



STILL
COOL.
STAY
GREEN.



ECO SMART

**FD SERIES
PACKAGED AIR-CONDITIONERS**

 **MITSUBISHI**
HEAVY INDUSTRIES, LTD.
AIR CONDITIONERS

HEAVY DUTY

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CONTROL SYSTEMS

[INDIVIDUAL CONTROL]

REMOTE CONTROL LINE UP

	INDOOR UNIT	REMOTE CONTROL
WIRED	FDT	RC-EX1A
	FDUM	RC-E5
	FDE	RCH-E3

	INDOOR UNIT	REMOTE CONTROL
WIRELESS	FDE	RCN-E1R
	FDUM	RCN-KIT3-E

WIRED REMOTE CONTROL WITH WEEKLY TIMER (OPTION)

RC-E5



The RC-E5 control 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

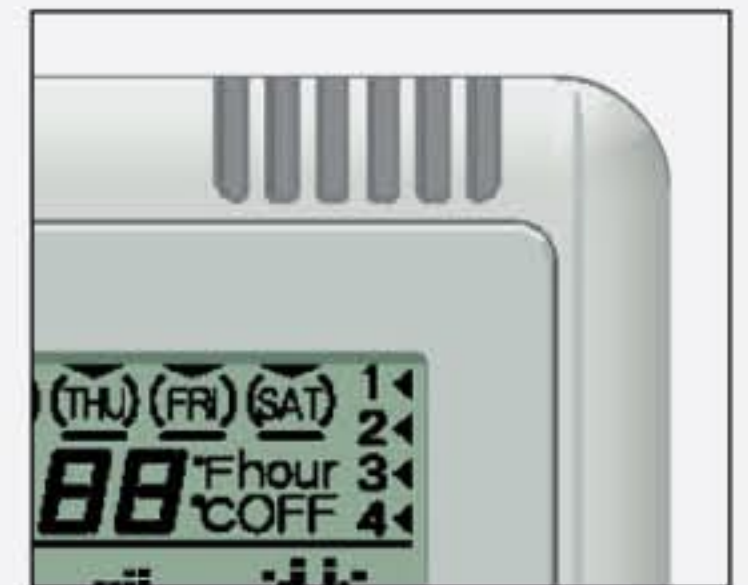


• Run hour meters to facilitate maintenance checking

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.



SIMPLE REMOTE CONTROL (OPTION)

RCH-E3 (wired)



Considering specialized 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, with 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-KIT3-E



RCN-E1R



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

THERMISTOR (OPTION)

SC-THB-E3

In case sensor in the indoor units or the remote control sensor can not sense the room temperature correctly, or individual remote control in each room is not required but only sensor is required (as when center control system is in place), install SC-THB-E3 at proper place in the rooms.



SIMPLE SETTING REMOTE CONTROL (OPTION)

Advanced touch screen panel with full dot liquid crystal display

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

RC-EX1A



High power operation

- The highest capacity operation (Max 15 minutes)
- Increasing air flow volume

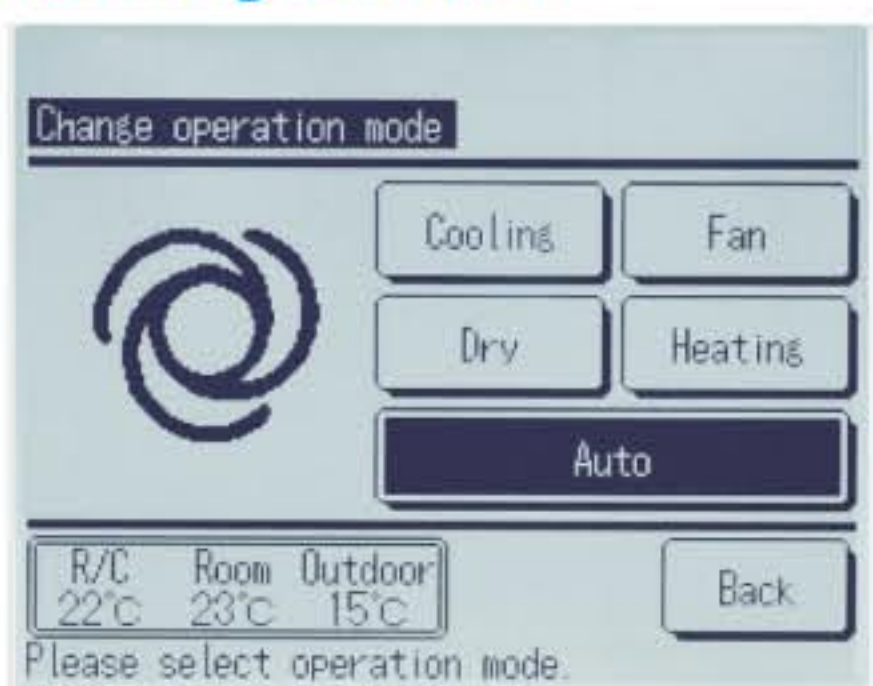
Energy-saving operation

- Changes set temperature. At 28°C in cooling mode and 25°C in auto mode.
- Operation correction by outdoor temperature

Run / Stop

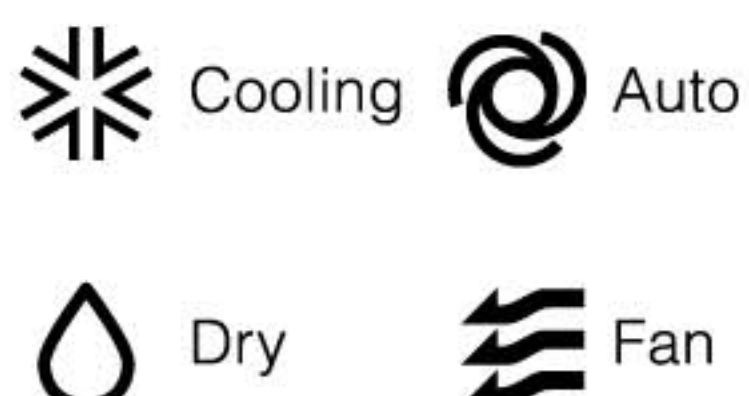
Simple setting by tapping button only

Operation mode setting screen

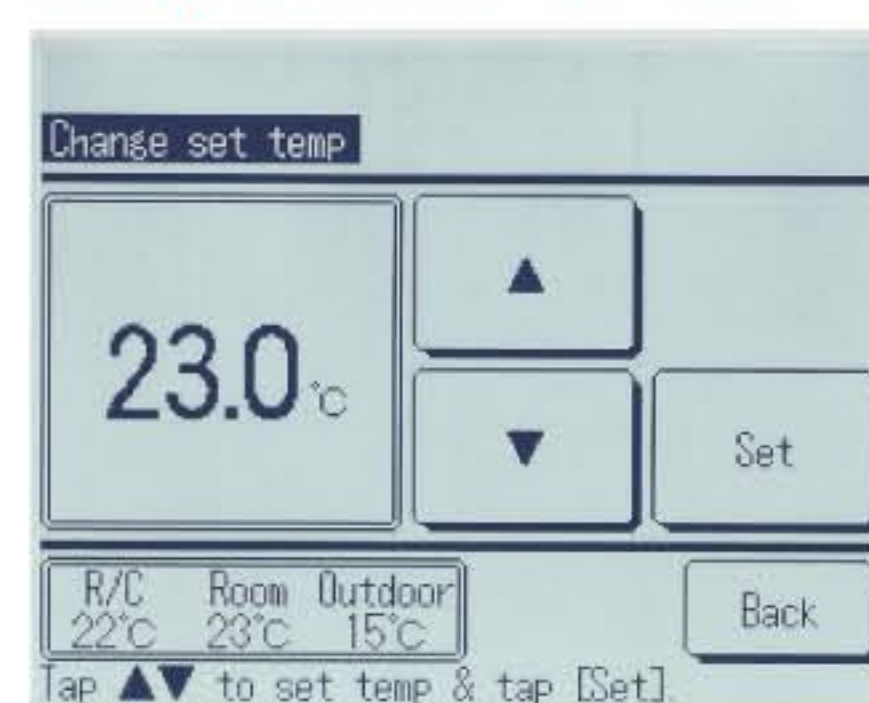


The desired operation mode can be selected by simply tapping this button.

Operation mode
















Setting temperature screen



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

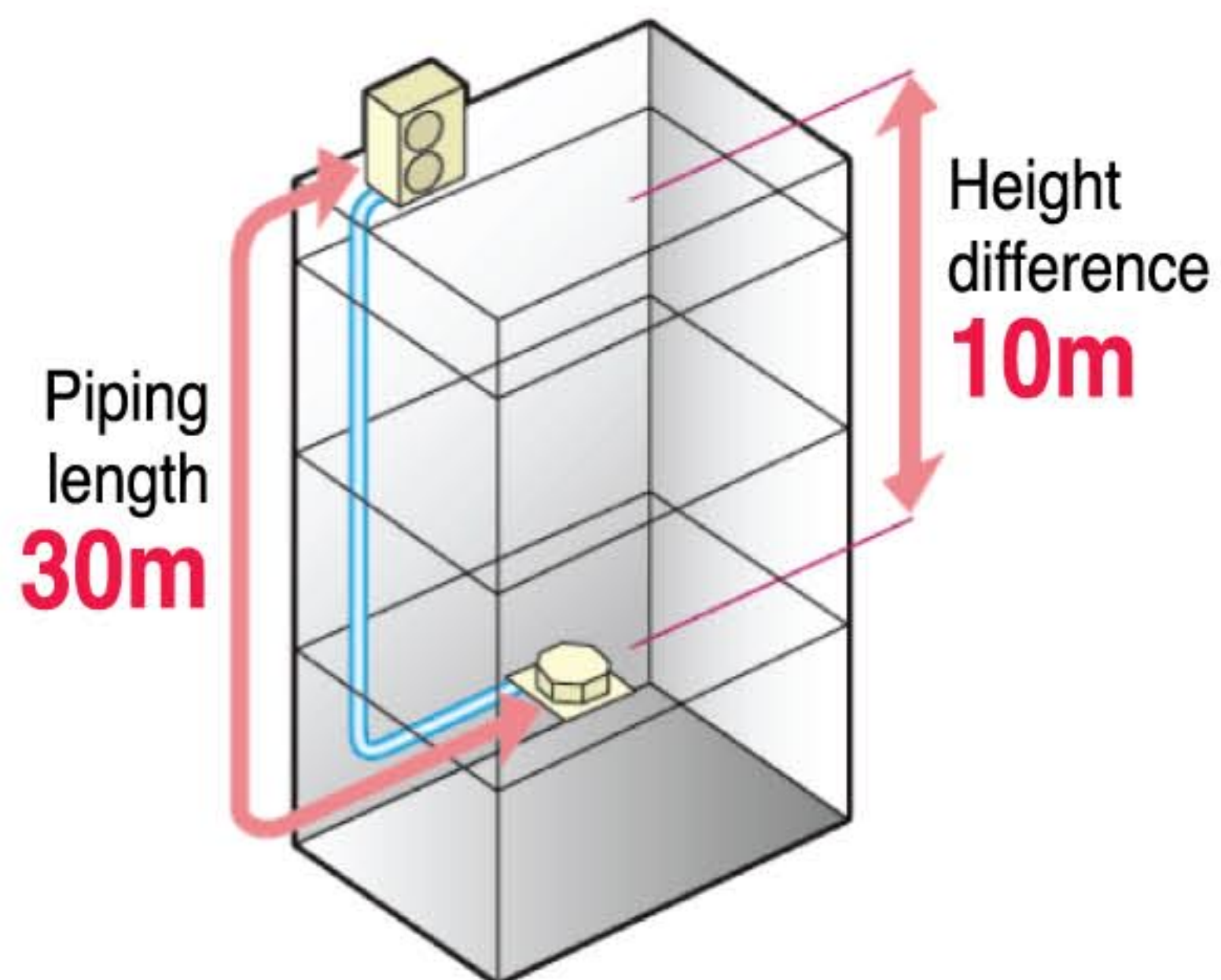
NON - INVERTER PAC

TYPE	HI-COP				
	HP	2	3	4	5
	kW	5.0	7.1	10.0	12.5
FDT 	Indoor	FDT50CRS-S1	FDT71CRS-S1	FDT100CRS-S1	–
	Outdoor	FDC50CRS-S1	FDC71CRS-S1	FDC100CR-S1	–
FDUM 	Indoor	–	–	–	–
	Outdoor	–	–	–	–
FDE 	Indoor	FDE50CRS-S1	FDE71CRS-S1	FDE100CR-S1	–
	Outdoor	FDC50CRS-S1	FDC71CRS-S1	FDC100CR-S1	–
FDF 	Indoor	–	–	–	–
	Outdoor	–	–	–	–
OUTDOOR UNIT					

TYPE	STANDARD				
	HP	2	3	4	5
	kW	5.0	7.1	10.0	12.5
FDT 	Indoor	FDT50CR-S	FDT71CR-S	FDT100CR-S	FDT125CR-S
	Outdoor	FDC50CR-S	FDC71CR-S	FDC100CR-S	FDC125CR-S
FDUM 	Indoor	FDUM50CR-S	FDUM71CR-S	FDUM100CR-S	FDUM125CR-S
	Outdoor	FDC50CR-S	FDC71CR-S	FDC100CR-S	FDC125CR-S
FDE 	Indoor	–	–	–	FDE125CR-S
	Outdoor	–	–	–	FDC125CR-S
FDF 	Indoor	–	FDF71CR-S	–	FDF125CR-S
	Outdoor	–	FDC71CR-S	–	FDC125CR-S
OUTDOOR UNIT					

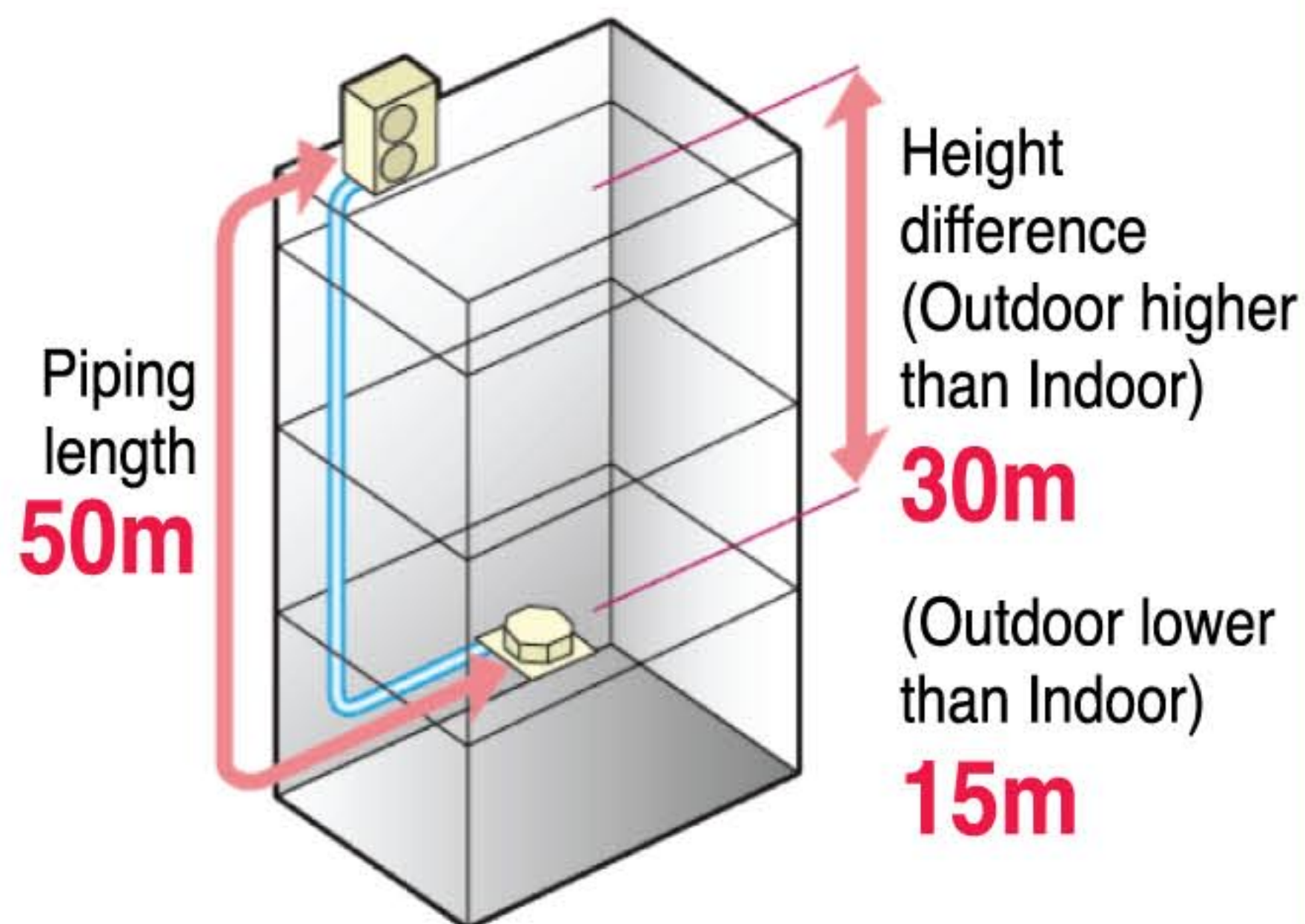
USAGE LIMITATION

Outdoor Temperature



FDC50, 71CR, CRS-S

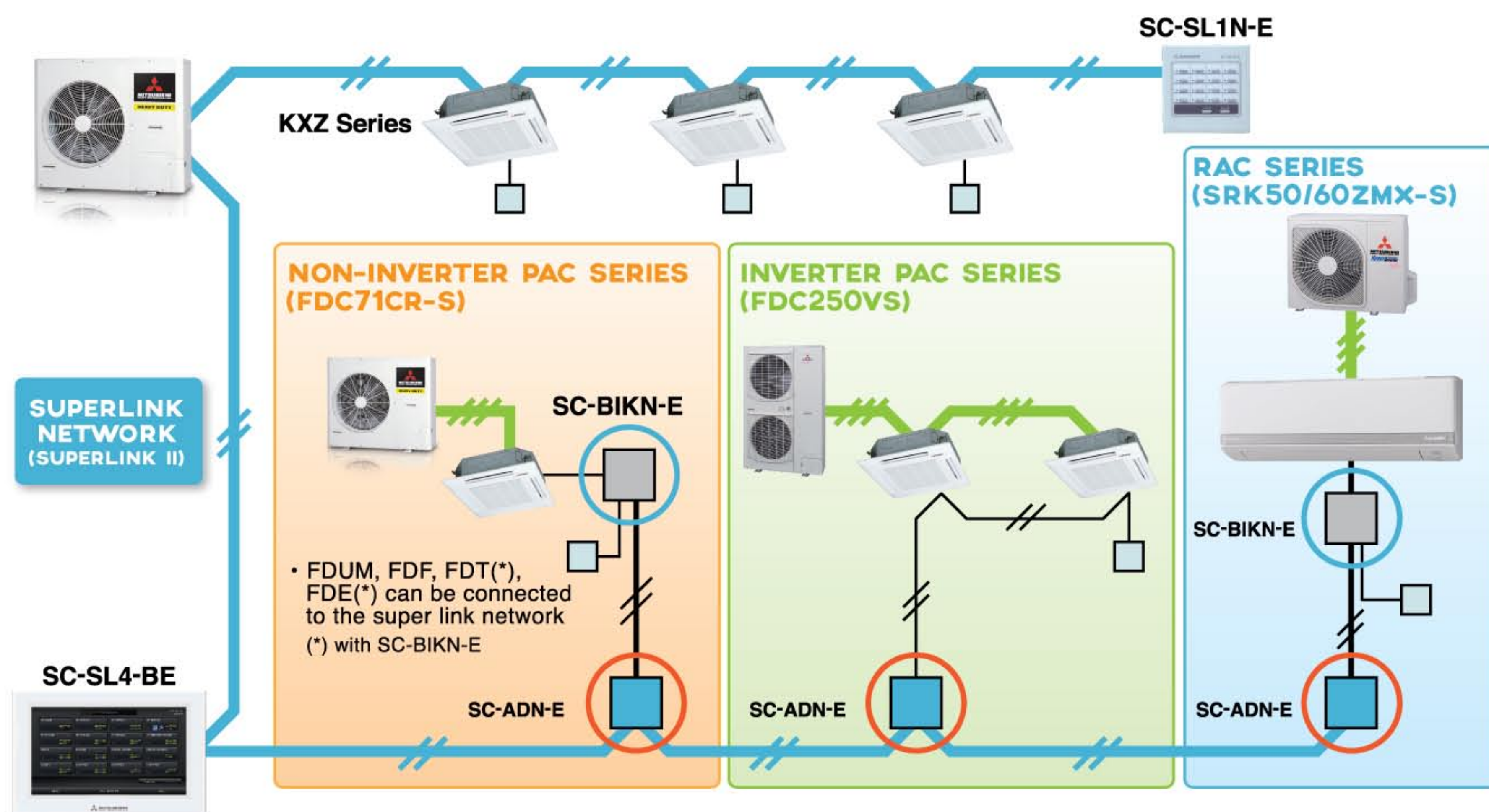
Pre-Charge piping length:
15m



FDC100, 125CR-S

Pre-Charge piping length:
30m

SUPERLINK SYSTEM



CEILING CASSETTE -4WAY- FDT



MHI - R410A

POINT
1

ARRANGEMENT OF INSTALLATION BALANCE OF INDOOR UNIT

Checking from access ports with detachable covers at each corner, arrangement of installation balance of indoor unit can be available without removing a panel. Workability is improved and time of installation is reduced.



POINT
2

EASY CHECKING OF DRAIN PAN

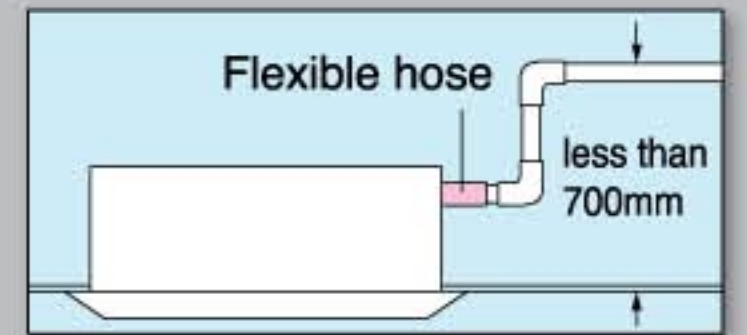
Easy checking of drain pan condition is available by removing corner lid only. Due to new design, changing fan motor is available without removing a panel. Temporary setting of drain pan is also available.



POINT
3

700MM DRAIN PUMP

Drain can be discharged upwards by 700mm from the ceiling surface. It allows a piping layout with a high degree of freedom. Depending on the installation location and 260mm flexible hose as a standard equipment supports easy workability.

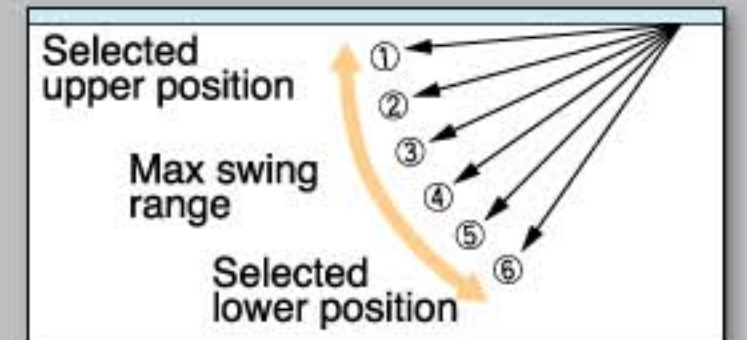


POINT
4

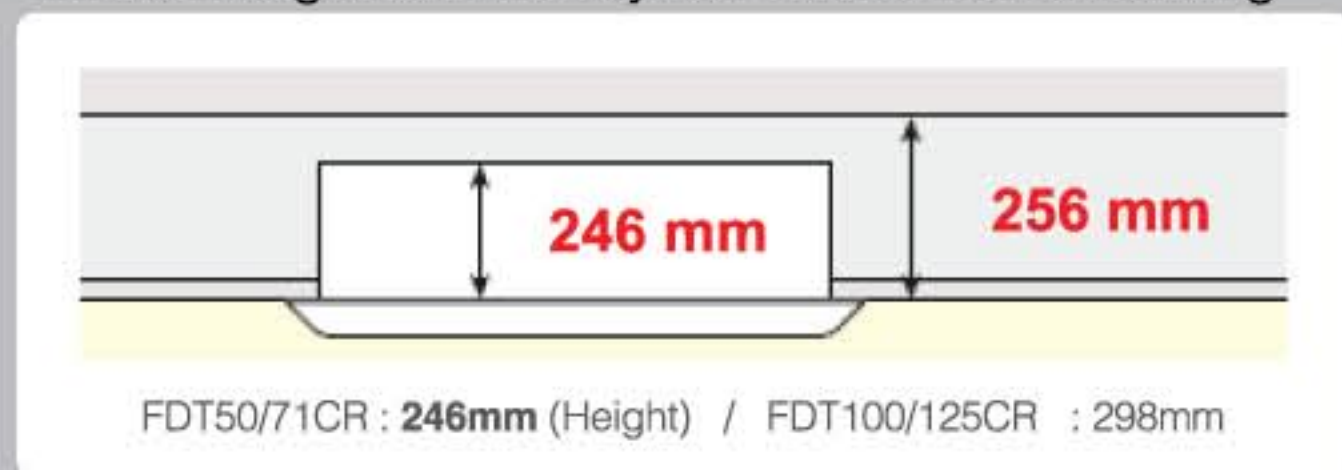
FLAP CONTROL SYSTEM

The flap can swing within the range of upper and lower flap position selected with wired remote control. (this system is applied for FDE type also)

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



- Indoor height is thin easy to install at narrow ceiling



- MHI have 4 kind of remote control for option

REMOTE CONTROL

Wireless (standard)



Wired (option)



RC-EX1A

RC-E5

RCH-E3



**FDT50/71/100CR-S1
FDT50/71/100/125CR-S**



**FDC50CR-S1
FDC50/71CR-S**



FDC71CR-S1



**FDC100CR-S1
FDC100/125CR-S**

REMOTE CONTROL

Wireless (standard)



Wired (option)



RC-EX1A



RC-E5



RCH-E3

SPECIFICATIONS

			HI-COP			STANDARD			
Indoor unit			FDT50CR-S1	FDT71CR-S1	FDT100CR-S1	FDT50CR-S	FDT71CR-S	FDT100CR-S	FDT125CR-S
Outdoor unit			FDC50CR-S1	FDC71CR-S1	FDC100CR-S1	FDC50CR-S	FDC71CR-S	FDC100CR-S	FDC125CR-S
Power source			1 Phase 220-240V 50Hz		3 Phase 380-415V 50Hz	1 Phase 220-240V 50Hz		3 Phase 380-415V 50Hz	
Cooling Capacity	kW		5.2	7.1	10.0	5.0	7.1	10.0	12.5
	BTU/h		17,742	24,225	34,120	17,060	24,225	34,120	42,650
Input	W		1,460	1,960	2,941	1,613	2,290	2,941	4,464
COP			3.56	3.62	3.40	3.10	3.10	3.40	2.80
EER			12.15	12.35	11.60	10.58	10.58	11.60	9.55
Max. running current	A		9.2	12.6	11.7	12	17	11.7	16.1
Inrush Current	A		10	17	12	30	44	12	17
Sound power level	Indoor		57	64	65	55	64	65	68
	Outdoor		65	69	70	65	67	70	72
Sound pressure level	Indoor	dB(A)	Hi:39 Me:33 Lo:31	Hi:46 Me:35 Lo:33	Hi:51 Me:40 Lo:38	Hi:39 Me:33 Lo:31	Hi:46 Me:35 Lo:33	Hi:51 Me:40 Lo:38	Hi:51 Me:43 Lo:41
	Outdoor		50	54	57	50	55	57	59
Air flow	Indoor	m ³ /min	Hi:18 Me:16 Lo:14	Hi:28 Me:21 Lo:19	Hi:31 Me:27 Lo:20	Hi:20 Me:18 Lo:16	Hi:28 Me:21 Lo:19	Hi:31 Me:27 Lo:20	Hi:34 Me:30 Lo:23
	Outdoor		38	60	75	38	38	75	75
Exterior dimensions	Indoor	HxWxD (mm)	U:246 x 840 x 840 P:35 x 950 x 950		U:298x840x840 P:35x950x950	U:246 x 840 x 840 P:35 x 950 x 950		U: 298 x 840 x 840 P: 35 x 950 x 950	
	Outdoor		640 x 850 (+65) x 290	750 x 880 (+88) x 340	845 x 970 x 370	640 x 850 (+65) x 290		845 x 970 x 370	
Net Weight	Indoor	kg	29.5 (U:24 P:5.5)		32.5 (U:27 P:5.5)	27.5 (U:22 P:5.5)		32.5 (U:27 P:5.5)	
	Outdoor		42	52	78	40	47	78	87
Refrigerant			R410A						
Ref.piping size	Liquid/Gas	Ømm	6.35(1/4") / 15.88(5/8")		9.52 (3/8") / 15.88 (5/8")	6.35(1/4") / 15.88(5/8")		9.52 (3/8") / 15.88 (5/8")	
Refrigerant line (one way) length			Max.30		Max.50	Max.30		Max.50	
Vertical height diff./Outdoor is higher/lower			Max.10 / Max.10		Max.30/Max.15	Max.10 / Max.10		Max.30 / Max.15	
Panel			T-PSN-3BW-E (wireless) / T-PSA-3BW-E						
Remote Control	Wireless		Standard (include T-PSN-3BW-E)						
	Wired		RC-EX1A, RC-E5, RCH-E3 (option) (need SC-BIKN option)						

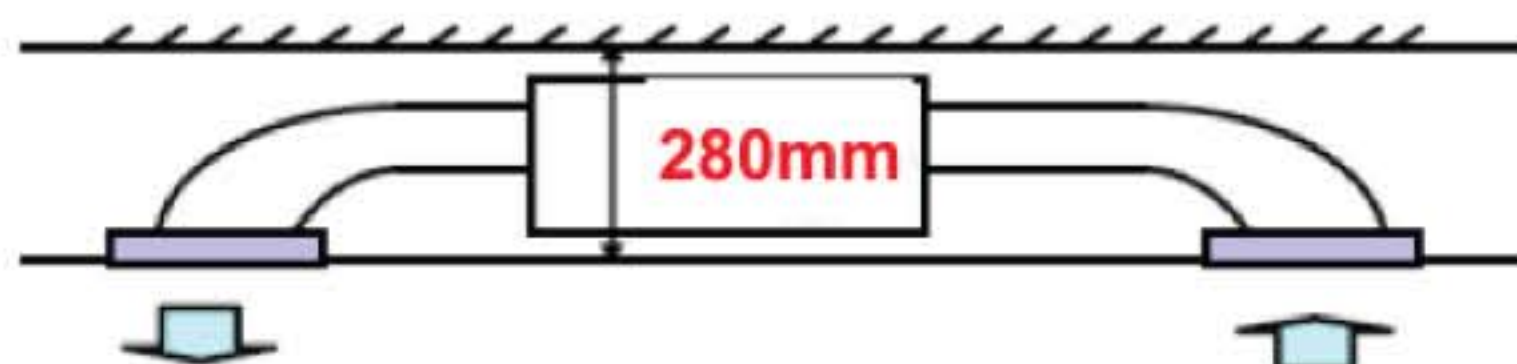
*U = Unit, P = Panel

DUCT CONNECTED -MIDDLE STATIC PRESSURE- FDUM



MHI - R410A

- Indoor height is thin easy to install at narrow ceiling



FDUM50/71/100/125CR : 280mm (Height)

- MHI have 4 kind of remote control for option

REMOTE CONTROL

Wireless (standard)



Wired (option)



RC-EX1A



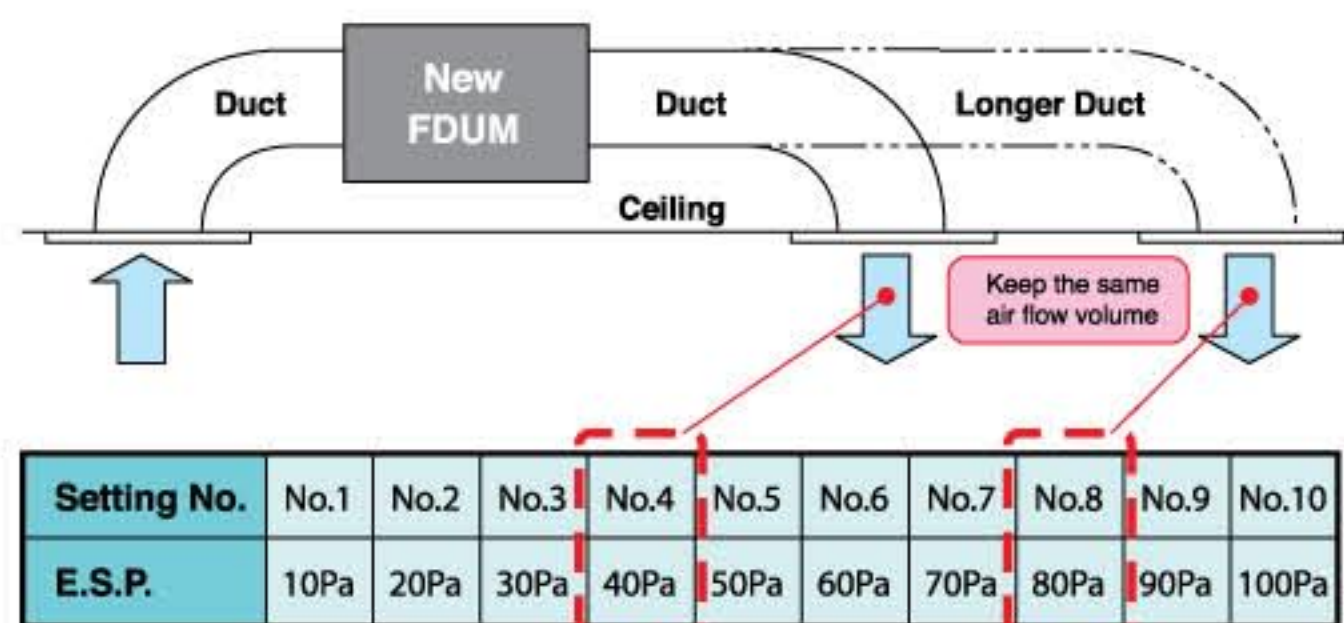
RC-E5



RCH-E3

- Static pressure range is more flexible with Automatic Control by Remote (E.S.P) 35 – 100 Pa

- Automatic external static pressure (E.S.P.) control
Duct design was simplified. Using DC motor, the most optimum air flow volume can be achieved by this automatic control. Indoor unit will recognize external static pressure by itself automatically and kept rated air flow volume.



RC-E5

E.S.P. button

External Static Pressure (E.S.P.) can be set by E.S.P. button.



FDUM50/71/100/125CR-S

FILTER KIT (OPTION)

- UM-FL1EF : for 50
- UM-FL2EF : for 71
- UM-FL3EF : for 100, 125



external static pressure loss:5Pa



FDC50/71CR-S



FDC100/125CR-S

REMOTE CONTROL

Wireless (option)



RCN-KIT3-E

Wired (option)



RC-EX1A

RC-E5

RCH-E3

SPECIFICATIONS

			STANDARD			
Indoor unit			FDUM50CR-S	FDUM71CR-S	FDUM100CR-S	FDUM125CR-S
Outdoor unit			FDC50CR-S	FDC71CR-S	FDC100CR-S	FDC125CR-S
Power source			1 Phase 220-240V 50Hz		3 Phase 380-415V 50Hz	
Cooling Capacity	kW		5.0	7.1	10.0	12.5
	BTU/h		17,060	24,225	34,120	42,650
Input	W		1,613	2,290	3,226	4,464
COP			3.10	3.10	3.10	2.80
EER			10.58	10.58	10.58	9.55
Max. running current	A		12	17	10	14
Inrush Current	A		20	20	10	14
Sound power level	Indoor		60	65	65	67
	Outdoor		65	67	70	72
Sound pressure level	Indoor	dB(A)	P-Hi:37 Hi:32 Me:29 Lo:26	P-Hi:38 Hi:33 Me:31 Lo:29	P-Hi:47 Hi:40 Me:37 Lo:32	P-Hi:47 Hi:41 Me:37 Lo:32
	Outdoor		50	55	57	59
Air flow	Indoor	m ³ /min	P-Hi:13 Hi:10 Me:9 Lo:8	P-Hi:24 Hi:19 Me:15 Lo:10	P-Hi:39 Hi:32 Me:26 Lo:20	P-Hi:48 Hi:35 Me:28 Lo:22
	Outdoor		38	38	75	75
Available external static pressure	Pa		Standard: 35 Max: 100		Standard: 60 Max: 100	
Exterior dimensions	Indoor	HxWxD (mm)	280 x 750 x 635	280 x 950 x 635	280 x 1370 x 740	
	Outdoor		640 x 850 (+65) x 290		845 x 970 x 370	
Net Weight	Indoor	kg	29	34	54	54
	Outdoor		40	47	78	87
Refrigerant			R410A			
Ref.piping size	Liquid/Gas	Ømm	6.35(1/4") / 15.88(5/8")		9.52 (3/8") / 15.88 (5/8")	
Refrigerant line (one way) length		m	Max. 30	Max. 30	Max. 50	Max. 50
Vertical height diff. / Outdoor is higher/lower		m	Max.10 / Max.10		Max. 30 / Max. 15	
Remote Control	Wireless		RCN-KIT3-E (option)			
	Wired		RC-EX1A, RC-E5, RCH-E3 (option)			

CEILING SUSPENDED FDE

R410A
ECO-FRIENDLY



MHI - R410A

REMOTE CONTROL

Wireless (standard)



Wired (option)



RC-EX1A



RC-E5



RCH-E3

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 the bottom.



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. FDE50CRS-S weights 32kg the lightest level in the industry. Convenient and quick installation





**FDE50/71CRS-S1
FDE100CR-S1
FDE125CR-S**



FDC50CRS-S1



FDC71CRS-S1



**FDC100CR-S1
FDC125CR-S**

REMOTE CONTROL

Wireless (standard)



Wired (option)



RC-EX1A



RC-E5



RCH-E3

SPECIFICATIONS

			HI-COP		STANDARD	
Indoor unit			FDE50CRS-S1	FDE71CRS-S1	FDE100CR-S1	FDE125CR-S
Outdoor unit			FDC50CRS-S1	FDC71CRS-S1	FDC100CR-S1	FDC125CR-S
Power source			1 Phase 220-240V 50Hz		3 Phase 380-415V 50Hz	
Cooling Capacity	kW		5.3	7.1	10.0	12.5
	BTU/h		18,084	24,225	34,120	42,650
Input	W		1,430	2,000	3,180	4,425
COP			3.71	3.55	3.14	2.82
EER			12.65	12.11	10.73	9.64
Max. running current	A		12	17	10	14
Inrush Current	A		20	20	10	14
Sound power level	Indoor		59	63	61	64
	Outdoor		65	67	70	72
Sound pressure level	Indoor	dB(A)	Hi:46 Me:38 Lo:36	Hi:50 Me:39 Lo:36	Hi:45 Me:43 Lo:37	Hi:48 Me:46 Lo:38
	Outdoor		50	55	57	59
Air flow	Indoor	m ³ /min	Hi:20 Me:15 Lo:13	Hi:23 Me:16 Lo:13	Hi:29 Me:26 Lo:17	Hi:33 Me:29 Lo:18
	Outdoor		38	60	75	75
Exterior dimensions	Indoor	HxWxD (mm)	210 x 1320 x 690	210 x 1320 x 690	250 x 1620 x 690	
	Outdoor		640 x 850 (+65) x 290	750 x 880 (+88) x 340	845 x 970 x 370	
Net Weight	Indoor	kg	32	32	42	42
	Outdoor		42	52	78	87
Refrigerant			R410A			
Ref.piping size	Liquid/Gas	Ømm	6.35 (1/4") / 15.88 (5/8")		9.52 (3/8") / 15.88 (5/8")	
Refrigerant line (one way) length		m	Max. 30	Max. 30	Max. 50	Max. 50
Vertical height diff. / Outdoor is higher/lower		m	Max.10 / Max.10		Max. 30 / Max. 15	
Remote Control	Wireless		Standard			
	Wired		RC-EX1A, RC-E5, RCH-E3 (option) (need SC-BIKN option)			

FLOOR STANDING FDF

R410A
ECO-FRIENDLY



MHI - R410A

POINT

1

AUTO HORIZONTAL SWING

Auto horizontal swing wakes wide and powerful air flow, increase your comfort, realizing high efficiency in combination with our highly advanced outdoor units.



POINT

2

EASY TRANSPORTATION AND INSTALLATION WORKABILITY

Piping and drain hose connection can be selected out of 4 - direction and the selection makes installation workability more effective. Due to slim design (Depth:320mm), easy transportation and installation are realized.

Easy Maintenance

The surface of heat exchanger can be appeared only removing the front panel. Easy cleaning of heat exchanger is possible.





FDF71/125CR-S



FDC71CR-S



FDC125CR-S

SPECIFICATIONS

			STANDARD	
Indoor unit			FDF71CR-S	FDF125CR-S
Outdoor unit			FDC71CR-S	FDC125CR-S
Power source			1 Phase , 220-240V, 50Hz	3 Phase , 380-415V, 50Hz
Cooling Capacity	kW		7.1	12.5
	BTU/h		24,225	42,650
Input	W		2,507	4,781
COP			2.83	2.61
EER			9.66	8.92
Max. running current:			13.2	9.92
Inrush Current			18	14.3
Sound power level	Indoor		58	63
	Outdoor		67	72
Sound pressure level	Indoor	dB(A)	Hi:46 Me:38	Hi:51 Me:44 Lo:43
	Outdoor		55	59
Air flow	Indoor	m ³ /min	Hi:21 Me:15	Hi:25 Me:17 Lo:15
	Outdoor		38	75
Refrigerant Control			Capillary	Electronic Expansion Valve
Exterior dimensions	Indoor	HxWxD (mm)	1,850 x 600 x 320	1,850 x 600 x 320
	Outdoor		640 x 850 (+65) x 290	845 x 970 x 370
Net Weight	Indoor	kg	49	52
	Outdoor		47	87
Refrigerant			R410A 1,450g	R410A 2,250g
Ref.piping size	Liquid/Gas	Ømm	6.35 (1/4") / 15.88 (5/8")	9.52 (3/8") / 15.88 (5/8")
Refrigerant line (one way) length			Max.30	Max.50
Vertical height diff. / Outdoor is higher/lower			Max.10 / Max.10	Max.30 / Max.15
Remote Control	Wireless		No option	
	Wired		Standard	



TOWARDS A BETTER FUTURE TOGETHER

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Mitsubishi Heavy Industries-Mahajak Air Conditioners Co., Ltd.

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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
Date of certification : December 16, 1994



MITSUBISHI HEAVY INDUSTRIES-
MAHAJAK AIR CONDITIONERS CO., LTD.
Certified ISO 9001
Certificate Number : 041001998 0813
Date of Registration : October 1998

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
Date of certification : November 20, 1998



MITSUBISHI HEAVY INDUSTRIES-
MAHAJAK AIR CONDITIONERS CO., LTD.
Certified ISO 14001
Certificate Number : 041041998 0815 E5
Date of Registration : December 2006

Because of our policy of continuous improvement, we reserve right to make changes in all specifications without notice.