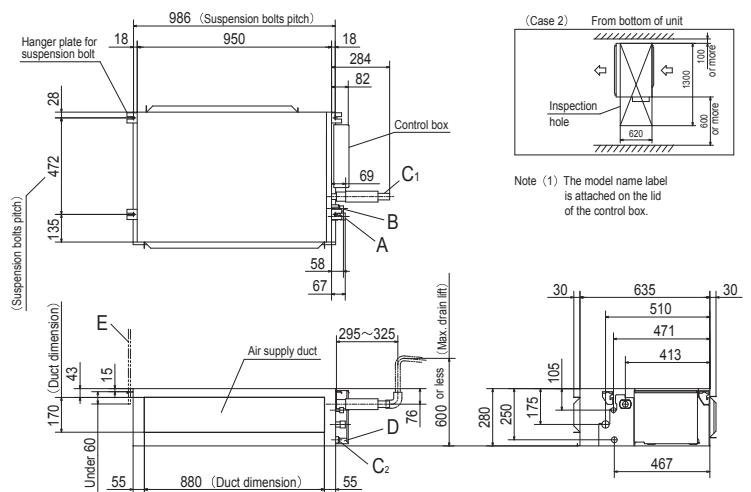


### (1) Indoor units Model FDA71VF



Unit:mm

Symbol	Content
A	Gas piping φ 15.88 (5/8") (Flare)
B	Liquid piping φ 9.52 (3/8") (Flare)
C1	Drain piping VP25 (I.D.25,O.D.32)
C2	Drain piping (Gravity drainage) VP20 (I.D.20,O.D.26)
D	Hole for wiring
E	Suspension bolts (M10)
F	Inspection hole (450X450)

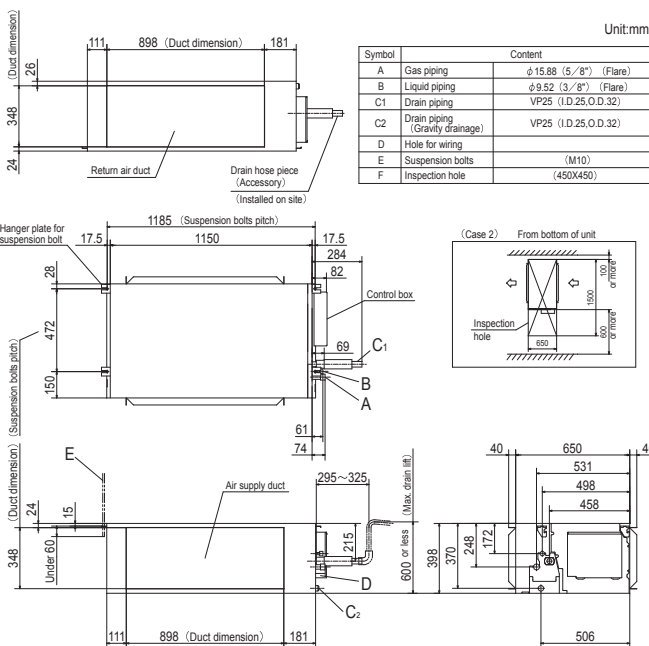




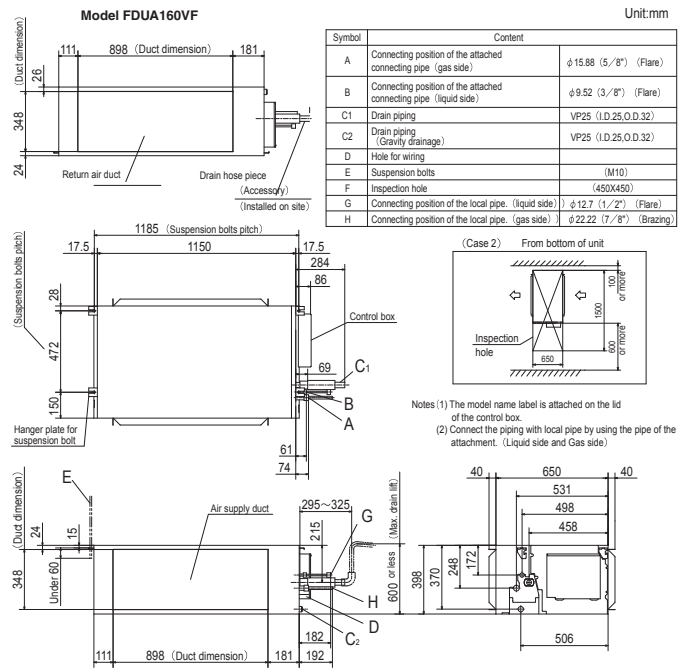
# FDUA

			FDUA71VNXVF	FDUA100VNVF	FDUA100VNXVF	FDUA125VNXVF	FDUA140VNXVF	FDUA160VSVF
Indoor			FDUA71VF	FDUA100VF	FDUA100VF	FDUA125VF	FDUA140VF	FDUA160VF
Outdoor			FDC71VNX	FDC100VN	FDC100VNX	FDC125VNX	FDC140VNX	FDC160VS
Power supply	Outdoor Unit	1 Phase 230V 50Hz						
Capacity	Cooling T1	kW	7.1 (3.2-8.0)	10 (4.0-11.2)	10 (4.0-11.2)	12.5 (5.0-14.0)	14.0 (5.0-14.5)	16.0 (7.0-20.0)
	Heating H1		8.0 (3.6-9.0)	11.2 (4.0-12.5)	11.2 (4.0-12.5)	14.0 (4.0-17.0)	16.0 (4.0-18.0)	18.0 (7.6-22.4)
	Heating H2		5.9	10.0	13.5	14.0	15.0	15.0
Input	Cooling T1	kW	2.22	3.05	2.85	3.83	4.44	5.02
	Heating H1		2.22	2.87	2.74	3.68	4.41	4.96
EER	Cooling T1		3.20	3.28	3.51	3.26	3.15	3.19
COP	Heating H1		3.60	3.90	4.09	3.80	3.63	3.63
Sound pressure level (JIS C9612)	Indoor	dB(A)	P-Hi:38 Hi:33 Me:29 Lo:25	P-Hi:43 Hi:42 Me:40 Lo:37	P-Hi:43 Hi:42 Me:40 Lo:37	P-Hi:45 Hi:43 Me:41 Lo:37	P-Hi:47 Hi:46 Me:43 Lo:40	P-Hi:49 Hi:48 Me:45 Lo:42
	Outdoor		51	49	48	48	49	57
Sound power level (JIS C9612)	Outdoor	dB(A)	66	70	70	70	72	74
Airflow	Indoor	l/s	P-Hi: 400 Hi: 317 Me: 250 Lo: 167	P-Hi:650 Hi:600 Me:550 Lo:483	P-Hi:650 Hi:600 Me:550 Lo:483	P-Hi:717 Hi:650 Me:600 Lo:500	P-Hi:850 Hi:800 Me:700 Lo:600	P-Hi:850 Hi:800 Me:700 Lo:600
External Static Pressure		Pa	200					
External dimensions (HXWD)	Indoor	mm	280 x 950 x 635	398 x 1150 x 650	398 x 1150 x 650	398 x 1150 x 650	398 x 1150 x 650	398 x 1150 x 650
	Outdoor		750 x 880(+88) x 340	845 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1300 x 970 x 370	1505 x 970 x 370
Net weight	Indoor	kg	34	52	52	52	52	52
	Outdoor		60	81	105	105	105	140
Refrigerant piping	Liquid line	mm	Ø9.52	Ø9.52	Ø9.52	Ø9.52	Ø9.52	Ø12.7
	Gas line		Ø15.88	Ø15.88	Ø15.88	Ø15.88	Ø15.88	Ø22.22
	Connection method		Flare Connection					
Refrigerant R410A	Quantity	kg	2.95	3.8	4.5	4.5	4.5	7.2
	Pre charged to pipe length	m	30	30	30	30	30	30
Maxium Pipe Length		m	50	50	100	100	100	70
Supply Air Connection		mm	170 x 880		348 x 898			
Return Air Connection		mm	200 x 740		348 x 898			
Controller			RC-E5, RC-EX1A or RCN-KIT3-E					

Models FDUA100VF, 125VF, 140VF



Model FDUA160VF



Outline drawing (Unit:mm)

# FDUM Indoor Unit.

Duct Connected - Medium Static Pressure.



FDUM50 ~ 140VF

### Wireless Remote Control



RCN-KIT3-E

### Wired Remote Control



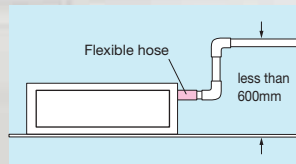
RC-EX1A

RC-E5

RCH-E3

## 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.



## Thin design

The height of all FDUM models is only 280mm.

70mm less

H 350  
H 280



FDUM100/125/140VF

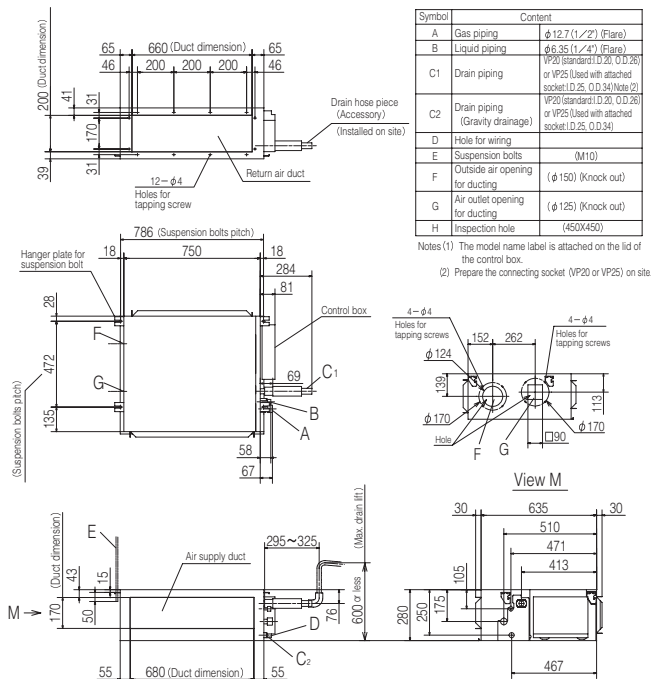
19mm less

H 299  
H 280

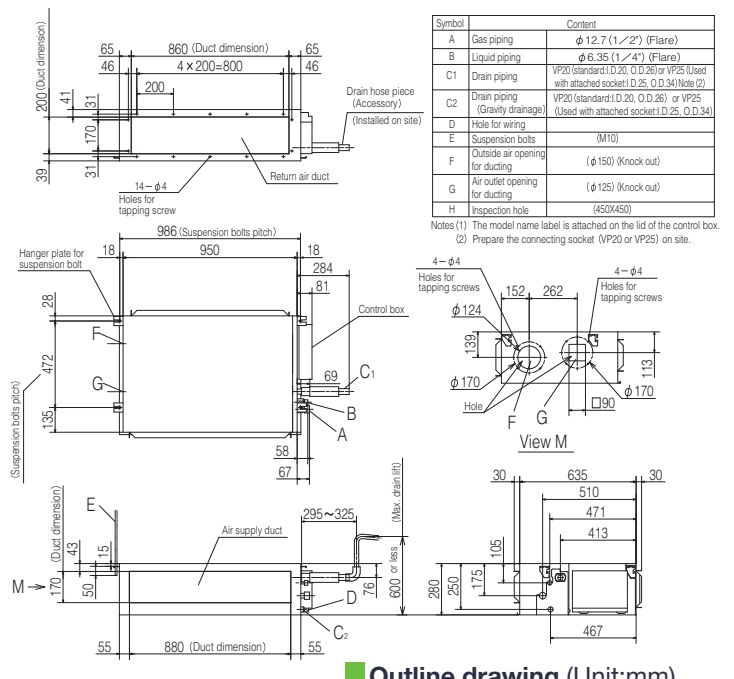


FDUM50/60/71VF

### FDUM50VF



### FDUM60VF

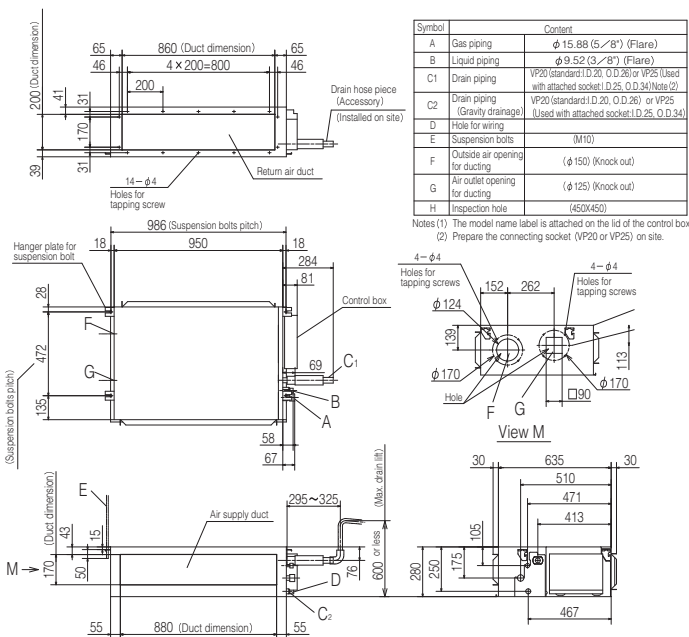


Outline drawing (Unit:mm)

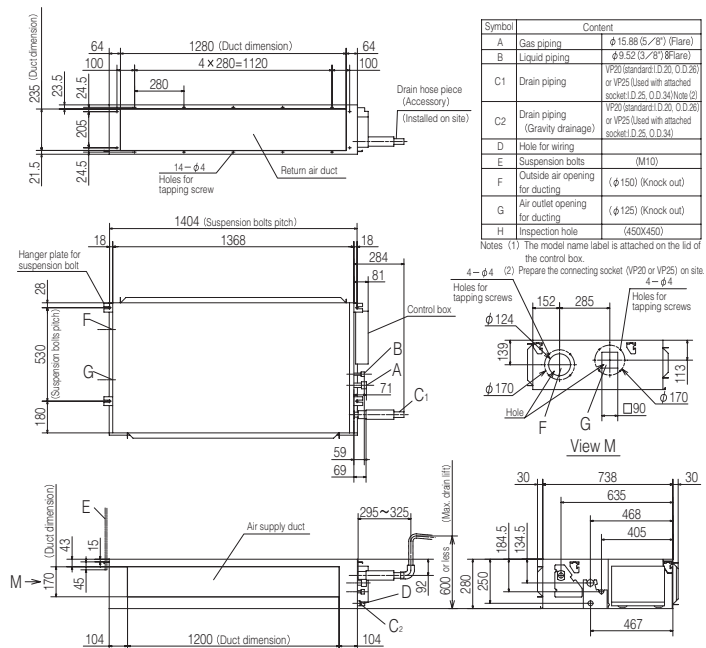
# FDUM

			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		4.3	4.9	7.0	11.4	13.7	14.3	
Input	Cooling T1	kW	1.56	1.75	2.20	2.92	3.60	4.48	
	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	3.15	
COP	Heating H1		3.18	3.35	3.64	3.50	3.59	3.63	
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	51	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 (H×W×D)	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	845 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-EX1A or RCN-KIT3-E						

## FDUM71VF



## FDUM100VF, 125VF, 140VF



# FDT - Indoor Unit. Ceiling Cassette-4way.



FDT60 ~ 140VF

**Remote control (Option)**

**Wired**



RC-EX1A RC-E5 RCH-E3

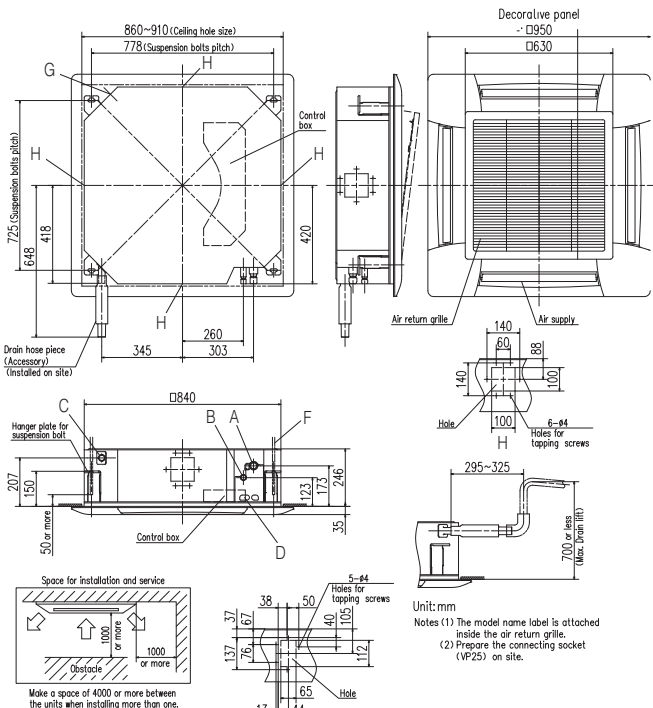
**Wireless**



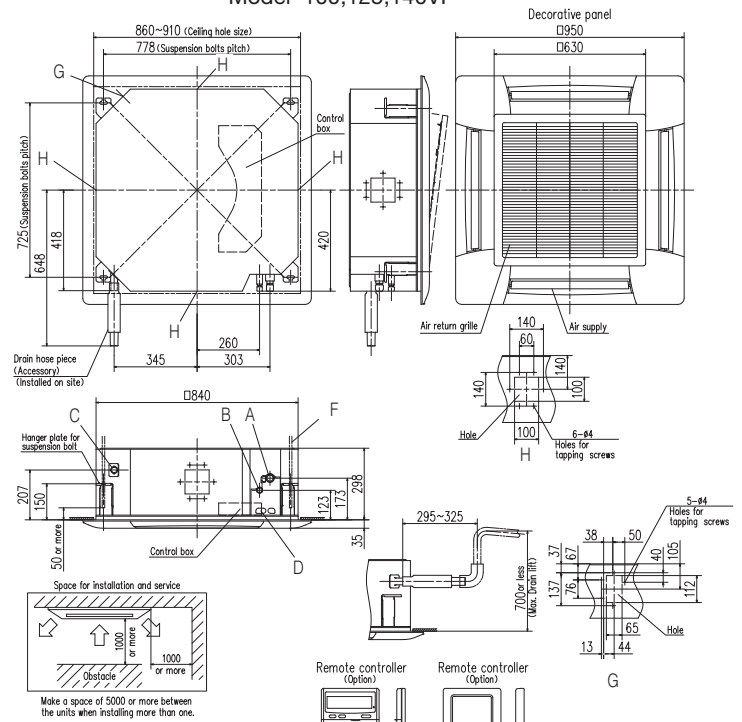
RCN-T-36W-E

**Outline drawing (Unit:mm)**

Model FDT 60,71VF

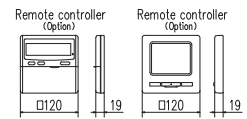


Model 100,125,140VF



Unit:mm  
Notes (1) The model name label is attached inside the air return grille.  
(2) Prepare the connecting socket (VP25) on site.

Symbol	Content
A	Gas piping φ15.88 (5/8") (Flare)
B	Liquid piping φ9.52 (3/8") (Flare)
C	Drain piping VP25 (1.25, 0.2, 0.34) Note(2)
D	Hole for wiring
F	Suspension bolts (M10 or M8)
G	Outside air opening for ducting (Knock out)
H	Air outlet opening for ducting (Knock out)



Notes (1) The model name label is attached inside the air return grille.  
(2) Prepare the connecting socket (VP25) on site.

Unit:mm

## Installation

Detachable covers at each corner allows for easy alignment and balance.

The panel does not need to be removed. Installation time is reduced.



## Infrared control option

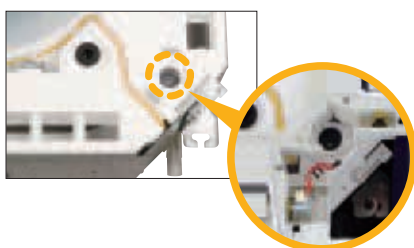
For wireless control simply insert the infrared receiver kit on the corner.

wireless remote control  
RCN-T-36W-E



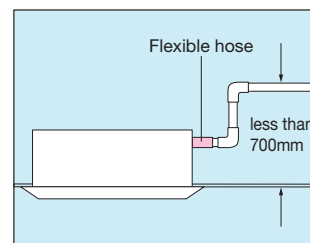
## Easy checking of drain pan

To check the drain pan simply remove the corner lid.



## 700mm Drain Pump

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



## FDT

			FDT60ZJXVF	FDT71VNXVF	FDT100VNVF	FDT125VNXVF	FDT140VNXVF
<b>Indoor</b>			FDT60VF	FDT71VF	FDT100VF	FDT125VF	FDT140VF
<b>Outdoor</b>			SRC60ZJX-S	FDC71VNX	FDC100VN	FDC125VNX	FDC140VNX
<b>Power supply</b>	<b>Indoor Unit</b>	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		5.29	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	4.09	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-3BW-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			
Maxium Pipe Length		m	30	50		100	
Controller			RC-E5, RC-EX1A or RCN-T-36W-E				

# FDTC - Indoor Unit.

## Ceiling Cassette-4way Compact 600x600mm



FDTC50VF

Remote control (Option)

Wired



RC-EX1A

RC-E5

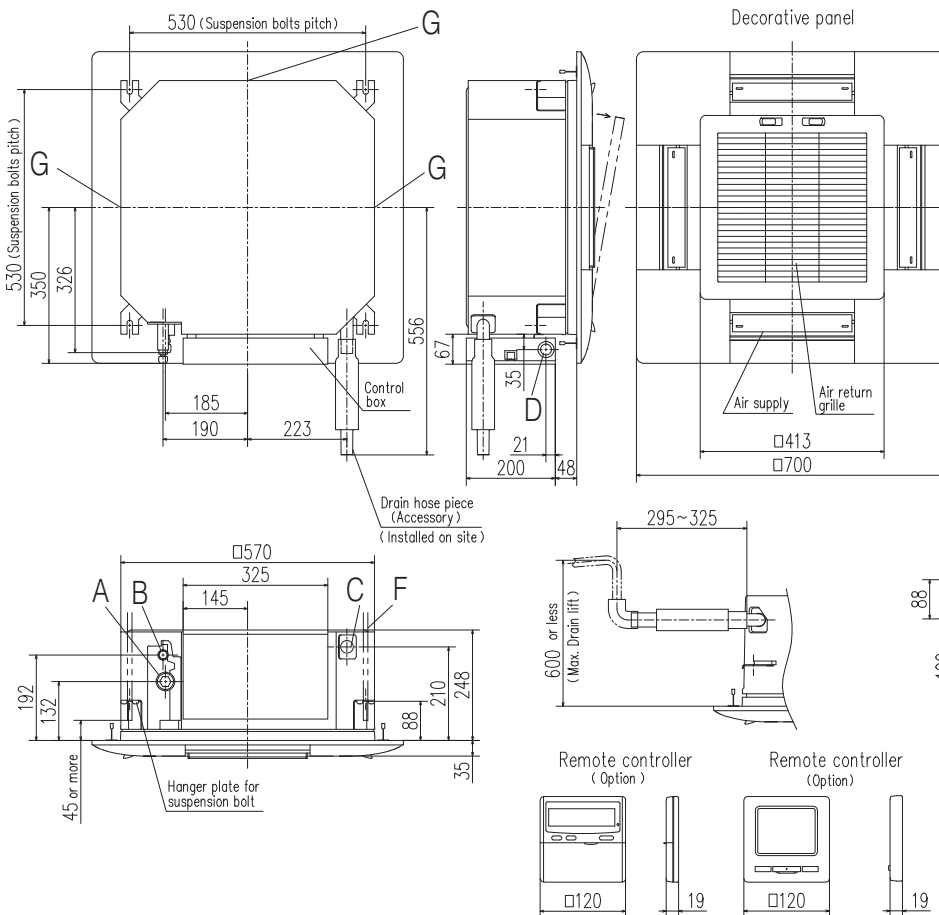
RCH-E3

Wireless

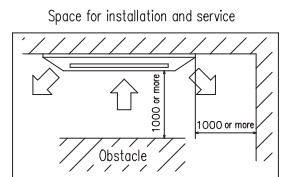


RCN-TC-24W-ER

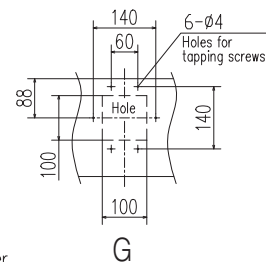
Outline drawing (Unit:mm)



Symbol	Content
A	Gas piping Model 25,35 : φ9.52 (3/8") (Flare) 40-60 : φ12.7 (1/2") (Flare)
B	Liquid piping φ6.35 (1/4") (Flare)
C	Drain piping VP20 (I.D.20,0,D.26) Note (2)
D	Hole for wiring φ25
F	Suspension bolts (M10 or M8)
G	Air outlet opening for ducting (Knock out)



Make a space of 4000 or more between the units when installing more than one.



- Notes (1) The model name label is attached on the control box lid.
- (2) Prepare the connecting socket (VP20) on site.
- (3) This unit is designed for 2x2 grid ceiling. If it is installed on a ceiling other than 2x2 grid ceiling, provide an inspection port on the control box side.

## Taking OA (Outside air intake) into inside

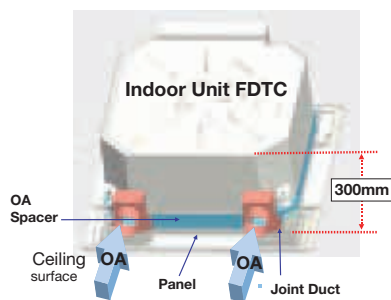
OA Spacer TC-OAS-E (option)  
 Joint Duct TC-OAD-E (option)  
 Utilizing OA spacer which comes as optional equipment, outside air can be taken into inside.

### Using 1 joint duct:

OA comes up to 1.3m<sup>3</sup>/min.

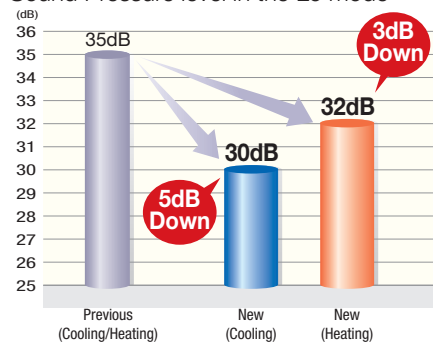
### Using 2 joint ducts:

OA comes from 1.3 to 2.6m<sup>3</sup>/min.

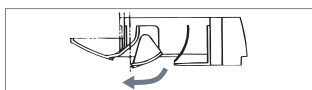
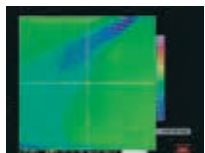


## Quiet operation

Sound Pressure level in the Lo mode



## “CLEARER” Air Flow



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

## Installation Workability



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



wireless remote control  
 RCN-TC-24W-ER

## Compact and Convenient

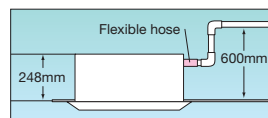
### • 600mm Drain Pump

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 only 16.5kg.



## FDTC

			FDTC50ZJXVF
Indoor			FDTC50VF
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:32
	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
Maxium Pipe Length		m	30
Controller			RC-E5, RC-EX1A or RCN-TC-24W-ER

VF model may be supplied in lieu.

# FDEN - Indoor Unit.

## Ceiling Suspended.



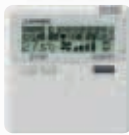
FDEN100/125VF

### Remote control (Option)

#### Wired



RC-EX1A



RC-E5



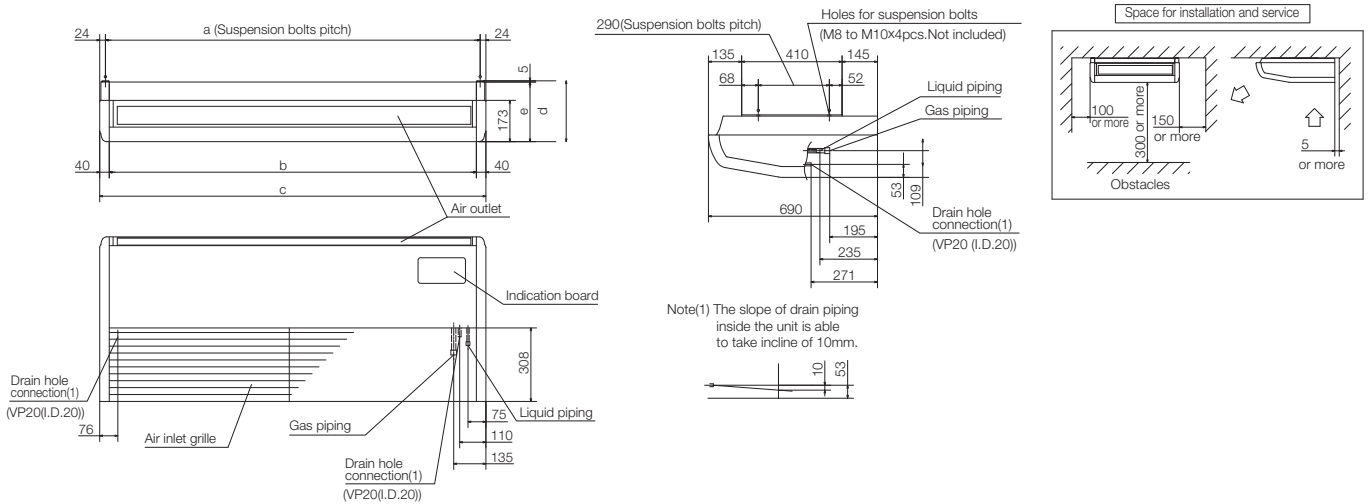
RCH-E3

#### Wireless



RCN-E1R

### Outline drawing (Unit:mm)



### Dimension Table

model	a	b	c	d	e
FDEN100~125	1572	1540	1620	255	250



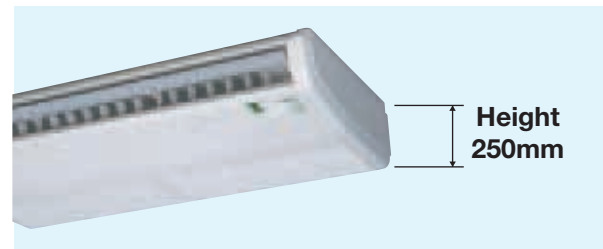
## Improved installation workability

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.

## 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

			FDEN100VNVF	FDEN125VNXVF
Indoor			FDEN100VF	FDEN125VF
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		NA	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-EX1A or RCN-E-E	

# Hyperinverter.

Outdoor Unit 5.0-14.0kW.



SRC50/60ZJX-S



FDC71VNX



FDC100VN

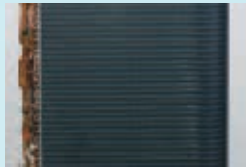
**Micro**



FDC125/140VNX

## 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 for use in areas 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.

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

**Hyper Inverter**

kW	Piping length	Height difference
5~6	30m	20m
7.1	50m	30m
12.5~14	100m	30m

**Micro Inverter**

kW	Piping length	Height difference
10	50m	30m

## Refrigerant precharged piping length extending to 30m

Precharged refrigerant 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 smooth installation.

## 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.

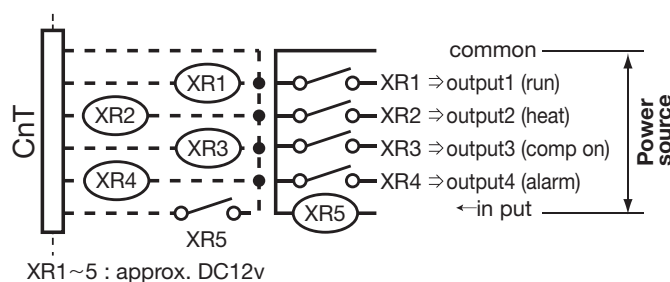
### Increase of heat transfer efficiency

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

## Convenience.

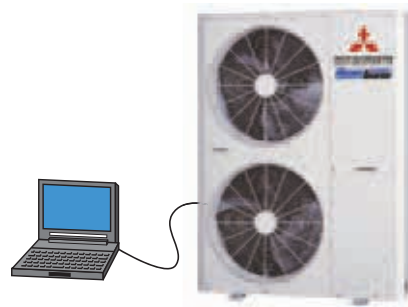
### CnT terminal

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's service software (Mente PC) makes service simpler.



### 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

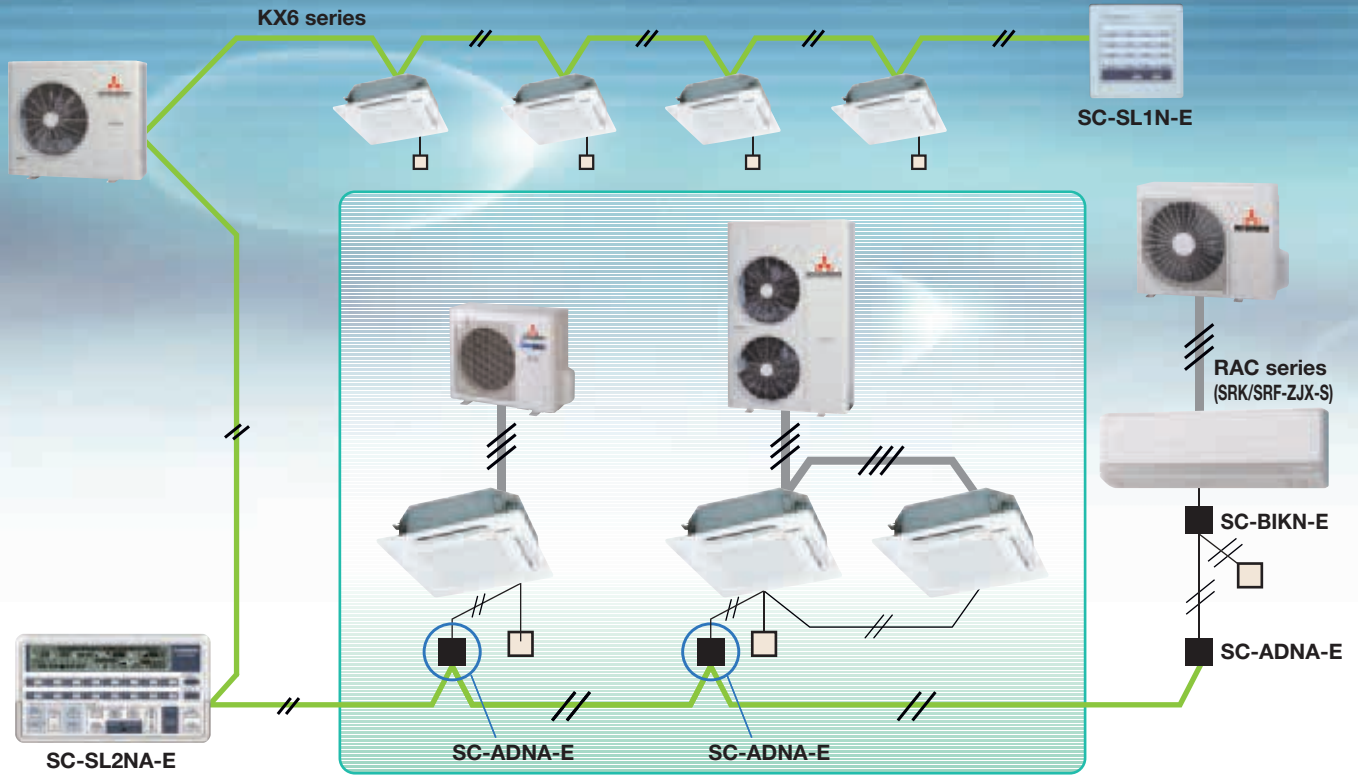
#### Adapt to RoHS

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.

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

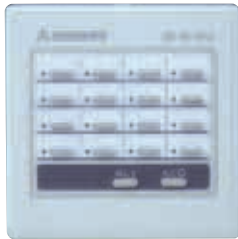
### Employment of R410A refrigerant

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



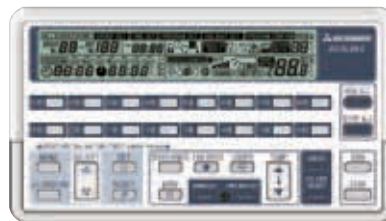
**Central Control**

**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. Allows 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-WGWNA-A/B**

(SC-WGWNA-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-WGWNA-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.

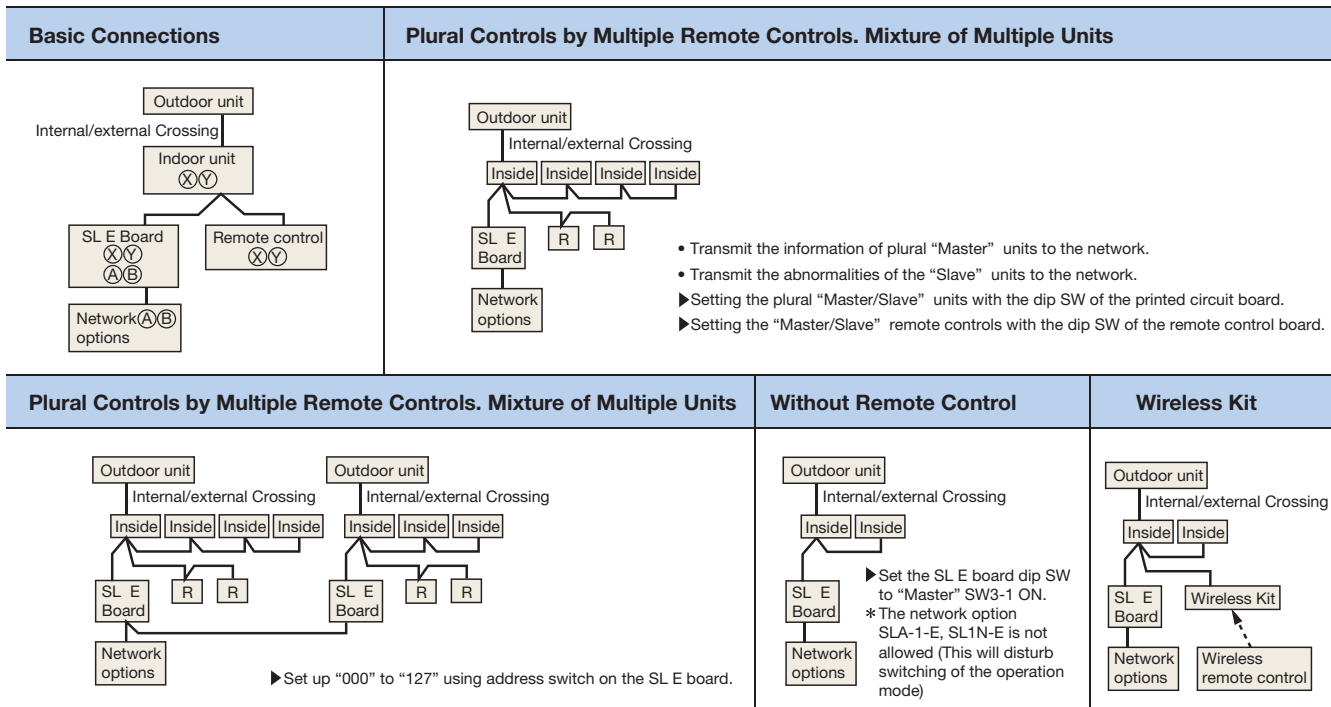
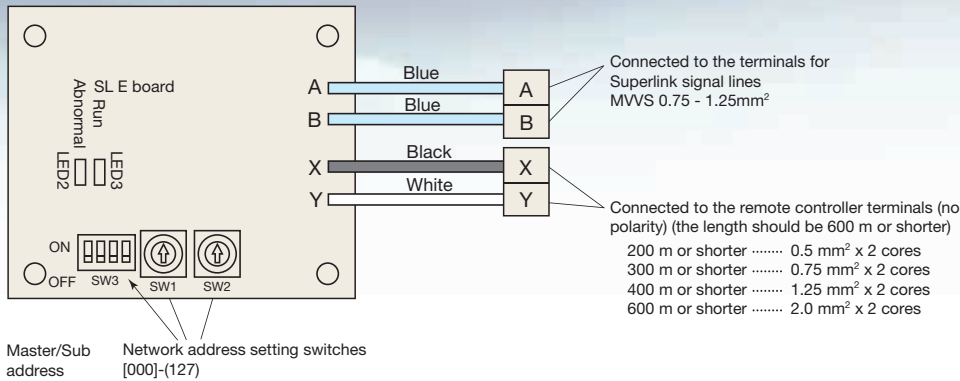
# SUPERLINK E BOARD (SC-ADNA-E)

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).

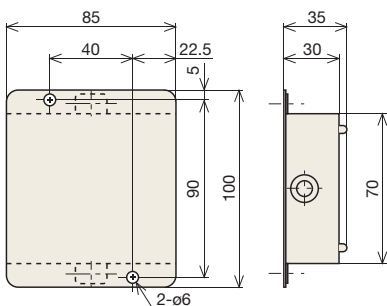
## (1) Functions

- (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 System.

## 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

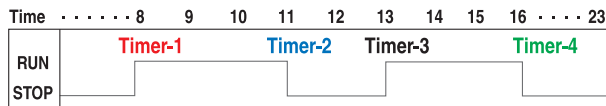


The RC-E5 controller enables extensive access to service and maintenance technical data combined with easy to use functions and a clear LCD display.

#### 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

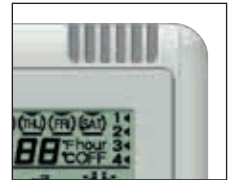


#### Run hour metres to facilitate maintenance checking

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 throughout the structure greater comfort control is achieved. In many instances one additional sensor is all that is required.



## KX-KXR.

Industry leading energy efficiency and reliability from our advanced technology.

Mitsubishi Heavy Industries offers one of the largest ranges of VRF multi inverter products in the industry. The compact M series (11.2 to 15.5kW) is a single fan, single phase outdoor that is providing air conditioning solutions all over Australia and New Zealand. The larger side blow (22.4 to 33.5kW) and top discharge (40 to 68kW) units can be used singularly or in combination to deliver up to 136kW of heat pump or heat recovery technology and energy saving in high rise and mid rise structures. With 16 types of indoor units and 78 different capacities available designs are only limited by imagination. Our eSolution software makes selection simple.

The SuperlinkII network can control up to 128 indoor units via a central control or BMS interface such as Web or BACnet gateways. Mente PC can be connected for fault finding and recording test run reports.

**HyperMulti**  
**KX·KXR**



PRODUCTS

## SR.

### Residential Air Conditioner.

Mitsubishi Heavy Industries wall mounted and floor standing inverter split systems are the ideal choice to control comfort in any residential situation.

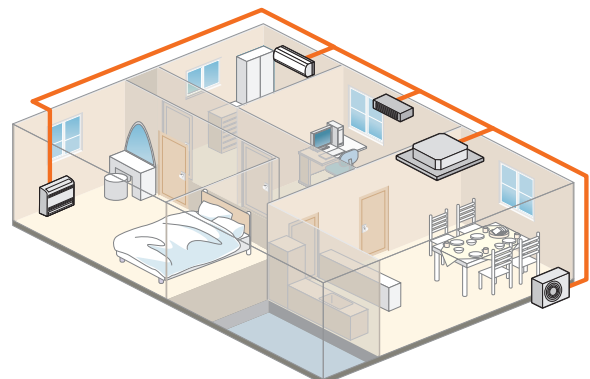
Mitsubishi Heavy Industries residential air conditioners have received rave reviews in consumer magazines here and overseas when tested and compared to the competitions similar products. Energy efficiency, quiet operation and ease of use were the standout differences.



## SCM.

### Residential Air Conditioner.

These residential use inverter multi system can condition 2 to 6 rooms using either wall mounted, floor standing, low static bulkhead or compact cassette type indoor units. The SCM series offers a total of 7 outdoor units and many indoor units making hundreds of different comfort combinations possible. Perfect for homes and apartments.



## 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](http://www.arctick.org). Suitable access for service must be provided in compliance with industry standards and local regulations.



MHIAA is proudly sponsoring  
Monika's Doggie Rescue

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## MRE SPARE PARTS

[www.mrespareparts.com.au](http://www.mrespareparts.com.au) Tel: +61 (0) 2 9600 7444 Fax: +61 (0) 2 9600 8044

### 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



MITSUBISHI HEAVY INDUSTRIES-  
MAHAJAK AIR CONDITIONERS CO., LTD.  
Certified ISO 9001  
Certificate Number : 04100 1998 0813

### ISO14001

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



BIWAJIMA PLANT  
Mitsubishi Heavy Industries, Ltd.  
Air-conditioning & Refrigeration Systems Headquarters  
Certified ISO 14001  
Certificate number : JQA-EM0256



MITSUBISHI HEAVY INDUSTRIES-  
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Certified ISO 14001  
Certificate Number : 04104 1998 0813 ES

