

# MHI

## DATA BOOK

**DRAFT**

Manual No.'10•SCM-DB-092D

### **INVERTER MULTI-SPLIT SYSTEM RESIDENTIAL AIR CONDITIONERS (Split system, air to air heat pump type)**

**(OUTDOOR UNIT)**

**SCM60ZJ-S  
80ZJ-S**

**(INDOOR UNIT)**

**Wall mounted type**

**SRK20ZJX-S  
25ZJX-S  
35ZJX-S  
50ZJX-S  
60ZJX-S**

**Floor standing type**

**SRF25ZJX-S  
35ZJX-S  
50ZJX-S**

**Ceiling concealed type**

**SRR25ZJ-S  
35ZJ-S  
50ZJ-S  
60ZJ-S**

**SRK20ZJ-S  
25ZJ-S  
35ZJ-S  
50ZJ-S**

**Ceiling cassette-4way compact type**

**FDTC25VD  
35VD  
50VD  
60VD**

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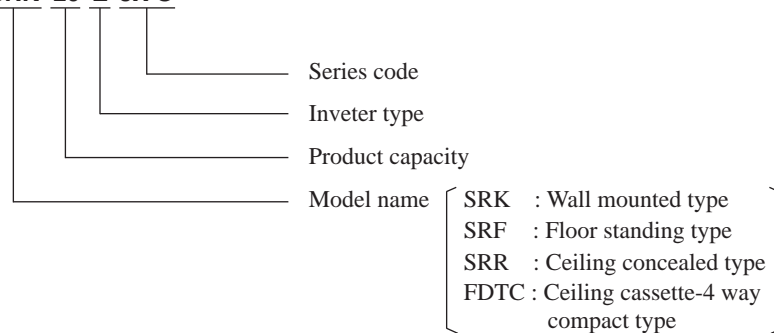
## ■ Table of models

Model \ Capacity	20	25	35	50	60
Wall mounted type (SRK**ZJX-S)	○	○	○	○	○
Wall mounted type (SRK**ZJ-S)	○	○	○	○	
Floor standing type (SRF)		○	○	○	
Ceiling concealed type (SRR)		○	○	○	○
Ceiling cassette-4way compact type (FDTC)		○	○	○	○
Outdoor unit to be combined (SCM)	SCM60ZJ-S,80ZJ-S				

## ■ How to read the model name

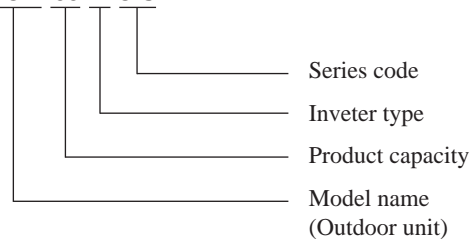
### Indoor unit

Example: **SRK 20 Z JX-S**



### Outdoor unit

Example: **SCM 60 Z J-S**




# 1. SPECIFICATIONS

## (1) Indoor units

### (a) Wall mounted type (SRK)

Adapted to RoHS directive

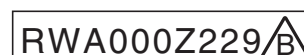
Item		Model	SRK20ZJX-S		
Cooling capacity (1)		W	2000		
Heating capacity (1)		W	2500		
Power supply			1 Phase, 220~240 V, 50Hz		
Noise level	Cooling	Sound level	dB(A) Hi: 39 Me: 30 Lo: 21		
		Power level	dB 53		
	Heating	Sound level	dB(A) Hi: 38 Me: 33 Lo: 25		
		Power level	dB 54		
Exterior dimensions (Height x Width x Depth)		mm	309 x 890 x 220		
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent		
Net weight		kg	15		
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing		
	Deice control		Microcomputer control		
Air handling equipment	Fan type & Q'ty		Tangential fan x 1		
	Motor		W 27		
	Air flow	Cooling	CMM	Hi: 11.5 Me: 8.0 Lo: 5.0	
		Heating	CMM	Hi: 12.0 Me: 9.5 Lo: 7.0	
	Fresh air intake			Not possible	
Air filter, Quality / Quantity			Polypropylene net (washable) x 2		
Operation control	Operation switch		Wireless-Remote control		
	Room temperature control		Microcomputer thermostat		
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green, ECONO: Blue		
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection		
Installation data	Refrigerant piping size (O.D)	mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")		
	Connecting method		Flare connecting		
	Attached length of piping	m	Liquid line : 0.55 Gas Line : 0.49		
	Insulation for piping			Necessary (Both sides), independent	
Drain hose			Connectable (VP 16)		
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)		
	Connecting method		Terminal block (Screw fixing type)		
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)		
Optional parts			Interface kit (SC-BIKN-E)		
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.		
Operation	Indoor air temperature	Outdoor air temperature		Standards	
		DB	WB		DB
	Cooling	27°C	19°C		35°C
Heating	20°C	—	7°C	6°C	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.					
(3) The operation data are applied to the 220/230/240V districts respectively.					

RWA000Z229 




Adapted to **RoHS** directive

Item		Model	SRK25ZJX-S																						
Cooling capacity (1)		W	2550																						
Heating capacity (1)		W	3130																						
Power supply			1 Phase, 220~240 V, 50Hz																						
Noise level	Cooling	Sound level	dB(A) Hi: 41 Me: 31 Lo: 22																						
		Power level	dB 55																						
	Heating	Sound level	dB(A) Hi: 41 Me: 34 Lo: 27																						
		Power level	dB 58																						
Exterior dimensions (Height x Width x Depth)		mm	309 x 890 x 220																						
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent																						
Net weight		kg	15																						
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing																						
	Deice control		Microcomputer control																						
Air handling equipment	Fan type & Q'ty		Tangential fan x 1																						
	Motor		W	27																					
	Air flow	Cooling	CMM Hi: 12.5 Me: 9.0 Lo: 5.0																						
		Heating	CMM Hi: 13.0 Me: 10.0 Lo: 7.5																						
	Fresh air intake		Not possible																						
Air filter, Quality / Quantity		Polypropylene net (washable) x 2																							
Operation control	Operation switch		Wireless-Remote control																						
	Room temperature control		Microcomputer thermostat																						
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green, ECONO: Blue																						
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection																						
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")																					
	Connecting method			Flare connecting																					
	Attached length of piping		m	Liquid line : 0.55 Gas Line : 0.49																					
	Insulation for piping			Necessary (Both sides), independent																					
Drain hose			Connectable (VP 16)																						
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)																						
	Connecting method		Terminal block (Screw fixing type)																						
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)																						
Optional parts			Interface kit (SC-BIKN-E)																						
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.																						
<table border="1"> <thead> <tr> <th rowspan="2">Operation</th> <th colspan="2">Indoor air temperature</th> <th colspan="2">Outdoor air temperature</th> <th rowspan="2">Standards</th> </tr> <tr> <th>DB</th> <th>WB</th> <th>DB</th> <th>WB</th> </tr> </thead> <tbody> <tr> <td>Cooling</td> <td>27°C</td> <td>19°C</td> <td>35°C</td> <td>24°C</td> <td rowspan="2">ISO-T1, JIS C 9612</td> </tr> <tr> <td>Heating</td> <td>20°C</td> <td>—</td> <td>7°C</td> <td>6°C</td> </tr> </tbody> </table>		Operation	Indoor air temperature		Outdoor air temperature		Standards	DB	WB	DB	WB	Cooling	27°C	19°C	35°C	24°C	ISO-T1, JIS C 9612	Heating	20°C	—	7°C	6°C			
Operation	Indoor air temperature		Outdoor air temperature		Standards																				
	DB	WB	DB	WB																					
Cooling	27°C	19°C	35°C	24°C	ISO-T1, JIS C 9612																				
Heating	20°C	—	7°C	6°C																					
(2) This air-conditioner is manufactured and tested in conformity with the ISO.																									
(3) The operation data are applied to the 220/230/240V districts respectively.																									




Adapted to RoHS directive

Item		Model	SRK35ZJX-S			
Cooling capacity (1)		W	3500			
Heating capacity (1)		W	4300			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 43 Me: 33 Lo: 22			
		Power level	dB 58			
	Heating	Sound level	dB(A) Hi: 42 Me: 35 Lo: 27			
		Power level	dB 59			
Exterior dimensions (Height x Width x Depth)		mm	309 x 890 x 220			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	15			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Tangential fan x 1			
	Motor		W	27		
	Air flow	Cooling	CMM	Hi: 13.5 Me: 9.5 Lo: 5.0		
		Heating		Hi: 14.0 Me: 11.0 Lo: 8.0		
	Fresh air intake			Not possible		
Air filter, Quality / Quantity			Polypropylene net (washable) x 2			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green, ECONO: Blue			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")		
	Connecting method			Flare connecting		
	Attached length of piping		m	Liquid line : 0.55 Gas Line : 0.49		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number			1.5mm <sup>2</sup> x 4 cores (Including earth cable)		
	Connecting method			Terminal block (Screw fixing type)		
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	—	7°C	6°C	ISO-T1, JIS C 9612	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

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Adapted to **RoHS** directive

Item		Model	SRK50ZJX-S																						
Cooling capacity (1)		W	5000																						
Heating capacity (1)		W	6000																						
Power supply			1 Phase, 220~240 V, 50Hz																						
Noise level	Cooling	Sound level	dB(A) Hi: 45 Me: 38 Lo: 26																						
		Power level	dB 60																						
	Heating	Sound level	dB(A) Hi: 45 Me: 38 Lo: 32																						
		Power level	dB 62																						
Exterior dimensions (Height x Width x Depth)		mm	309 x 890 x 220																						
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent																						
Net weight		kg	15																						
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing																						
	Deice control		Microcomputer control																						
Air handling equipment	Fan type & Q'ty		Tangential fan x 1																						
	Motor		W	27																					
	Air flow	Cooling	CMM Hi: 13.5 Me: 11 Lo: 8																						
		Heating	CMM Hi: 16.5 Me: 14.5 Lo: 10.5																						
	Fresh air intake		Not possible																						
Air filter, Quality / Quantity		Polypropylene net (washable) x 2																							
Operation control	Operation switch		Wireless-Remote control																						
	Room temperature control		Microcomputer thermostat																						
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green, ECONO: Blue																						
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection																						
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 12,7 (1/2")																					
	Connecting method			Flare connecting																					
	Attached length of piping		m	Liquid line : 0.55 Gas Line : 0.49																					
	Insulation for piping			Necessary (Both sides), independent																					
Drain hose			Connectable (VP 16)																						
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)																						
	Connecting method		Terminal block (Screw fixing type)																						
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)																						
Optional parts			Interface kit (SC-BIKN-E)																						
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.																						
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Operation	Indoor air temperature		Outdoor air temperature		Standards																				
	DB	WB	DB	WB																					
Cooling	27°C	19°C	35°C	24°C	ISO-T1, JIS C 9612																				
Heating	20°C	—	7°C	6°C																					
(2) This air-conditioner is manufactured and tested in conformity with the ISO.																									
(3) The operation data are applied to the 220/230/240V districts respectively.																									

RWA000Z229 

Adapted to **RoHS** directive

Item		Model	SRK60ZJX-S	
Cooling capacity (1)		W	6000	
Heating capacity (1)		W	6800	
Power supply			1 Phase, 220~240 V, 50Hz	
Noise level	Cooling	Sound level	dB(A) Hi: 47 Me: 38 Lo: 26	
		Power level	dB 62	
	Heating	Sound level	dB(A) Hi: 45 Me: 39 Lo: 33	
		Power level	dB 62	
Exterior dimensions (Height x Width x Depth)		mm	309 x 890 x 220	
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent	
Net weight		kg	15	
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing	
	Deice control		Microcomputer control	
Air handling equipment	Fan type & Q'ty		Tangential fan x 1	
	Motor		W 27	
	Air flow	Cooling	CMM	Hi: 14.5 Me: 12.5 Lo: 8.5
		Heating	CMM	Hi: 17.0 Me: 15.0 Lo: 11.0
	Fresh air intake			Not possible
Air filter, Quality / Quantity			Polypropylene net (washable) x 2	
Operation control	Operation switch		Wireless-Remote control	
	Room temperature control		Microcomputer thermostat	
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green, ECONO: Blue	
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection	
Installation data	Refrigerant piping size (O.D)	mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 12.7 (1/2")	
	Connecting method		Flare connecting	
	Attached length of piping	m	Liquid line : 0.55 Gas Line : 0.49	
	Insulation for piping			Necessary (Both sides), independent
Drain hose			Connectable (VP 16)	
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)	
	Connecting method		Terminal block (Screw fixing type)	
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)	
Optional parts			Interface kit (SC-BIKN-E)	


Note (1) The data are measured at the following conditions.

The pipe length is 7.5m.

Operation	Indoor air temperature		Outdoor air temperature		Standards
	DB	WB	DB	WB	
Cooling	27°C	19°C	35°C	24°C	ISO-T1, JIS C 9612
Heating	20°C	—	7°C	6°C	

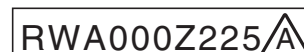
(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) The operation data are applied to the 220/230/240V districts respectively.

RWA000Z229 


Adapted to RoHS directive

Item		Model	SRK20ZJ-S			
Cooling capacity (1)		W	2000			
Heating capacity (1)		W	2700			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 33 Me: 27 Lo: 21			
		Power level	dB 49			
	Heating	Sound level	dB(A) Hi: 36 Me: 31 Lo: 24			
		Power level	dB 52			
Exterior dimensions (Height x Width x Depth)		mm	294 x 798 x 229			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	9.5			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Tangential fan x 1			
	Motor		W	38		
	Air flow	Cooling	CMM Hi: 7.8 Me: 5.6 Lo: 4.8			
		Heating	CMM Hi: 9.8 Me: 6.3 Lo: 5.0			
	Fresh air intake		Not possible			
Air filter, Quality / Quantity		Polypropylene net (washable) x 2				
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")		
	Connecting method			Flare connecting		
	Attached length of piping		m	Liquid line : 0.53 Gas Line : 0.40		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)			
	Connecting method		Terminal block (Screw fixing type)			
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
	Item	Indoor air temperature		Outdoor air temperature		Standards
Operation		DB	WB	DB	WB	
Cooling		27°C	19°C	35°C	24°C	
Heating		20°C	—	7°C	6°C	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						




Adapted to **RoHS** directive

Item		Model	SRK25ZJ-S			
Cooling capacity (1)		W	2500			
Heating capacity (1)		W	3200			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 34 Me: 28 Lo: 21			
		Power level	dB 50			
	Heating	Sound level	dB(A) Hi: 39 Me: 31 Lo: 24			
		Power level	dB 55			
Exterior dimensions (Height x Width x Depth)		mm	294 x 798 x 229			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	9.5			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Tangential fan x 1			
	Motor		W	38		
	Air flow	Cooling	CMM	Hi: 7.9 Me: 6.0 Lo: 5.0		
		Heating		Hi: 10.6 Me: 6.5 Lo: 5.1		
	Fresh air intake			Not possible		
Air filter, Quality / Quantity			Polypropylene net (washable) x 2			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")		
	Connecting method			Flare connecting		
	Attached length of piping		m	Liquid line : 0.53 Gas Line : 0.40		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)			
	Connecting method		Terminal block (Screw fixing type)			
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	—	7°C	6°C	ISO-T1, JIS C 9612	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

RWA000Z225 


Adapted to **RoHS** directive

Item		Model	SRK35ZJ-S			
Cooling capacity (1)		W	3500			
Heating capacity (1)		W	4000			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 42 Me: 32 Lo: 22			
		Power level	dB 58			
	Heating	Sound level	dB(A) Hi: 43 Me: 37 Lo: 25			
		Power level	dB 59			
Exterior dimensions (Height x Width x Depth)		mm	294 x 798 x 229			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	9.5			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Tangential fan x 1			
	Motor		W	38		
	Air flow	Cooling	CMM Hi: 10.1 Me: 6.4 Lo: 5.0			
		Heating	CMM Hi: 12.8 Me: 9.4 Lo: 6.1			
	Fresh air intake		Not possible			
Air filter, Quality / Quantity		Polypropylene net (washable) x 2				
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")		
	Connecting method			Flare connecting		
	Attached length of piping		m	Liquid line : 0.53 Gas Line : 0.40		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)			
	Connecting method		Terminal block (Screw fixing type)			
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
	Item	Indoor air temperature		Outdoor air temperature		Standards
Operation		DB	WB	DB	WB	
Cooling		27°C	19°C	35°C	24°C	
Heating		20°C	—	7°C	6°C	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

RWA000Z225 

Adapted to **RoHS** directive

Item		Model	SRK50ZJ-S			
Cooling capacity (1)		W	5000			
Heating capacity (1)		W	5800			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 46 Me: 37 Lo: 26			
		Power level	dB 61			
	Heating	Sound level	dB(A) Hi: 45 Me: 37 Lo: 31			
		Power level	dB 61			
Exterior dimensions (Height x Width x Depth)		mm	294 x 798 x 229			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	9.5			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Tangential fan x 1			
	Motor		W	38		
	Air flow	Cooling	CMM	Hi: 11.3 Me: 7.8 Lo: 5.3		
		Heating		Hi: 13.5 Me: 10.2 Lo: 7.5		
	Fresh air intake			Not possible		
Air filter, Quality / Quantity			Polypropylene net (washable) x 2			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, 3D AUTO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 12.7 (1/2")		
	Connecting method			Flare connecting		
	Attached length of piping		m	Liquid line : 0.53 Gas Line : 0.40		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)			
	Connecting method		Terminal block (Screw fixing type)			
Accessories (included)			Mounting kit, Clean filter (Allergen clear filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	—	7°C	6°C	ISO-T1, JIS C 9612	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

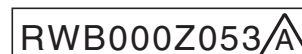
RWA000Z225 



**(b) Floor standing type (SRF)**


Adapted to RoHS directive

Item		Model	SRF25ZJX-S			
Cooling capacity (1)		W	2500			
Heating capacity (1)		W	3400			
Power supply			1 Phase, 220 ~ 240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 40 Me: 32 Lo: 26			
		Power level	dB 51			
	Heating	Sound level	dB(A) Hi: 40 Me: 35 Lo: 28			
		Power level	dB 51			
Exterior dimensions (Height x Width x Depth)		mm	600 x 860 x 238			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	18			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Turbo fan x 1			
	Motor	W	40			
	Air flow	Cooling	CMM	Hi: 9.0 Me: 7.6 Lo: 5.8		
		Heating		Hi: 10.5 Me: 8.2 Lo: 6.6		
	Fresh air intake			Impossible		
Air filter, Quality / Quantity			Polypropylene net (washable) x 1			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, AIR OUTLET SELECTION: Green, ECONO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)	mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")			
	Connecting method		Flare connecting			
	Attached length of piping		m	-		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)			
	Connecting method		Terminal block (Screw fixing type)			
Accessories (included)			Mounting kit, Clean filter (Natural Enzyme Filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	-	7°C	6°C		
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						




Adapted to **RoHS** directive

Item		Model	SRF35ZJX-S			
Cooling capacity (1)		W	3500			
Heating capacity (1)		W	4500			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 41 Me: 34 Lo: 28			
		Power level	dB 52			
	Heating	Sound level	dB(A) Hi: 41 Me: 36 Lo: 31			
		Power level	dB 52			
Exterior dimensions (Height x Width x Depth)		mm	600 x 860 x 238			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	19			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Turbo fan x 1			
	Motor		W	40		
	Air flow	Cooling	CMM	Hi: 9.2 Me: 7.8 Lo: 6.4		
		Heating		Hi: 10.7 Me: 8.3 Lo: 7.4		
	Fresh air intake			Impossible		
Air filter, Quality / Quantity			Polypropylene net (washable) x 1			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, AIR OUTLET SELECTION: Green, ECONO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")		
	Connecting method			Flare connecting		
	Attached length of piping		m	-		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)			
	Connecting method		Terminal block (Screw fixing type)			
Accessories (included)			Mounting kit, Clean filter (Natural Enzyme Filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	-	7°C	6°C		
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

RWB000Z053 

Adapted to **RoHS** directive

Item		Model	SRF50ZJX-S			
Cooling capacity (1)		W	5000			
Heating capacity (1)		W	6000			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 47 Me: 39 Lo: 30			
		Power level	dB 58			
	Heating	Sound level	dB(A) Hi: 47 Me: 39 Lo: 32			
		Power level	dB 58			
Exterior dimensions (Height x Width x Depth)		mm	600 x 860 x 238			
Exterior appearance (Munsell color)			Fine snow (8.0Y 9.3/0.1) near equivalent			
Net weight		kg	19			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Turbo fan x 1			
	Motor		W	40		
	Air flow	Cooling	CMM	Hi: 11.5 Me: 9.6 Lo: 6.6		
		Heating		Hi: 12.0 Me: 10.0 Lo: 7.6		
	Fresh air intake			Impossible		
Air filter, Quality / Quantity			Polypropylene net (washable) x 1			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, AIR OUTLET SELECTION: Green, ECONO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 12.7 (1/2")		
	Connecting method			Flare connecting		
	Attached length of piping		m	-		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)			
	Connecting method		Terminal block (Screw fixing type)			
Accessories (included)			Mounting kit, Clean filter (Natural Enzyme Filter x 1, Photocatalytic washable deodorizing filter x 1)			
Optional parts			Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	-	7°C	6°C	ISO-T1, JIS C 9612	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

RWB000Z053 

(c) Ceiling concealed type (SRR)

Adapted to RoHS directive

Item		Model	SRR25ZJ-S	
Cooling capacity (1)		W	2500	
Heating capacity (1)		W	3400	
Power supply			1 Phase, 220~240 V, 50Hz	
Noise level	Cooling	Sound level	dB(A) Hi: 40 Me: 35 Lo: 29	
		Power level	dB 54	
	Heating	Sound level	dB(A) Hi: 41 Me: 38 Lo: 31	
		Power level	dB 55	
Exterior dimensions (Height x Width x Depth)		mm	230 x 740 x 455	
Exterior appearance (Munsell color)			—	
Net weight		kg	22	
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing	
	Deice control		Microcomputer control	
Air handling equipment	Fan type & Q'ty		Centrifugal fan x 2	
	Motor	W	51	
	Air flow	Cooling	CMM	Hi: 8.5 Me: 7.0 Lo: 5.0
		Heating		Hi: 10.0 Me: 9.0 Lo: 6.5
	Fresh air intake			Not possible
Air filter, Quality / Quantity			Polypropylene net x 1	
Operation control	Operation switch		Wireless-Remote control	
	Room temperature control		Microcomputer thermostat	
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, ECONO: Green	
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection	
Installation data	Refrigerant piping size (O.D)	mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")	
	Connecting method		Flare connecting	
	Attached length of piping	m	—	
	Insulation for piping			Necessary (Both sides), independent
Drain hose			Connectable (VP 16)	
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)	
	Connecting method		Terminal block (Screw fixing type)	
Accessories (included)			Mounting kit	
Optional parts			Wired remote control, Interface kit (SC-BIKN-E)	


Note (1) The data are measured at the following conditions.

The pipe length is 7.5m.

Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
Cooling		27°C	19°C	35°C	24°C	ISO-T1, JIS C 9612
Heating		20°C	—	7°C	6°C	


(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) The operation data are applied to the 220/230/240V districts respectively.

RWA000Z231 


Adapted to **RoHS** directive

Item		Model	SRR35ZJ-S			
Cooling capacity (1)		W	3500 (900)			
Heating capacity (1)		W	4200 (900)			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 42 Me: 37 Lo: 30			
		Power level	dB 56			
	Heating	Sound level	dB(A) Hi: 43 Me: 40 Lo: 32			
		Power level	dB 57			
Exterior dimensions (Height x Width x Depth)		mm	230 x 740 x 455			
Exterior appearance (Munsell color)			—			
Net weight		kg	22			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Centrifugal fan x 2			
	Motor		W	51		
	Air flow	Cooling	CMM	Hi: 9.0 Me: 7.5 Lo: 5.5		
		Heating		Hi: 11.0 Me: 9.5 Lo: 7.0		
	Fresh air intake			Not possible		
Air filter, Quality / Quantity			Polypropylene net x 1			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, ECONO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 9.52 (3/8")		
	Connecting method			Flare connecting		
	Attached length of piping		m	—		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number			1.5mm <sup>2</sup> x 4 cores (Including earth cable)		
	Connecting method			Terminal block (Screw fixing type)		
Accessories (included)			Mounting kit			
Optional parts			Wired remote control, Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	—	7°C	6°C	ISO-T1, JIS C 9612	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

RWA000Z231 


Adapted to **RoHS** directive

Item		Model	SRR50ZJ-S			
Cooling capacity (1)		W	5000			
Heating capacity (1)		W	5800			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 48 Me: 42 Lo: 33			
		Power level	dB 60			
	Heating	Sound level	dB(A) Hi: 48 Me: 45 Lo: 36			
		Power level	dB 60			
Exterior dimensions (Height x Width x Depth)		mm	230 x 740 x 455			
Exterior appearance (Munsell color)			—			
Net weight		kg	23			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Centrifugal fan x 2			
	Motor		W	51		
	Air flow	Cooling	CMM	Hi: 10.5 Me: 8.0 Lo: 5.0		
		Heating		Hi: 13.0 Me: 11.5 Lo: 7.5		
	Fresh air intake			Not possible		
Air filter, Quality / Quantity			Polypropylene net x 1			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, ECONO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 12.7 (1/2")		
	Connecting method			Flare connecting		
	Attached length of piping		m	—		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number			1.5mm <sup>2</sup> x 4 cores (Including earth cable)		
	Connecting method			Terminal block (Screw fixing type)		
Accessories (included)			Mounting kit			
Optional parts			Wired remote control, Interface kit ( SC-BIKN-E )			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	—	7°C	6°C	ISO-T1, JIS C 9612	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

RWA000Z231 

Adapted to **RoHS** directive

Item		Model	SRR60ZJ-S			
Cooling capacity (1)		W	6000			
Heating capacity (1)		W	6800			
Power supply			1 Phase, 220~240 V, 50Hz			
Noise level	Cooling	Sound level	dB(A) Hi: 51 Me: 44 Lo: 35			
		Power level	dB 63			
	Heating	Sound level	dB(A) Hi: 51 Me: 47 Lo: 38			
		Power level	dB 63			
Exterior dimensions (Height x Width x Depth)		mm	230 x 740 x 455			
Exterior appearance (Munsell color)			—			
Net weight		kg	23			
Refrigerant equipment	Heat exchanger		Louver fins & inner grooved tubing			
	Deice control		Microcomputer control			
Air handling equipment	Fan type & Q'ty		Centrifugal fan x 2			
	Motor		W	51		
	Air flow	Cooling	CMM	Hi: 12.5 Me: 9.0 Lo: 5.5		
		Heating		Hi: 15.0 Me: 12.5 Lo: 8.0		
	Fresh air intake			Not possible		
Air filter, Quality / Quantity			Polypropylene net x 1			
Operation control	Operation switch		Wireless-Remote control			
	Room temperature control		Microcomputer thermostat			
	Operation Display		RUN: Green, TIMER: Yellow, HI POWER: Green, ECONO: Green			
Safety devices			Frost protection, Serial signal error protection, Indoor fan motor error protection			
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") Gas line: $\phi$ 12.7 (1/2")		
	Connecting method			Flare connecting		
	Attached length of piping		m	—		
	Insulation for piping			Necessary (Both sides), independent		
Drain hose			Connectable (VP 16)			
Connection wiring	Size x Core number			1.5mm <sup>2</sup> x 4 cores (Including earth cable)		
	Connecting method			Terminal block (Screw fixing type)		
Accessories (included)			Mounting kit			
Optional parts			Wired remote control, Interface kit (SC-BIKN-E)			
Note (1) The data are measured at the following conditions.			The pipe length is 7.5m.			
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	—	7°C	6°C	ISO-T1, JIS C 9612	
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						

RWA000Z231 

## (d) Ceiling cassette -4way compact type (FDTC)

Adapted to RoHS directive

Model		FDTC25VD	
Item		Panel TC-PSA-25W-E	
Power source		220/230/240V ~ 50Hz	
Operation data		Cooling	Heating
Nominal capacity	kW	2.55	3.45
Sound Pressure Level	dB(A)	Cooling P-Hi : 38 Hi : 36 Me : 32 Lo : 29 Heating P-Hi : 39 Hi : 38 Me : 33 Lo : 29.5	
Exterior dimensions Height x Width x Depth	mm	Unit 248 × 570 × 570 Panel 35 × 700 × 700	
Exterior appearance (Munsell color)		Plaster White (6.8Y8.9/0.2) near equivalent	
Net weight	kg	UNIT 15 PANEL 3.5	
Heat exchanger		Louver fin & inner grooved tubing	
Air handling equipment Fan type & Q'ty		Turbo fan × 1	
Motor <Starting method>	W	33 < Direct line start >	
Air flow (Standard)	CMM	Cooling P-Hi : 10 Hi : 9 Me : 8 Lo : 6.5 Heating P-Hi : 10.5 Hi : 9.5 Me : 8.5 Lo : 7	
Available static pressure	Pa	0	
Outdoor air intake		Not possible	
Air filter, Q'ty		Pocket plastic net × 1 (Washable)	
Shock & vibration absorber		Rubber sleeve (for fan motor)	
Insulation (noise & heat)		Polyurethane form	
Remote controller		wired : RC-E4 (option) wireless : RCN-TC-24W-ER (option)	
Room temperature control		Thermostat by electronics	
Safety equipment		Overload protection for fan motor Frost protection thermostat	
Installation data Refrigerant piping size	mm	Liquid line : φ 6.35 (1/4") Gas line : φ 9.52 (3/8")	
Connecting method		Flare piping	
Drain pump		Built-in Drain pump	
Drain		Hose Connectable with VP20	
Insulation for piping		Necessary (both Liquid & Gas lines)	
Standard Accessories		Mounting kit, Drain hose	

Notes (1) The data are measured at the following conditions when the air flow is high mode.


Item	Indoor air temperature		Outdoor air temperature	
	DB	WB	DB	WB
Cooling	27°C	19°C	35°C	24°C
Heating	20°C		7°C	6°C

(2) This packaged air-conditioner is manufactured and tested in conformity with the ISO.

(3) Sound pressure level indicates the value in an anechoic chamber. During operation these value are somewhat higher due to ambient temperature.

(4) The operation data indicates when the air-conditioner is operated at 220/230/240V 50Hz.


(5) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.

RWA000Z234 




Adapted to **RoHS** directive

Model		FDTC35VD		
Item		Panel TC-PSA-25W-E		
Power source		220/230/240V ~ 50Hz		
Operation data		Cooling	Heating	
Nominal capacity	kW	3.6	4.25	
Sound Pressure Level	dB(A)	Cooling P-Hi : 41 Hi : 40 Me : 36 Lo : 30 Heating P-Hi : 43 Hi : 42 Me : 35 Lo : 32		
Exterior dimensions Height x Width x Depth	mm	Unit 248 × 570 × 570 Panel 35 × 700 × 700		
Exterior appearance (Munsell color)		Plaster White (6.8Y8.9/0.2) near equivalent		
Net weight	kg	UNIT 15 PANEL 3.5		
Heat exchanger		Louver fin & inner grooved tubing		
Air handling equipment Fan type & Q'ty		Turbo fan × 1		
Motor <Starting method>	W	33 < Direct line start >		
Air flow (Standard)	CMM	Cooling P-Hi : 11 Hi : 9.5 Me : 9 Lo : 7 Heating P-Hi : 11.5 Hi : 10.0 Me : 9 Lo : 8		
Available static pressure	Pa	0		
Outdoor air intake		Not possible		
Air filter, Q'ty		Pocket plastic net × 1 (Washable)		
Shock & vibration absorber		Rubber sleeve (for fan motor)		
Insulation (noise & heat)		Polyurethane form		
Remote controller		wired : RC-E4 (option) wireless : RCN-TC-24W-ER (option)		
Room temperature control		Thermostat by electronics		
Safety equipment		Overload protection for fan motor Frost protection thermostat		
Installation data Refrigerant piping size	mm	Liquid line : $\phi$ 6.35 (1/4") Gas line : $\phi$ 9.52 (3/8")		
Connecting method		Flare piping		
Drain pump		Built-in Drain pump		
Drain		Hose Connectable with VP20		
Insulation for piping		Necessary (both Liquid & Gas lines)		
Standard Accessories		Mounting kit, Drain hose		
Notes (1) The data are measured at the following conditions when the air flow is high mode.				
	Indoor air temperature		Outdoor air temperature	
Operation	DB	WB	DB	WB
Cooling	27°C	19°C	35°C	24°C
Heating	20°C		7°C	6°C
(2) This packaged air-conditioner is manufactured and tested in conformity with the ISO.				
(3) Sound pressure level indicates the value in an anechoic chamber. During operation these value are somewhat higher due to ambient temperature.				
(4) The operation data indicates when the air-conditioner is operated at 220/230/240V 50Hz.				
(5) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.				

RWA000Z234 


Adapted to **RoHS** directive

Model		FDTC50VD		
Item		Panel TC-PSA-25W-E		
Power source		220-240V ~ 50Hz / 220V ~ 60Hz		
Operation data		Cooling	Heating	
Nominal capacity	kW	5.0	5.4	
Sound Pressure Level	dB(A)	Cooling P-Hi : 47 Hi : 42 Me : 36 Lo : 30 Heating P-Hi : 47 Hi : 42 Me : 36 Lo : 32		
Exterior dimensions Height x Width x Depth	mm	Unit 248 × 570 × 570 Panel 35 × 700 × 700		
Exterior appearance (Munsell color)		Plaster White (6.8Y8.9/0.2) near equivalent		
Net weight	kg	UNIT 15 PANEL 3.5		
Heat exchanger		Louver fin & inner grooved tubing		
Air handling equipment Fan type & Q'ty		Turbo fan × 1		
Motor <Starting method>	W	33 < Direct line start >		
Air flow (Standard)	CMM	Cooling P-Hi : 13.5 Hi : 11.5 Me : 9 Lo : 7 Heating P-Hi : 13.5 Hi : 11.5 Me : 9 Lo : 8		
Available static pressure	Pa	0		
Outdoor air intake		Not possible		
Air filter, Q'ty		Pocket plastic net × 1 (Washable)		
Shock & vibration absorber		Rubber sleeve (for fan motor)		
Insulation (noise & heat)		Polyurethane form		
Remote controller		wired : RC-E4 (option) wireless : RCN-TC-24W-ER (option)		
Room temperature control		Thermostat by electronics		
Safety equipment		Overload protection for fan motor Frost protection thermostat		
Installation data Refrigerant piping size	mm	Liquid line : $\phi$ 6.35 (1/4") Gas line : $\phi$ 12.7 (1/2")		
Connecting method		Flare piping		
Drain pump		Built-in Drain pump		
Drain		Hose Connectable with VP20		
Insulation for piping		Necessary (both Liquid & Gas lines)		
Standard Accessories		Mounting kit, Drain hose		
Notes (1) The data are measured at the following conditions.				
	Indoor air temperature		Outdoor air temperature	
Operation	DB	WB	DB	WB
Cooling	27°C	19°C	35°C	24°C
Heating	20°C		7°C	6°C
(2) This packaged air-conditioner is manufactured and tested in conformity with the ISO.				
(3) Sound pressure level indicates the value in an anechoic chamber. During operation these value are somewhat higher due to ambient temperature.				
(4) The operation data indicates when the air-conditioner is operated at 230V50Hz or 220V60Hz.				
(5) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.				

PJA003Z375 

Adapted to **RoHS** directive

Model		FDTC60VD		
Item		Panel TC-PSA-25W-E		
Power source		220-240V ~ 50Hz / 220V ~ 60Hz		
Operation data		Cooling	Heating	
Nominal capacity	kW	5.6	6.7	
Sound Pressure Level	dB(A)	Cooling P-Hi : 47 Hi : 46 Me : 39 Lo : 30 Heating P-Hi : 47 Hi : 46 Me : 39 Lo : 32		
Exterior dimensions Height x Width x Depth	mm	Unit 248 × 570 × 570 Panel 35 × 700 × 700		
Exterior appearance (Munsell color)		Plaster White (6.8Y8.9/0.2) near equivalent		
Net weight	kg	UNIT 15 PANEL 3.5		
Heat exchanger		Louver fin & inner grooved tubing		
Air handling equipment Fan type & Q'ty		Turbo fan × 1		
Motor <Starting method>	W	33 < Direct line start >		
Air flow (Standard)	CMM	Cooling P-Hi : 13.5 Hi : 13.5 Me : 10 Lo : 7 Heating P-Hi : 13.5 Hi : 13.5 Me : 10 Lo : 8		
Available static pressure	Pa	0		
Outdoor air intake		Not possible		
Air filter, Q'ty		Pocket plastic net × 1 (Washable)		
Shock & vibration absorber		Rubber sleeve (for fan motor)		
Insulation (noise & heat)		Polyurethane form		
Remote controller		wired : RC-E4 (option) wireless : RCN-TC-24W-ER (option)		
Room temperature control		Thermostat by electronics		
Safety equipment		Overload protection for fan motor Frost protection thermostat		
Installation data Refrigerant piping size	mm	Liquid line : $\phi$ 6.35 (1/4") Gas line : $\phi$ 12.7 (1/2")		
Connecting method		Flare piping		
Drain pump		Built-in Drain pump		
Drain		Hose Connectable with VP20		
Insulation for piping		Necessary (both Liquid & Gas lines)		
Standard Accessories		Mounting kit, Drain hose		
Notes (1) The data are measured at the following conditions.				
	Indoor air temperature		Outdoor air temperature	
Operation	DB	WB	DB	WB
Cooling	27°C	19°C	35°C	24°C
Heating	20°C		7°C	6°C
(2) This packaged air-conditioner is manufactured and tested in conformity with the ISO.				
(3) Sound pressure level indicates the value in an anechoic chamber. During operation these value are somewhat higher due to ambient temperature.				
(4) The operation data indicates when the air-conditioner is operated at 230V50Hz or 220V60Hz.				
(5) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.				

PJA003Z375 

(2) Outdoor units

Adapted to RoHS directive

Item		Model	SCM60ZJ-S	
Cooling capacity (1)		W	6000 (1800 (Min.) ~ 7500 (Max.))	
Heating capacity (1)		W	6800 (1500 (Min.) ~ 7800 (Max.))	
Power supply			1 Phase, 220 ~ 240 V, 50Hz	
Operation data (1)	Power consumption	Cooling	1.43 (0.50 ~ 2.39)	
		Heating	1.51 (0.60 ~ 3.00)	
	Running current	Cooling	6.8 / 6.5 / 6.2 (220/ 230/ 240 V)	
		Heating	7.1 / 6.8 / 6.6 (220/ 230/ 240 V)	
	Inrush current		7.1 / 6.8 / 6.6 (220/ 230/ 240 V)	
	COP		Cooling 4.2	
			Heating 4.5	
	Noise level	Cooling	Sound level	50
			Power level	63
		Heating	Sound level	52
Power level			65	
Exterior dimensions (Height x Width x Depth)		mm	640 x 850 x 290	
Exterior appearance (Munsell color)			Stucco white ( 4.2Y 7.5/1.1 ) near equivalent	
Net weight		kg	49	
Refrigerant equipment	Compressor type & Q'ty		RM-T5118MDE2 (Twin rotary type) x 1	
	Motor (Starting method)		kW 1.4 (Line starting)	
	Refrigerant oil		ℓ 0.675 (DIAMOND FREEZE MA68)	
	Refrigerant (4)		kg R410A 2.5 (Pre-Charged up to the piping length of 40m)	
	Heat exchanger		M fins & inner grooved tubing	
	Refrigerant control		Capillary tubes + Electronic expansion valve	
	Device control		Microcomputer control	
Air handling equipment	Fan type & Q'ty		Propeller fan x 1	
	Motor		W 34	
	Air flow	Cooling	CMM 42.0	
Heating		42.0		
Shock & vibration absorber			Cushion rubber (for compressor)	
Electric heater			Crank case heater (220V 20W )	
Safety devices			Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Outdoor fan motor error protection, Heating & Cooling overload protection	
Installation data	Refrigerant piping size (O.D)		mm Liquid line: φ 6.35 (1/4") x 3 Gas line: φ 9.52 ( 3/8" ) x 3	
	Connecting method		Flare connecting	
	Insulation for piping		Necessary (Both sides), independent	
	Length for one indoor unit		Max. 25	
	Total length for all rooms		Max. 40	
	Vertical height difference between outdoor unit and indoor unit		Max. 15 (Outdoor unit is higher) Max. 15 (Outdoor unit is lower)	
Height difference of the indoor units		Max. 25		
Recommended breaker size		A	25	
Connection wiring	Size x Core number		1.5mm <sup>2</sup> x 4 cores (Including earth cable)	
	Connecting method		Terminal block (Screw fixing type)	
Accessories (included)			Union : ( φ 9.52 → φ 12.7 ) x 2, Installation sheet, Elbow, Grommet	
Indoor unit to be combined			SRK20,25,35,50,60ZJX-S SRK20,25,35,50ZJ-S SRF25,35,50ZJX-S SRR25,35,50,60ZJ-S FDTC25,35,50,60VD	
Number of connectable indoor units			Min. 2 ~ Max. 3	
Total of indoor units		kW	Max. 11	

Note (1) The data are measured at the following conditions.


The pipe length for one indoor unit is 7.5m.

Item	Indoor air temperature		Outdoor air temperature		Standards
	DB	WB	DB	WB	
Cooling	27°C	19°C	35°C	24°C	ISO-T1, JIS C 9612
Heating	20°C	—	7°C	6°C	

(2) This air-conditioner is manufactured and tested in conformity with the ISO.


(3) The operation data are applied to the 220/230/240V districts respectively.

(4) The refrigerant quantity to be charged includes the refrigerant in 40m connecting piping.  
(Purging is not required even for the short piping.)

RWC000Z235 

Adapted to RoHS directive

Item			Model	SCM80ZJ-S		
Cooling capacity (1)			W	8000 (1800 (Min.)—9200 (Max.))		
Heating capacity (1)			W	9300 (1500 (Min.)—9800 (Max.))		
Power supply				1 Phase, 220~240 V, 50Hz		
Operation data (1)	Power consumption	Cooling	kW	2.16 ( 0.48~2.83 )		
		Heating		2.26 ( 0.60~3.43 )		
	Running current	Cooling	A	9.9 / 9.4 / 9.0 (220/ 230/ 240 V)		
		Heating		10.4 / 10.0 / 9.5 (220/ 230/ 240 V)		
	Inrush current			10.4 / 10.0 / 9.5 (220/ 230/ 240 V)		
	COP		Cooling	3.70		
			Heating	4.12		
	Noise level	Cooling	Sound level	dB(A)	54	
			Power level		66	
Heating		Sound level	dB(A)	54		
		Power level		66		
Exterior dimensions (Height x Width x Depth)			mm	750 x 880 x 340		
Exterior appearance (Munsell color)				Stucco white ( 4.2Y 7.5/1.1 ) near equivalent		
Net weight			kg	62		
Refrigerant equipment	Compressor type & Q'ty			RM-T5118MDE2 (Twin rotary type) x 1		
	Motor (Starting method)		kW	1.4 (Line starting)		
	Refrigerant oil		ℓ	0.675 (DIAMOND FREEZE MA68)		
	Refrigerant (4)		kg	R410A 3.15 (Pre-Charged up to the piping length of 40m)		
	Heat exchanger			M fins & inner grooved tubing		
	Refrigerant control			Capillary tubes + Electronic expansion valve		
	Device control			Microcomputer control		
Air handling equipment	Fan type & Q'ty			Propeller fan x 1		
	Motor		W	86		
	Air flow	Cooling	CMM	56.0		
Heating		56.0				
Shock & vibration absorber				Cushion rubber (for compressor)		
Electric heater				Crank case heater (220V 20W)		
Safety devices				Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Outdoor fan motor error protection, Heating & Cooling overload protection		
Installation data	Refrigerant piping size (O.D)		mm	Liquid line: $\phi$ 6.35 (1/4") x 4		
				Gas line: $\phi$ 9.52 ( 3/8" ) x 4		
	Connecting method			Flare connecting		
	Insulation for piping			Necessary (Both sides), independent		
	Length for one indoor unit		m	Max. 25		
	Total length for all rooms			Max. 70		
Vertical height difference between outdoor unit and indoor unit		Max. 20 (Outdoor unit is higher) Max. 20 (Outdoor unit is lower)				
Height difference of the indoor units		Max. 25				
Recommended breaker size			A	25		
Connection wiring	Size x Core number			1.5mm <sup>2</sup> x 4 cores (Including earth cable)		
	Connecting method			Terminal block (Screw fixing type)		
Accessories (included)				Union : ( $\phi$ 9.52 → $\phi$ 12.7 ) x 2, Installation sheet, Elbow, Grommet x 2		
Indoor unit to be combined				SRK20,25,35,50,60ZJX-S SRK20,25,35,50ZJ-S SRF25,35,50ZJX-S SRR25,35,50,60ZJ-S FDTC25,35,50,60VD		
Number of connectable indoor units				Min. 2~Max. 4		
Total of indoor units			kW	Max. 13.5		
Note (1) The data are measured at the following conditions.				The pipe length for one indoor unit is 7.5m.		
Operation	Item	Indoor air temperature		Outdoor air temperature		Standards
		DB	WB	DB	WB	
	Cooling	27°C	19°C	35°C	24°C	
Heating	20°C	—	7°C	6°C		
(2) This air-conditioner is manufactured and tested in conformity with the ISO.						
(3) The operation data are applied to the 220/230/240V districts respectively.						
(4) The refrigerant quantity to be charged includes the refrigerant in 40m connecting piping. (Purging is not required even for the short piping.)						

RWC000Z235 

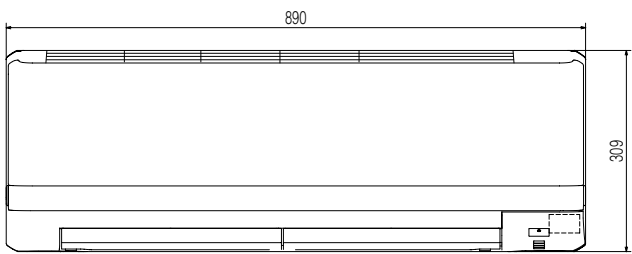
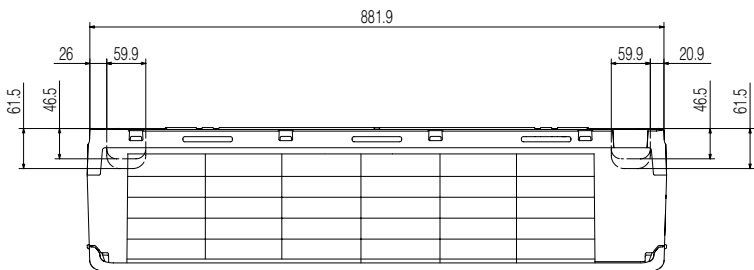
## 2. EXTERIOR DIMENSIONS

### (1) Indoor units

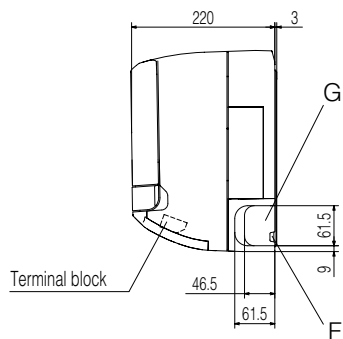
#### (a) Wall mounted type (SRK)

Models SRK20ZJX-S, 25ZJX-S, 35ZJX-S, 50ZJX-S, 60ZJX-S

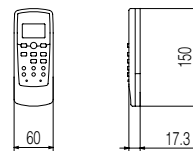
Symbol	Content	
A	Gas piping	Model 20,25,35 $\phi 9.52$ (3/8") (Flare) Model 50,60 $\phi 12.7$ (1/2") (Flare)
B	Liquid piping	$\phi 6.35$ (1/4") (Flare)
C	Hole on wall for right rear piping	( $\phi 65$ )
D	Hole on wall for left rear piping	( $\phi 65$ )
E	Drain hose	VP16
F	Outlet for wiring	
G	Outlet for piping (on both side)	



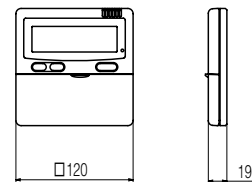
Outlet for down piping  
(Refer to the above view)



Wireless remote controller

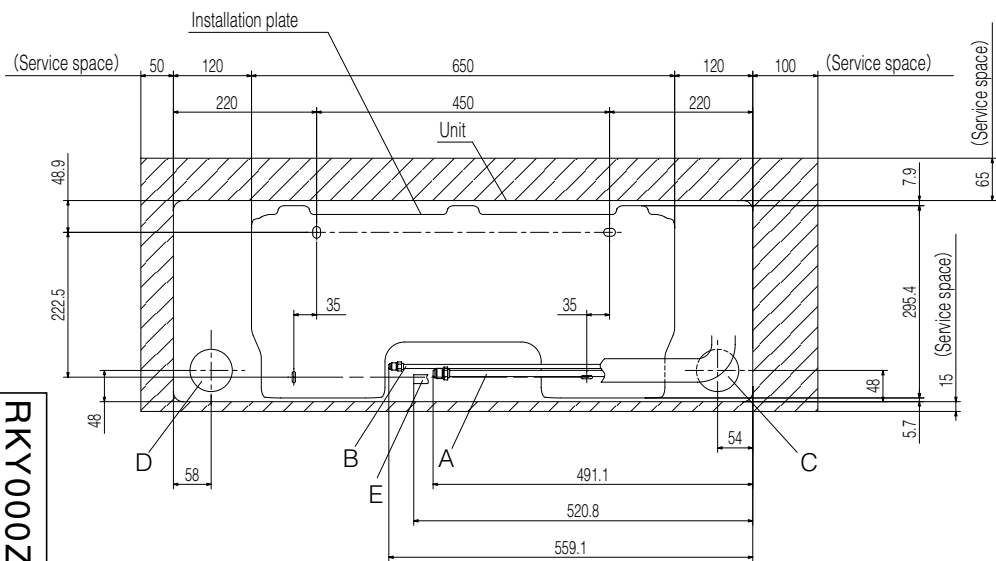


Wired - remote controller  
(Option)



- Notes (1) The model name label is attached on the underside of the panel.  
(2) It takes the interface kit (SC-BIKN-E) to connect the wired remote controller.

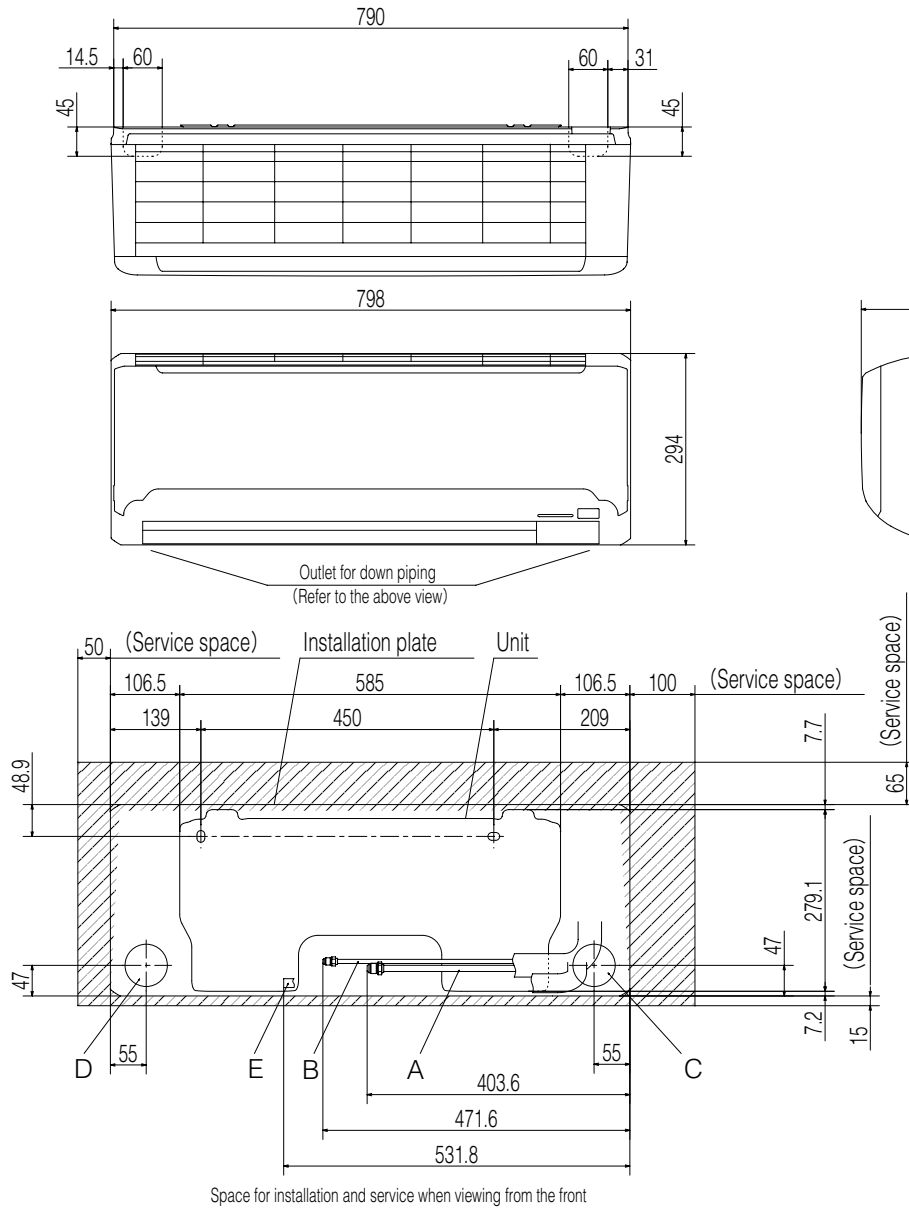
Unit:mm



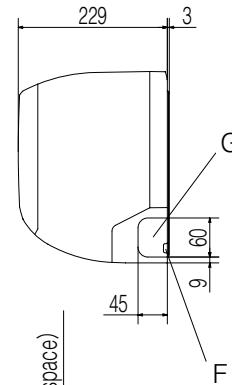
Space for installation and service when viewing from the front

RKY000Z053

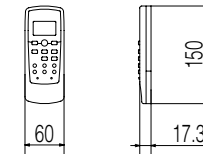
RLA000Z051



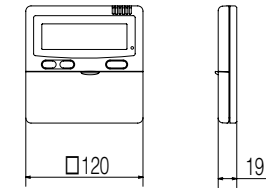
Symbol	Content	
A	Gas piping	Model 20~35 : $\phi 9.52$ (3/8") (Flare) 50 : $\phi 12.7$ (1/2") (Flare)
B	Liquid piping	$\phi 6.35$ (1/4") (Flare)
C	Hole on wall for right rear piping	( $\phi 65$ )
D	Hole on wall for left rear piping	( $\phi 65$ )
E	Drain hose	VP16
F	Outlet for wiring	
G	Outlet for piping (on both side)	



Wireless remote controller



Wired - remote controller  
(Option)

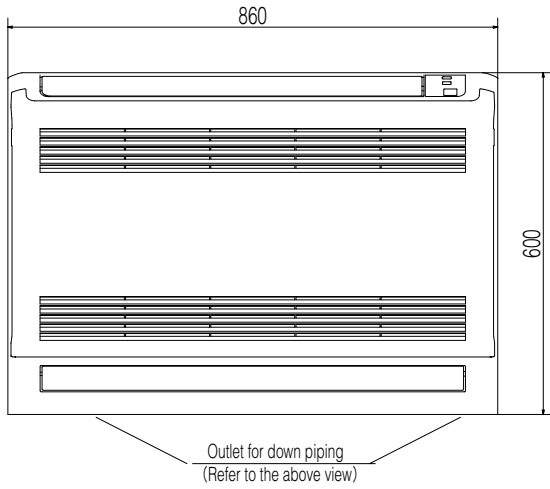
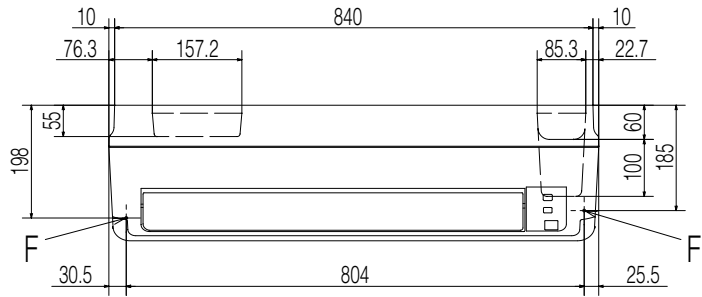


- Notes (1) The model name label is attached on the underside of the panel.  
 (2) It takes the interface kit (SC-BIKN-E) to connect the wired remote controller.

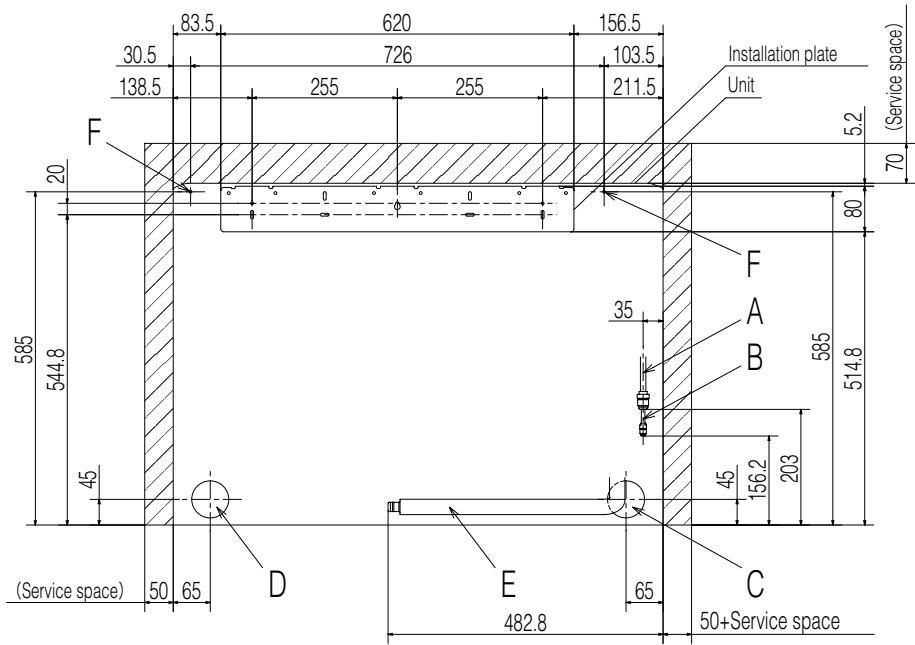
Unit:mm

Models SRK20ZJ-S, 25ZJ-S, 35ZJ-S, 50ZJ-S

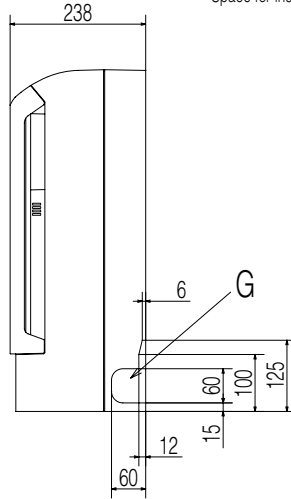
Symbol	Content	
A	Gas piping	Model 25,35 : $\phi 9.52$ (3/8") (Flare) 50 : $\phi 12.7$ (1/2") (Flare)
B	Liquid piping	$\phi 6.35$ (1/4") (Flare)
C	Hole on wall for right rear piping	( $\phi 65$ )
D	Hole on wall for left rear piping	( $\phi 65$ )
E	Drain hose	VP16
F	Screw point fasten the indoor unit	$\phi 5$
G	Outlet for piping (on both side)	



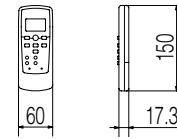
RFB000Z004



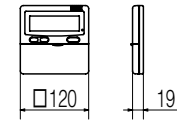
Space for installation and service when viewing from the front



Wireless remote controller



Wired remote controller  
(Option)



Notes

- (1) The model name label is attached on the right side of the unit.
- (2) It takes the interface kit (SC-BIKN-E) to connect the wired remote controller.
- (3) In case of wall installation, leave the unit 150mm or less from the floor.

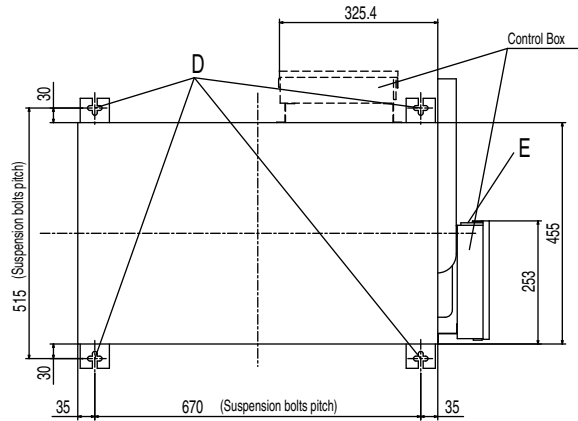
Unit:mm

**(b) Floor standing type (SRF)**  
**Models SRF25ZJX-S, 35ZJX-S, 50ZJX-S**



(c) Ceiling concealed type (SRR)

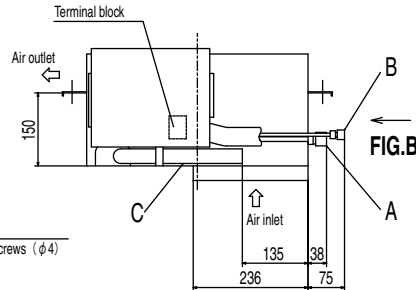
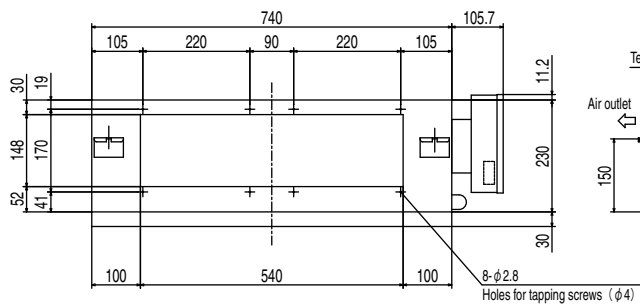
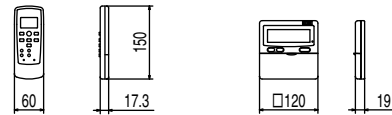
Models SRR25ZJ-S, 35ZJ-S, 50ZJ-S, 60ZJ-S



Symbol	Content		
	Model		
	SRR25ZJ-S, 35ZJ-S		
	SRR50ZJ-S, 60ZJ-S		
A	Gas piping	$\phi 9.52$ (3/8") (Flare)	$\phi 12.7$ (1/2") (Flare)
B	Liquid piping	$\phi 6.35$ (1/4") (Flare)	
C	Drain piping	VP16	
D	Suspension bolts	(M8)	
E	Power supply intake	( $\phi 35$ )	

Wireless remote controller

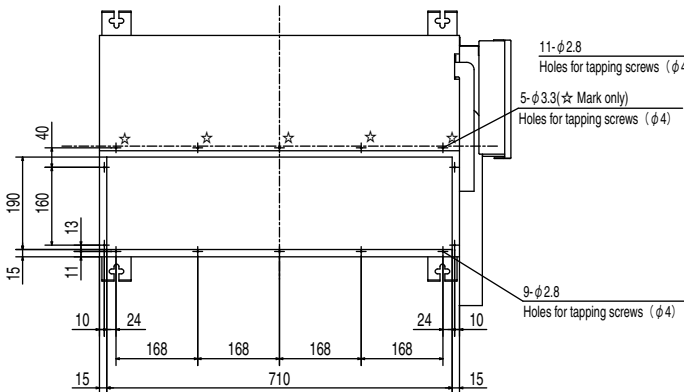
Wired remote controller (Option)



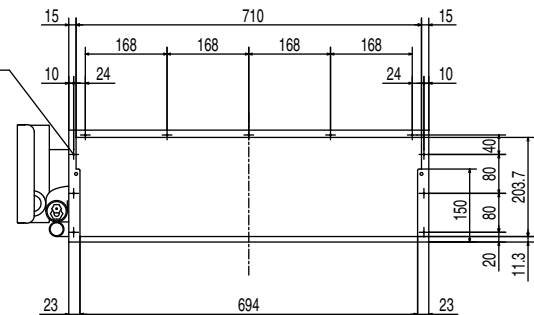
Note (1) The model name label is attached on the lid of the control box.  
 (2) It takes the interface kit (SC-BIKN-E) to connect the wired remote controller.

Unit:mm

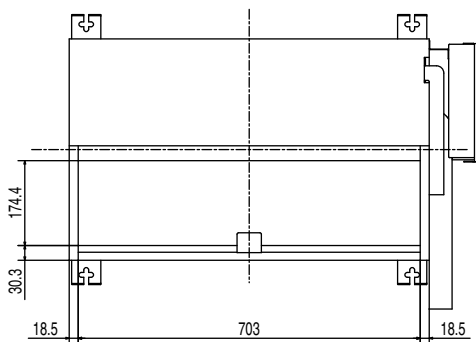
FIG.A



In case of filter guide taken off



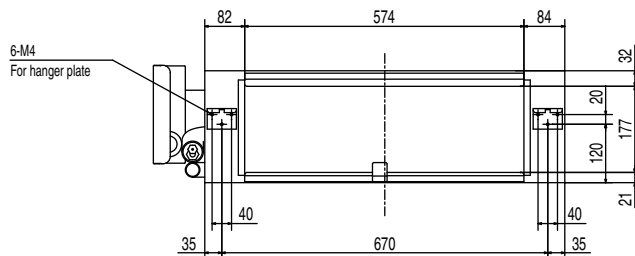
In case of rear panel taken off



In case of filter guide installed (normal condition)

FIG.A

(Air inlet from lower)




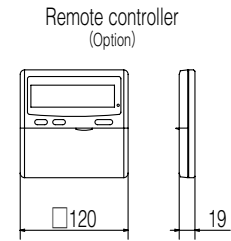
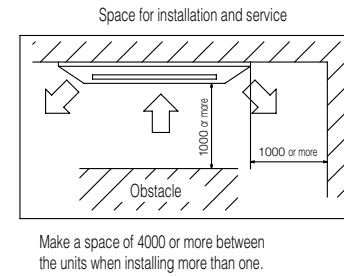
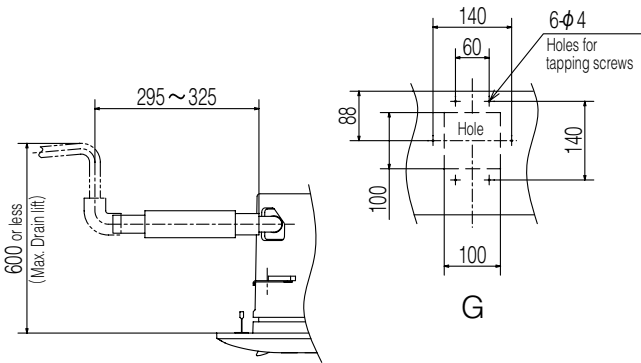
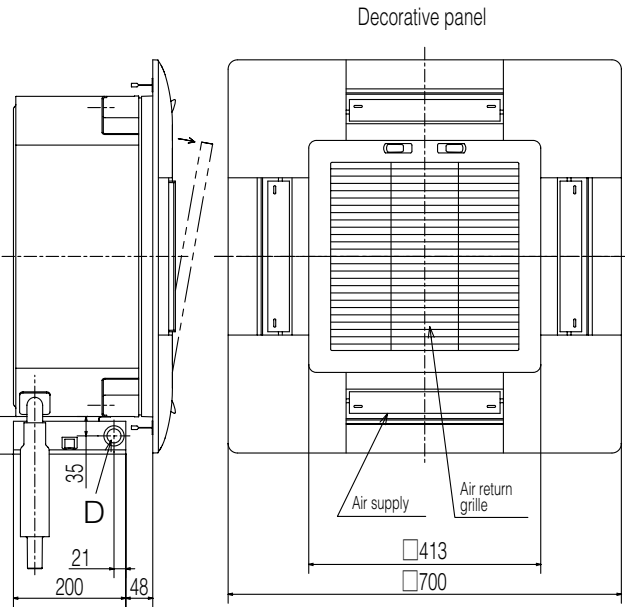
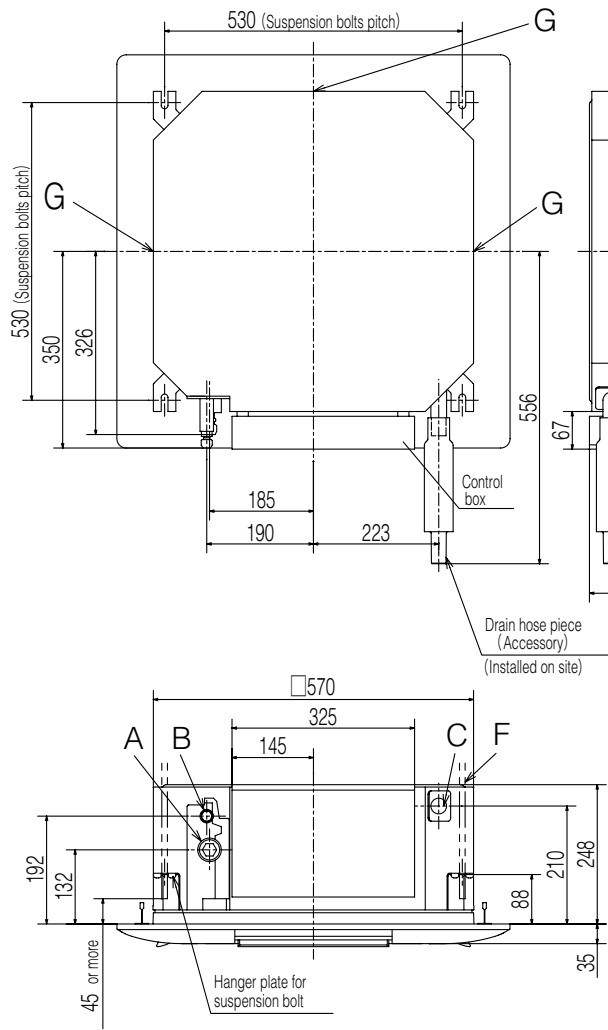
In case of filter guide installed (option)

FIG.B

(Air inlet from rear)

RJD000Z502

PJA003Z338 



Unit:mm

Symbol	Content	
	Model	
A	Gas piping	25.35 : φ9.52(3/8") (Flare)
		50.60 : φ12.7(1/2") (Flare)
B	Liquid piping	φ6.35(1/4") (Flare)
C	Drain piping	VP20 (I.D.20,O.D.26) Note (2)
D	Hole for wiring	φ25
F	Suspension bolts	(M10 or M8)
G	Ducting for air outlet	(Knock out)

(d) Ceiling cassette-4way compact type (FDTC)  
Models FDTC25VD, 35VD, 50VD, 60VD

- 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.

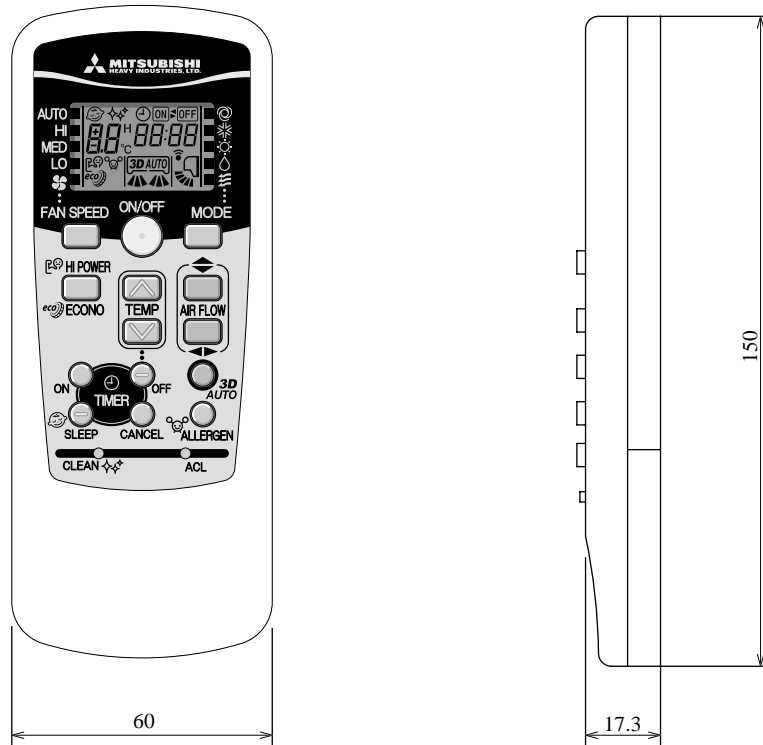
(2) Remote controller

(a) Wireless remote controller

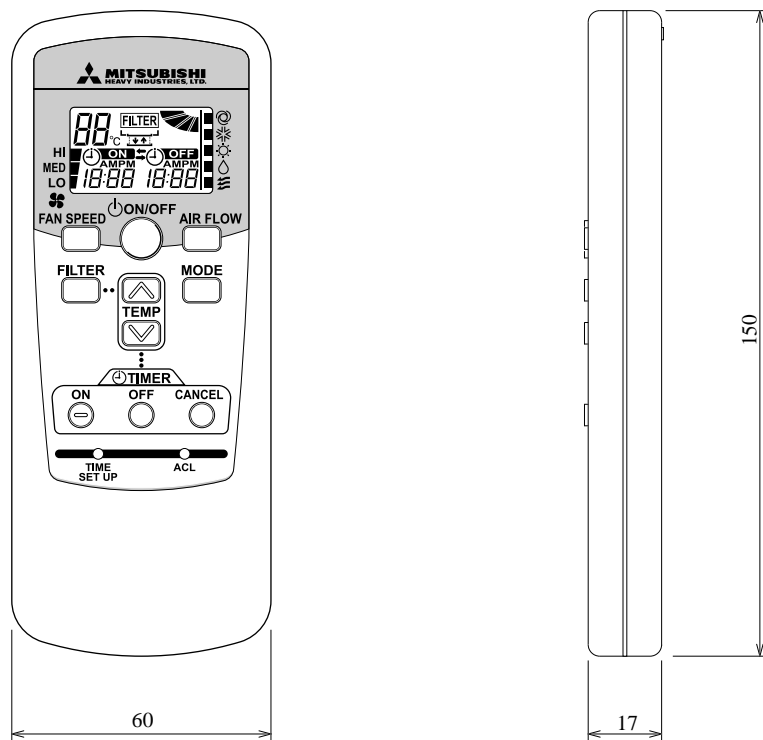
Models SRK, SRF, SRR

•The wireless remote controller in the following figure shows for the SRK-ZJ-S type.

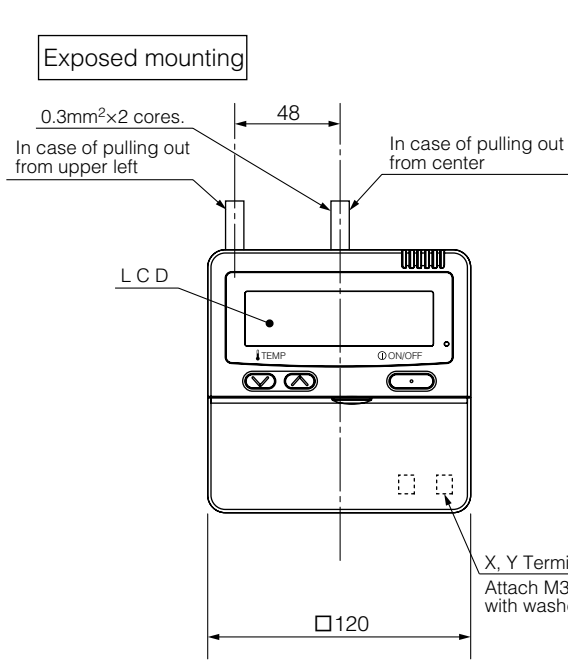
Unit: mm



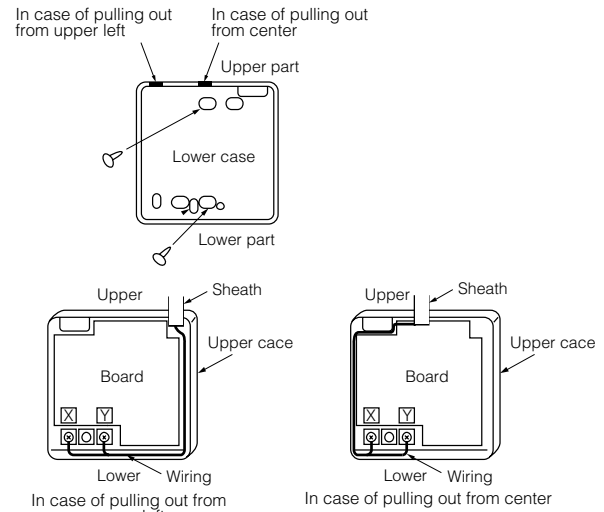
Model FDTC (Option parts)



**(b) Wired remote controller (Option parts)**

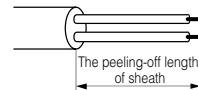


Wiring outlet  
Cut off the upper thin part of remote control lower case with a nipper or knife, and grind burrs with a file etc.

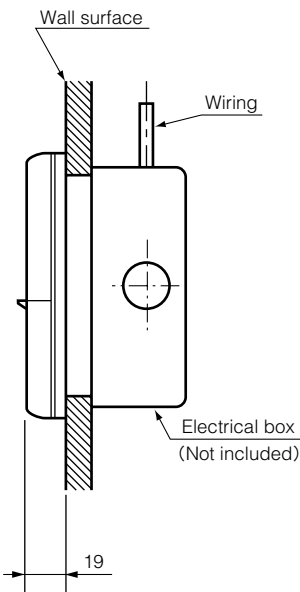


The peeling-off length of sheath

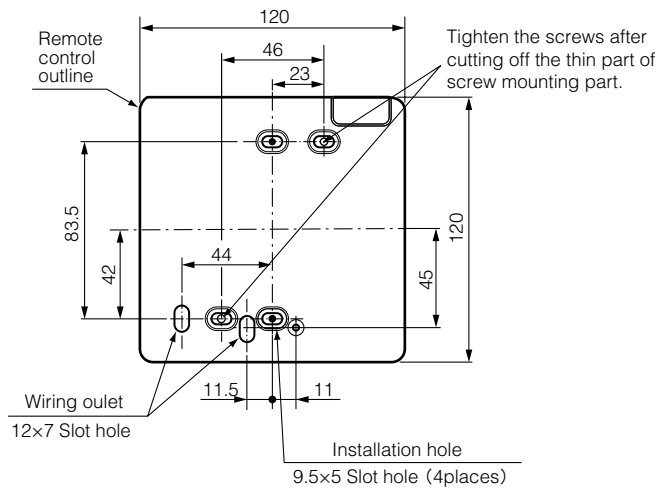
Pulling out from upper left	Pulling out from center
X wiring : 215mm	X wiring : 170mm
Y wiring : 195mm	Y wiring : 190mm



**Embedded mounting**



**Remote control installation dimensions**



- (1) Installation screw for remote control  
M4 Screw (2 pieces)

Unit:mm

**Wiring specifications**

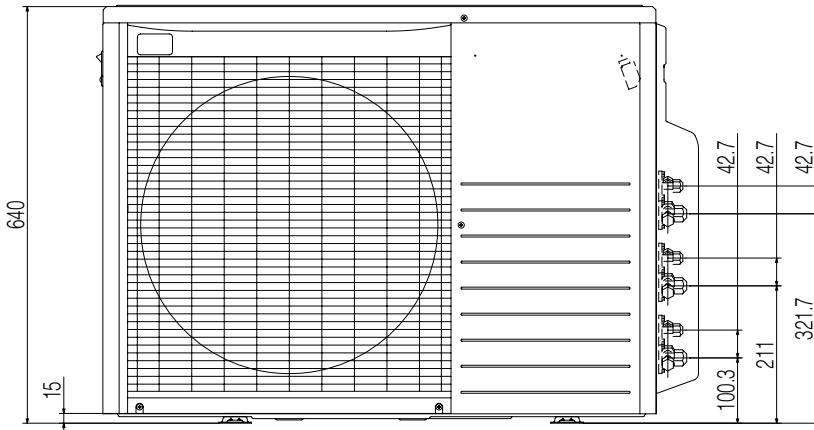
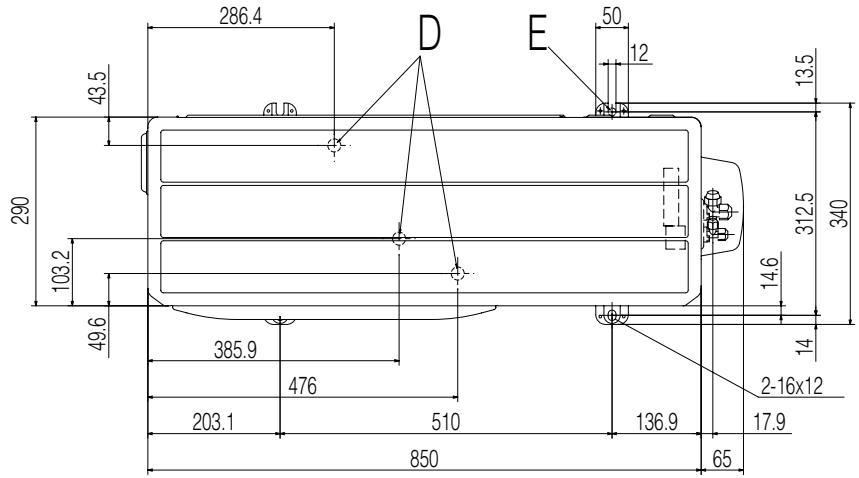
(1) If the prolongation is over 100m, change to the size below.  
But, wiring in the remote controller case should be under 0.5mm<sup>2</sup>. Change the wire size outside of the case according to wire connecting. Waterproof treatment is necessary at the wire connecting section. Be careful about contact failure.

Length	Wiring thickness
100 to 200m	0.5mm <sup>2</sup> x2 cores
Under 300m	0.75mm <sup>2</sup> x2 cores
Under 400m	1.25mm <sup>2</sup> x2 cores
Under 600m	2.0mm <sup>2</sup> x2 cores

PJZ000Z274

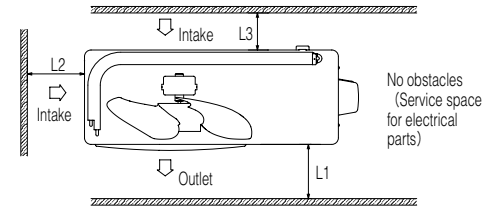
**(3) Outdoor units**  
**Model SCM60ZJ-S**

Symbol	Content	
A	Service valve connection (gas side)	φ9.52 (3/8") (Flare)
B	Service valve connection (liquid side)	φ6.35 (1/4") (Flare)
C	Pipe/cable draw-out hole	
D	Drain discharge hole	φ20 x 3 places
E	Anchor bolt hole	M10 x 4 places



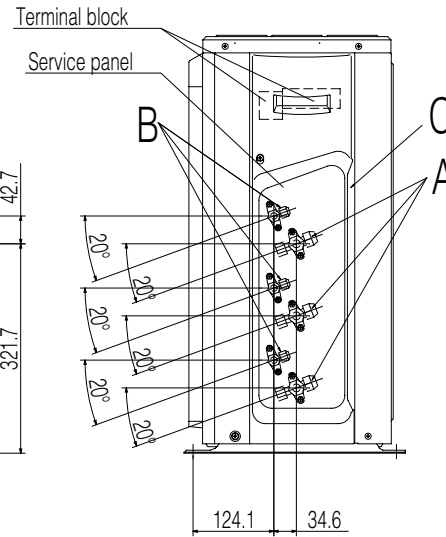
**Note**

- (1) It must not be surrounded by walls on four sides.
- (2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more than 15mm.
- (3) Where the unit is subjected to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
- (4) Leave 1.2m or more space above the unit.
- (5) A wall in front of the blower outlet must not exceed the unit's height.
- (6) The model name label is attached on the service panel.



Minimum installation space

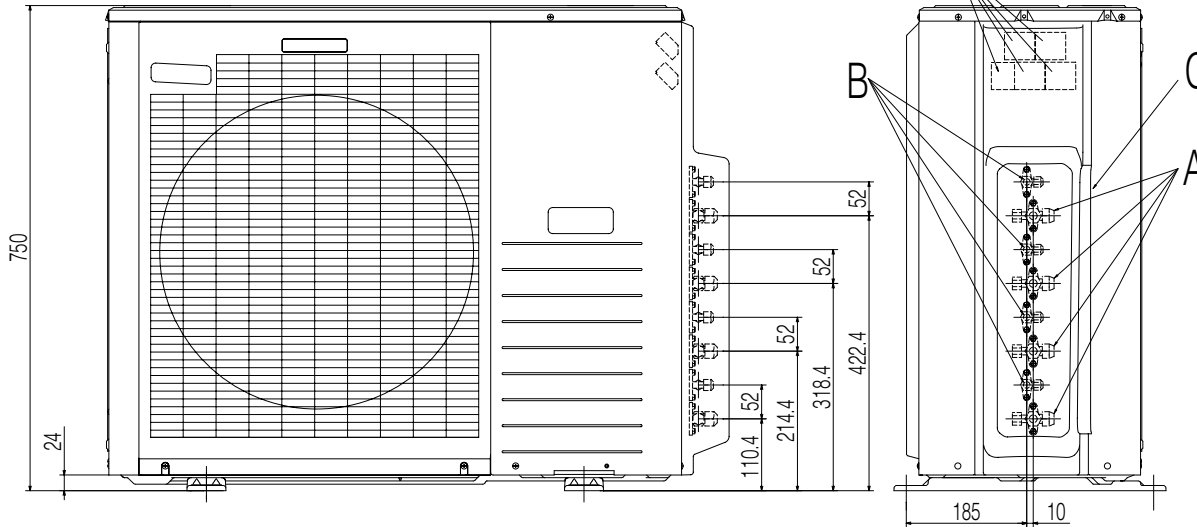
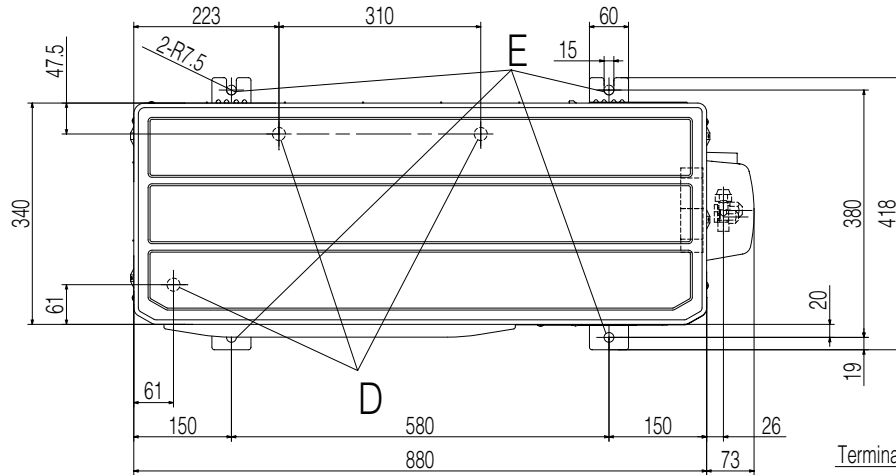
Examples of Installation	
Dimensions	
L1	600
L2	100
L3	100



Unit:mm

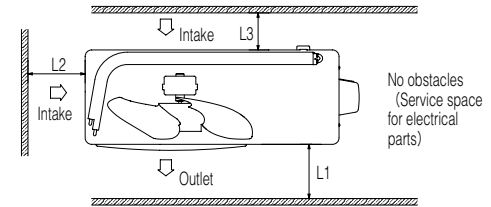
RWC000Z229

Symbol	Content	
A	Service valve connection (gas side)	φ9.52 (3/8") (Flare)
B	Service valve connection (liquid side)	φ6.35 (1/4") (Flare)
C	Pipe/cable draw-out hole	
D	Drain discharge hole	φ20 x 3 places
E	Anchor bolt hole	M10 x 4 places



Notes

- (1) It must not be surrounded by walls on four sides.
- (2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more than 15mm.
- (3) Where the unit is subjected to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
- (4) Leave 1.2m or more space above the unit.
- (5) A wall in front of the blower outlet must not exceed the unit's height.
- (6) The model name label is attached on the rear panel.



Minimum installation space

Examples of Installation	
Dimensions	
L1	600
L2	100
L3	100

Unit:mm

Model SCM80ZJ-S

### 3. ELECTRICAL WIRING

(1) Indoor units

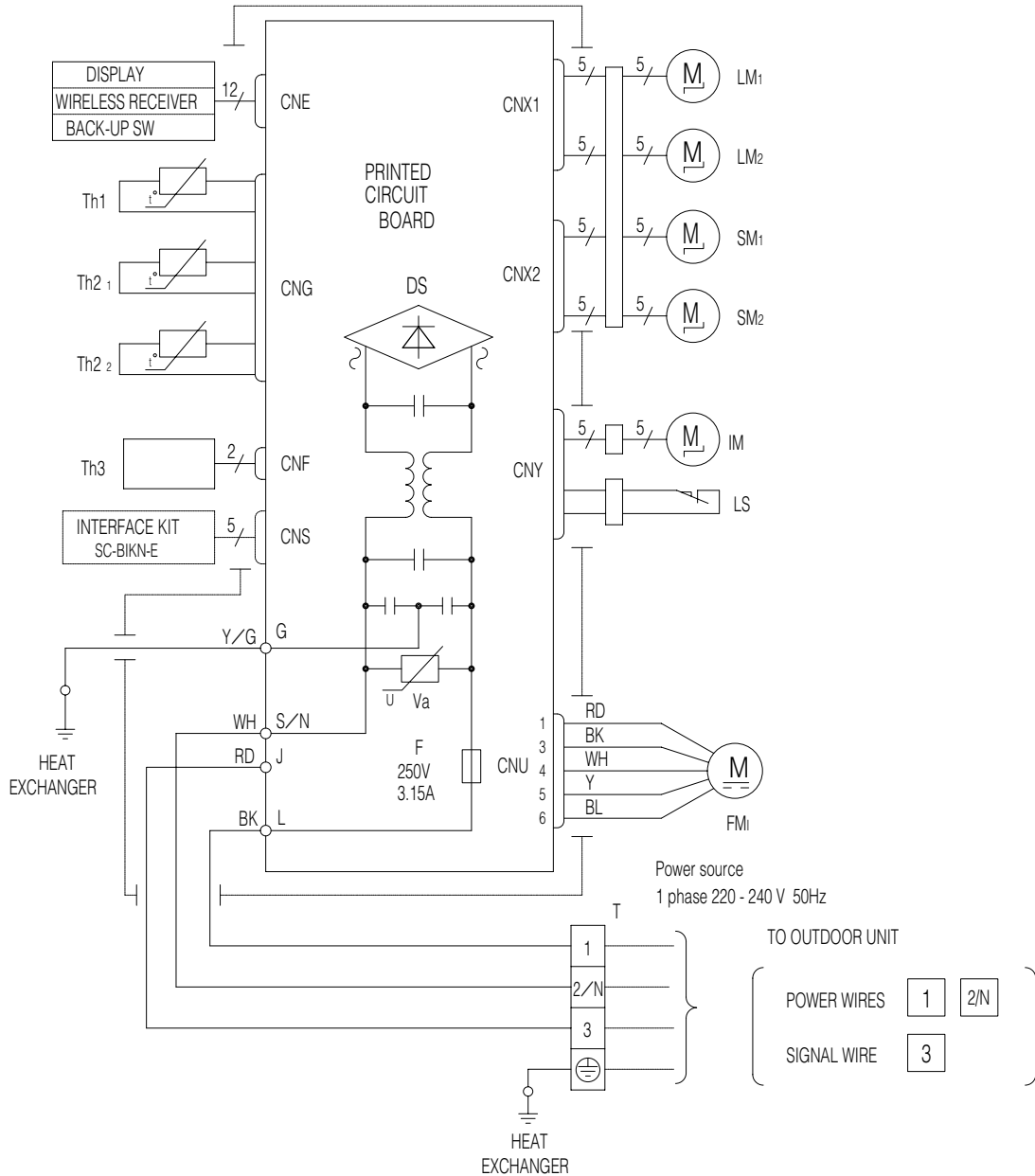
(a) Wall mounted type (SRK)

Models SRK20ZJX-S, 25ZJX-S, 35ZJX-S, 50ZJX-S, 60ZJX-S

Item	Description
CNE-CNY	Connector
FM <sub>i</sub>	Fan motor
SM <sub>1,2</sub>	Flap motor
LM <sub>1,2</sub>	Louver motor
IM	Inlet motor
Th1	Room temp. sensor
Th2 <sub>1,2</sub>	Heat exch. sensor
Th3	Humidity sensor (50,60 only)
LS	Limit switch
DS	Diode stack
F	Fuse
T	Terminal block
Va	Varistor

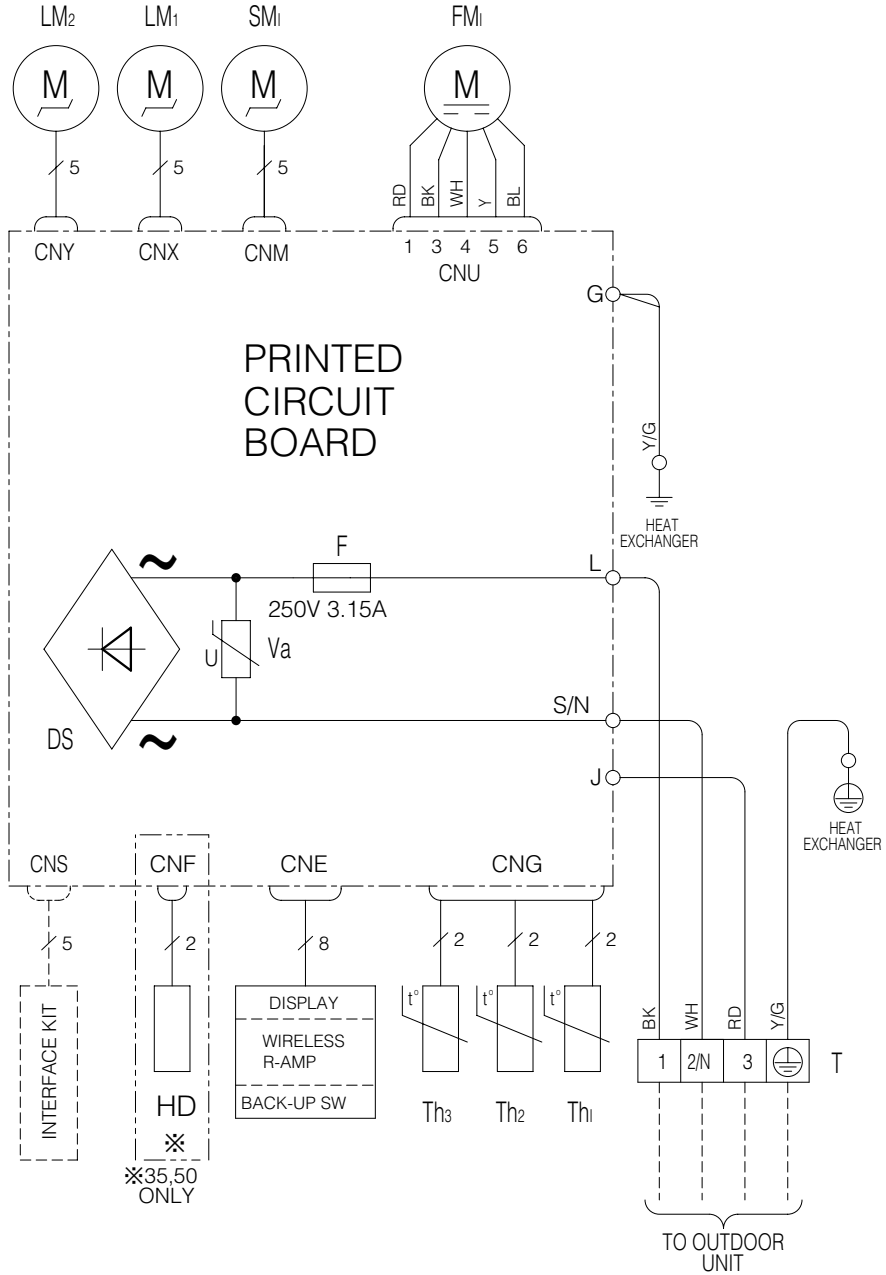
#### Color Marks

Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
Y	Yellow
Y/G	Yellow/Green



RWA000Z227

RWA000Z226



Item	Description
CNE-CNY	Connector
FM <sub>1</sub>	Fan motor
SM <sub>1</sub>	Flap motor
LM <sub>1,2</sub>	Louver motor
HD	Humidity sensor
Th <sub>1</sub>	Room temp. sensor
Th <sub>2,3</sub>	Heat exch. sensor
DS	Diode stack
F	Fuse
T	Terminal block
Va	Varistor

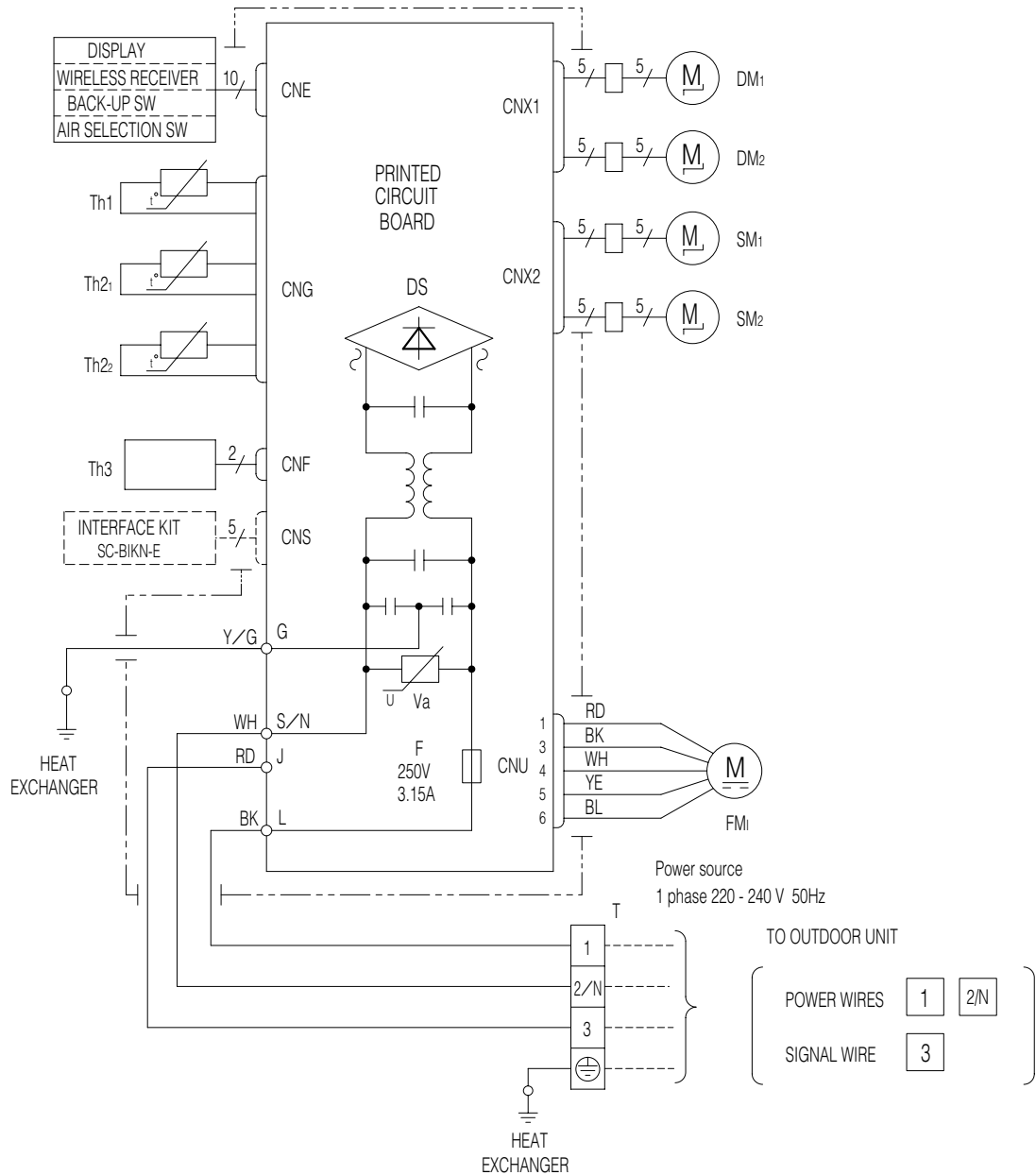
Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
Y	Yellow
Y/G	Yellow/Green

Power Source  
1 Phase  
220/230/240V 50Hz

Models SRK20ZJ-S, 25ZJ-S, 35ZJ-S, 50ZJ-S



RWB000Z052



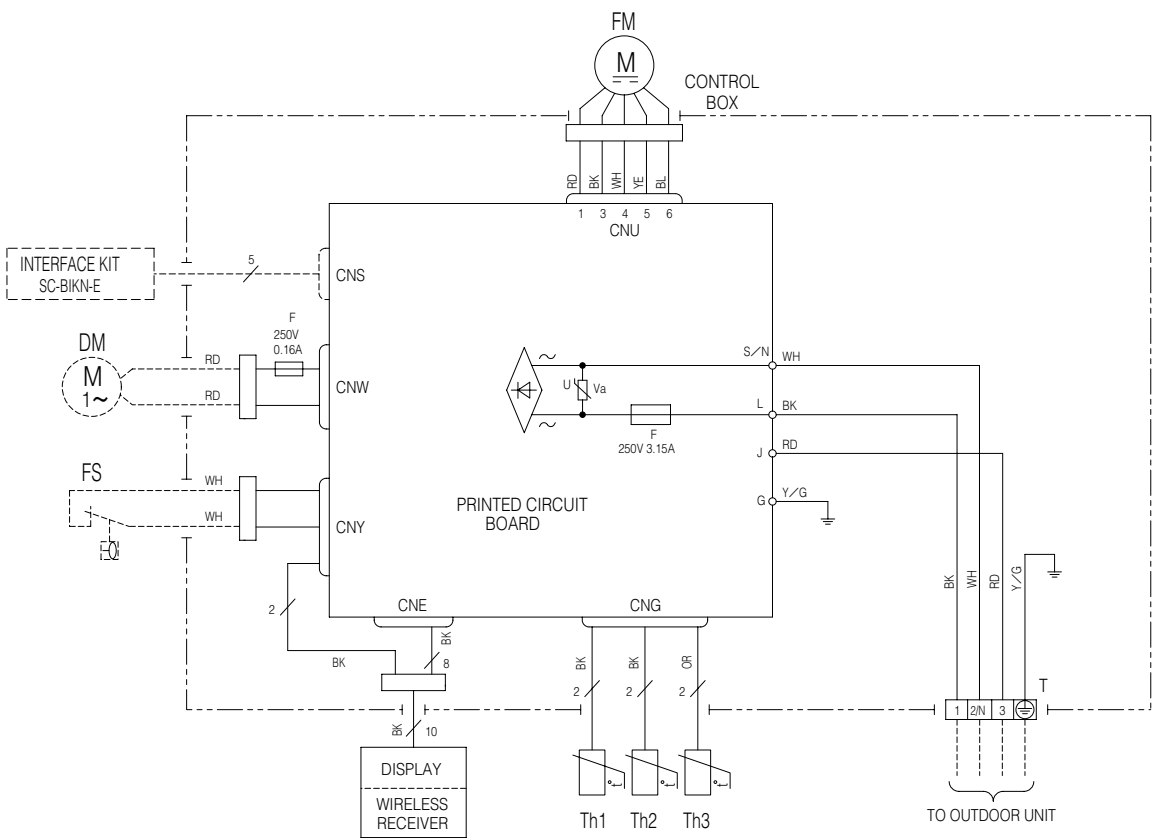
Item	Description
CNE-CN2	Connector
FM <sub>i</sub>	Fan motor
SM <sub>1,2</sub>	Flap motor
DM <sub>1</sub>	Damper motor
DM <sub>2</sub>	Damper arm motor
Th1	Room temp. sensor
Th2, 1,2	Heat exch. sensor
Th3	Humidity sensor
DS	Diode stack
F	Fuse
T	Terminal block
Va	Varistor

Color Marks

Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
YE	Yellow
Y/G	Yellow/Green

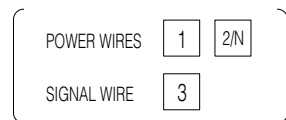
(b) Floor standing type (SRF)  
Models SRF25ZJX-S, 35ZJX-S, 50ZJX-S

(c) Ceiling concealed type (SRR)  
 Models SRR25ZJ-S, 35ZJ-S, 50ZJ-S, 60ZJ-S



Power source  
 1 phase 220 - 240 V 50Hz

TO OUTDOOR UNIT



Color Marks

Mark	Color	Mark	Color
BK	Black	YE	Yellow
BL	Blue	Y/G	Yellow/Green
OR	Orange		
RD	Red		
WH	White		

Meaning of Marks

Item	Description	Item	Description
CNE-CNY	Connector	Th1	Room temp. sensor
F	Fuse	Th2	Heat exch. sensor 1
FM <sub>1</sub>	Fan motor	Th3	Heat exch. sensor 2
DM	Drain motor	T	Terminal block
FS	Float Switch	Va	Varistor

RWA000Z230

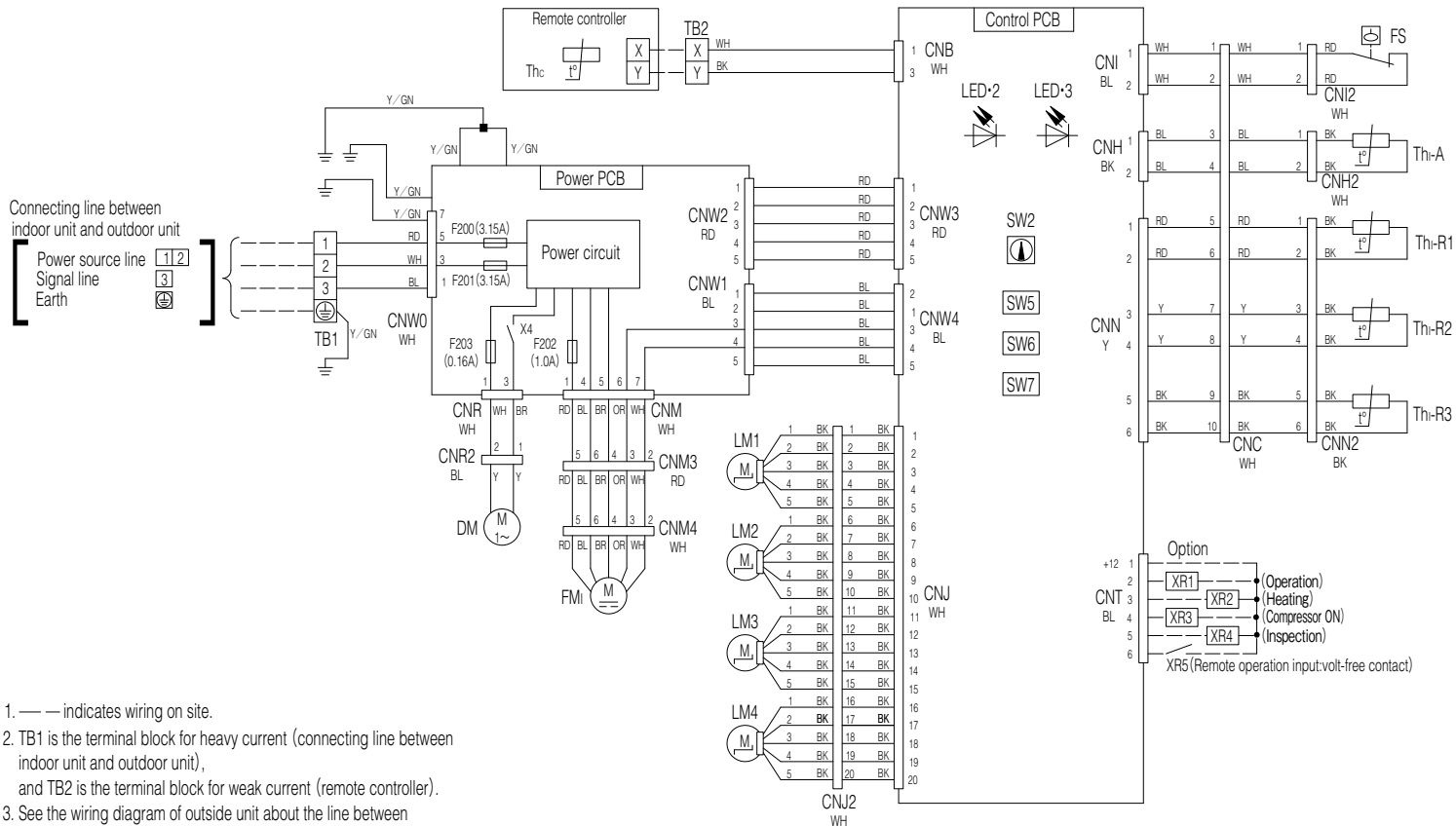
CNB~Z	Connector
DM	Drain motor
F200~203	Fuse
FM i	Fan motor
FS	Float switch
LED-2	Indication lamp (Green-Normal operation)

LED-3	Indication lamp (Red-Inspection)
LM1~4	Louver motor
SW2	Remote controller communication address
SW5	Plural units Master / Slave setting
SW6	Model capacity setting
SW7-1	Operation check, Drain motor test run

TB1	Terminal block (Power source) (□ mark)
TB2	Terminal block (Signal line) (□ mark)
Thc	Thermistor (Remote controller)
Th-A	Thermistor (Return air)
Th-R1,2,3	Thermistor (Heat exchanger)
X4	Relay for DM
■ mark	Closed-end connector

Color Marks

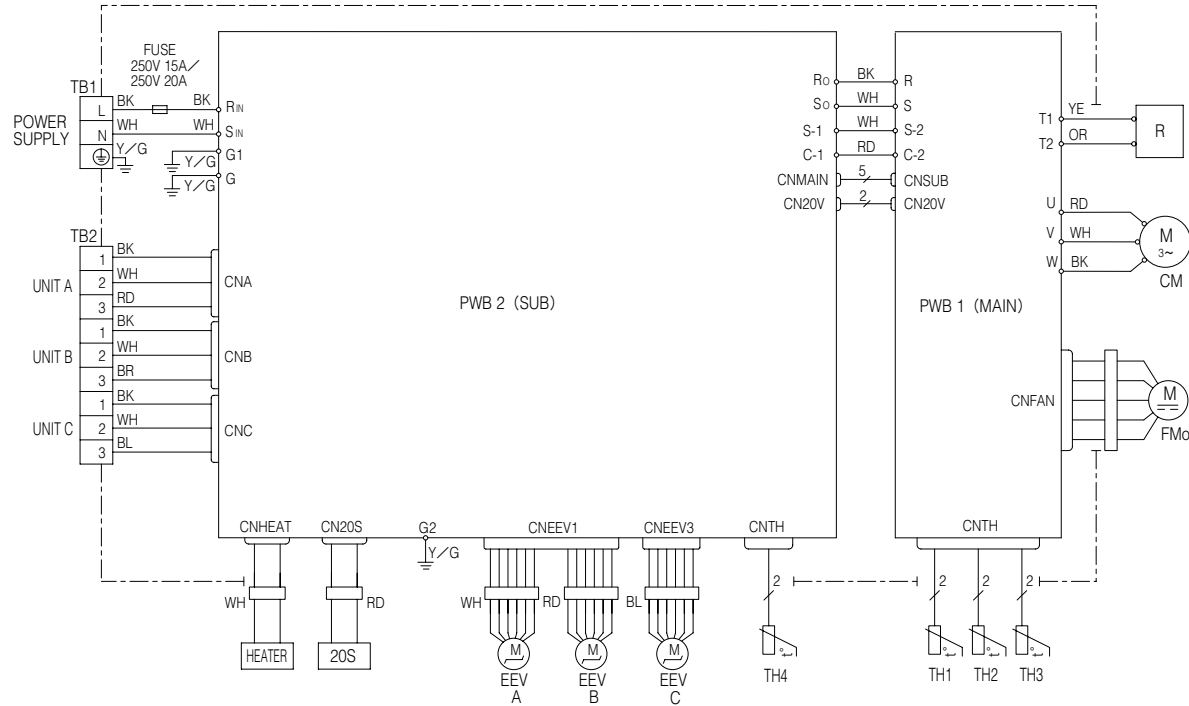
Mark	Color
BK	Black
BL	Blue
BR	Brown
OR	Orange
RD	Red
WH	White
Y	Yellow
Y/GN	Yellow / Green



(d) Ceiling cassette-4way compact type (FDTC)  
Models FDTCSVD, 35VD, 50VD, 60VD

PJA003Z340

WIRING DIAGRAM



Indication lamp	Color	Function
Led e (1)	Red	Warning lamp
Self diagnosis function by led e		
1 Time flash	Current cut	
2 Time flash	Trouble of outdoor unit	
3 Time flash	Over current	
4 Time flash	Transmission error	
5 Time flash	Over heat of compressor	
6 Time flash	Error of signal transmission	
7 Time flash	Lock of compressor	
8 Time flash	Sensor error (Except discharge pipe sensor)	
Light on	Outdoor fan motor error	
Four sec light and four sec off	Discharge pipe sensor error	
Caution • When the compressor does not run Immediately after hitting on the button,wait for 5 to 10 minutes. (There is possibility of delayed start.)		
• High voltage is produced in the control box. don't touch electrical parts in the control box for 5 minutes after cutting power supply.		

(2) Outdoor units  
Model SCM60Z-JS

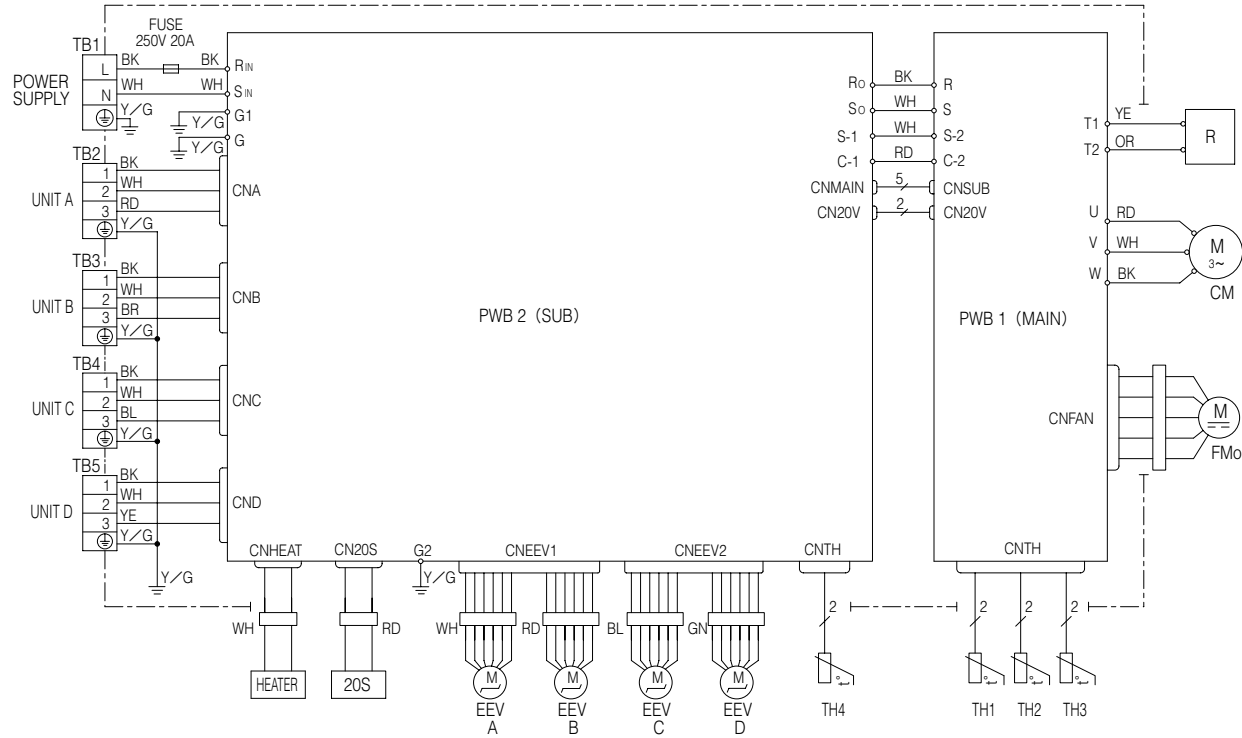
Color Marks

Mark	Color	Mark	Color
BK	Black	BR	Brown
BL	Blue	YE	Yellow
RD	Red	Y/G	Yellow/Green
WH	White		
OR	Orange		

Meaning of Marks

Item	Description	Item	Description
CNA-CN20S	Connector	R	Reactor
20S	4 Way valve (coil)	TB1,TB2	Terminal block
CM	Compressor motor	Th1	Heat exchanger sensor (outdoor unit)
EEV A,EEV B	Electric expansion valve (coil)	Th2	Outdoor air temp. sensor
EEV C		Th3	Discharge pipe temp. sensor
FMo	Fan motor	Th4	Suction pipe temp. sensor
HEATER	Crank case heater		

RWC000Z234



Indication lamp	Color	Function
Led e (1)	Red	Warning lamp
Self diagnosis function by led e		
1 Time flash		Current cut
2 Time flash		Trouble of outdoor unit
3 Time flash		Over current
4 Time flash		Transmission error
5 Time flash		Over heat of compressor
6 Time flash		Error of signal transmission
7 Time flash		Lock of compressor
8 Time flash		Sensor error (Except discharge pipe sensor)
Light on		Outdoor fan motor error
Four sec light and four sec off		Discharge pipe sensor error
Caution • When the compressor does not run Immediately after hitting on the button, wait for 5 to 10 minutes. (There is possibility of delayed start.)  • High voltage is produced in the control box. don't touch electrical parts in the control box for 5 minutes after cutting power supply.		

Model SCM80ZJ-S

Color Marks

Mark	Color	Mark	Color
BK	Black	RD	Red
BL	Blue	WH	White
BR	Brown	YE	Yellow
GN	Green	Y/G	Yellow/Green
OR	Orange		

Meaning of Marks

Item	Description	Item	Description
CNA-CN20S	Connector	R	Reactor
20S	4 Way valve (coil)	TB1~5	Terminal block
CM	Compressor motor	Th1	Heat exchanger sensor (outdoor unit)
EEV A, EEV B	Electric expansion valve (coil)	Th2	Outdoor air temp. sensor
EEV C, EEV D		Th3	Discharge pipe temp. sensor
FMo	Fan motor	Th4	Suction pipe temp. sensor
HEATER	Crank case heater		

RWC000Z230

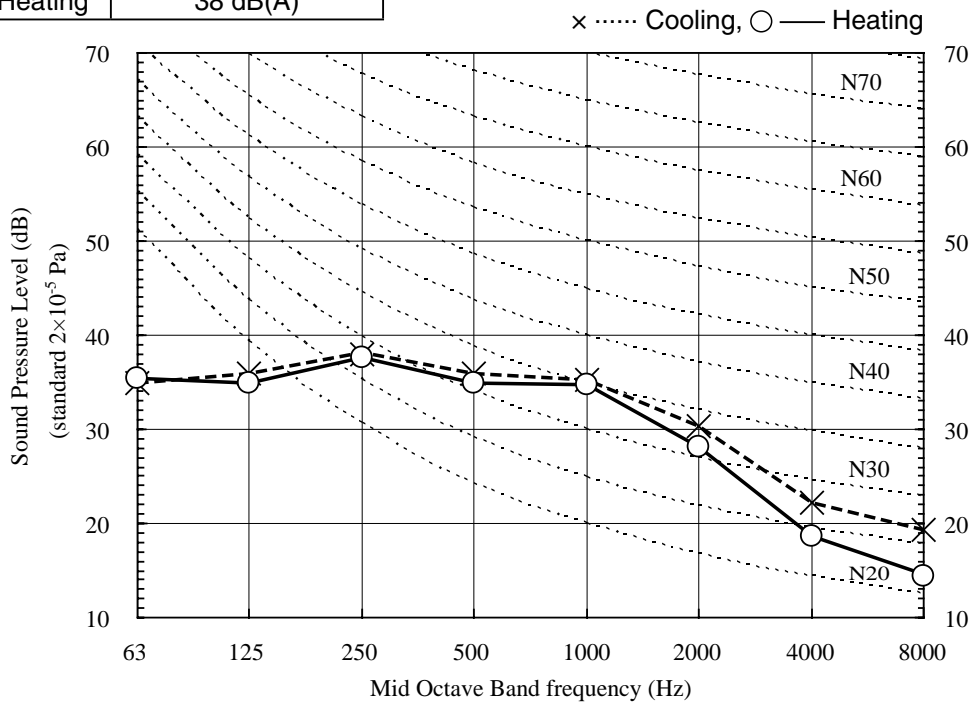
# 4. NOISE LEVEL

## (1) Indoor units

### (a) Wall mounted type (SRK)

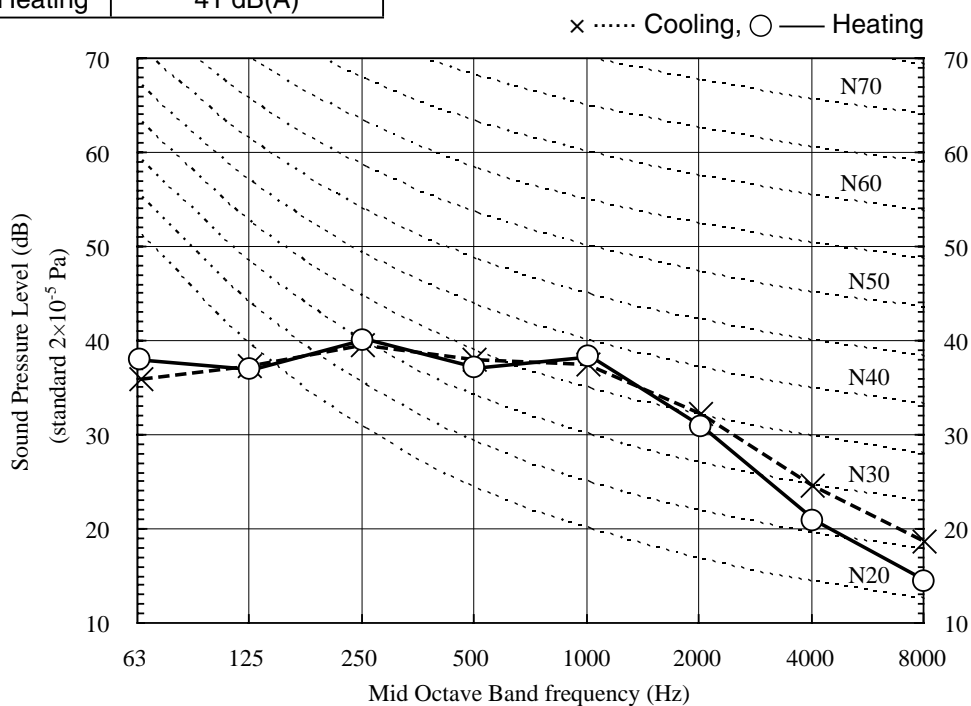
Condition ISO-T1, JIS C9612

Model	SRK20ZJX-S	
Noise Level	Cooling	39 dB(A)
	Heating	38 dB(A)



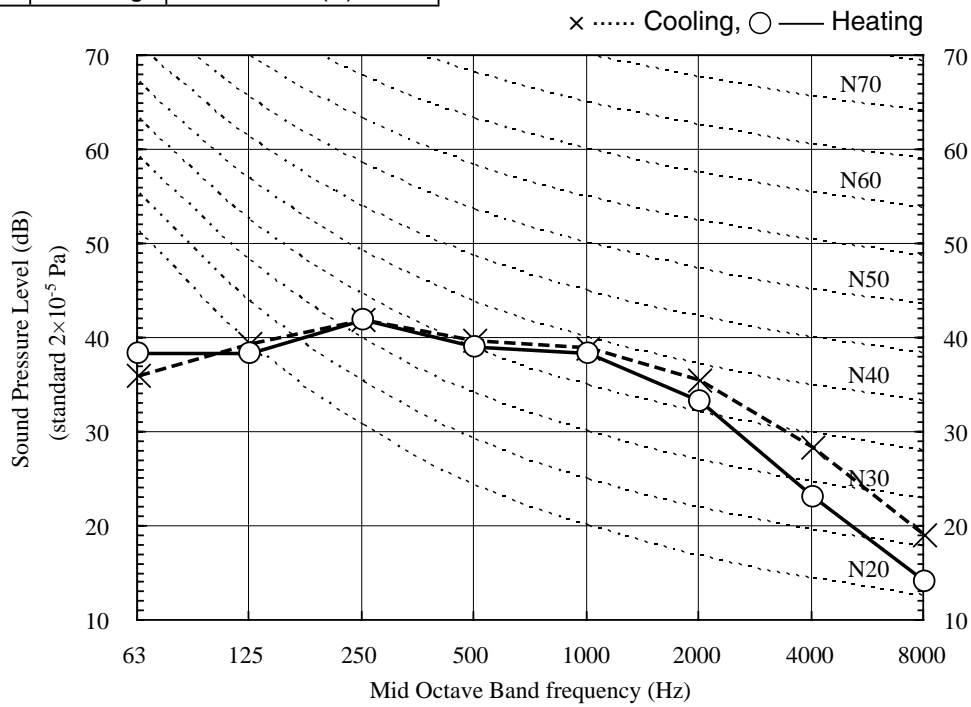
Condition ISO-T1, JIS C9612

Model	SRK25ZJX-S	
Noise Level	Cooling	41 dB(A)
	Heating	41 dB(A)



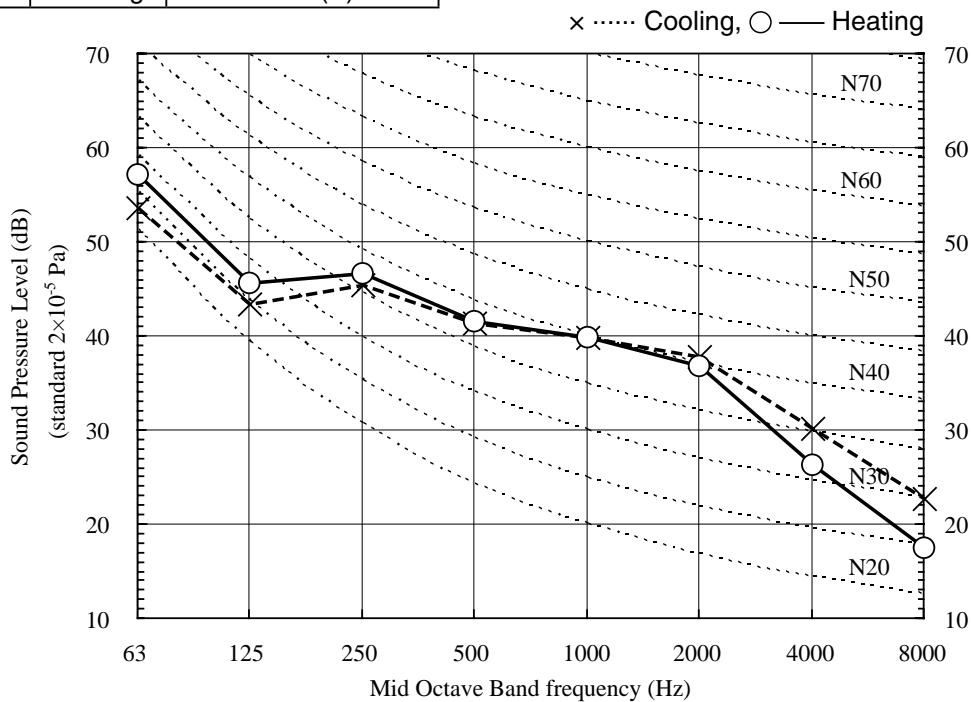
Condition ISO-T1, JIS C9612

Model	SRK35ZJX-S	
Noise Level	Cooling	43 dB(A)
	Heating	42 dB(A)



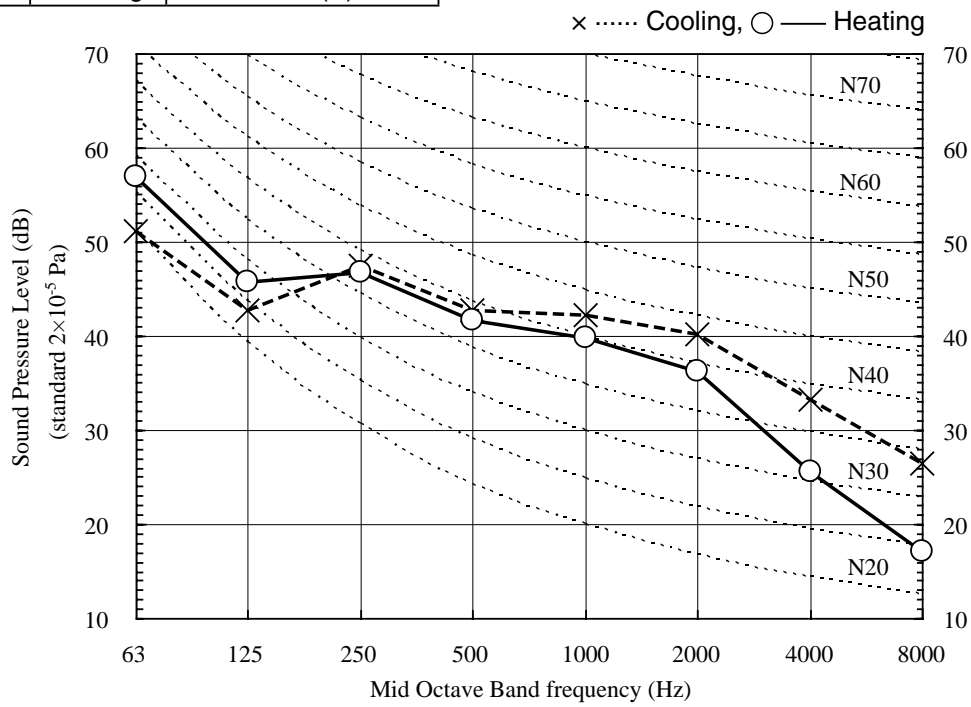
Condition ISO-T1, JIS C9612

Model	SRK50ZJX-S	
Noise Level	Cooling	45 dB(A)
	Heating	45 dB(A)



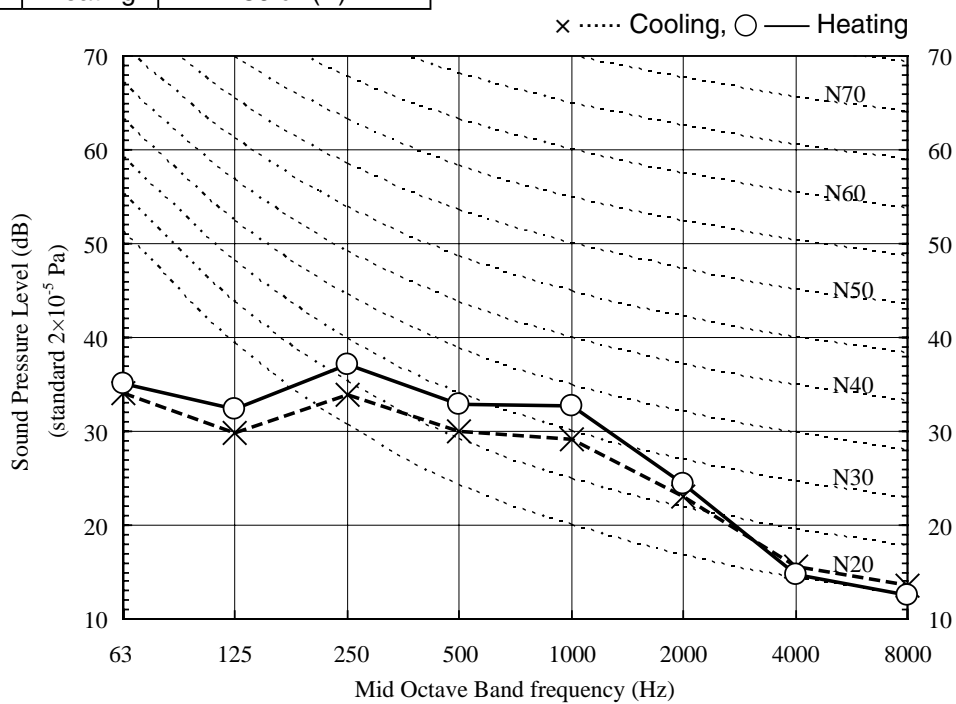
Condition ISO-T1, JIS C9612

Model	SRK60ZJX-S	
Noise Level	Cooling	47 dB(A)
	Heating	45 dB(A)



Condition ISO-T1, JIS C9612

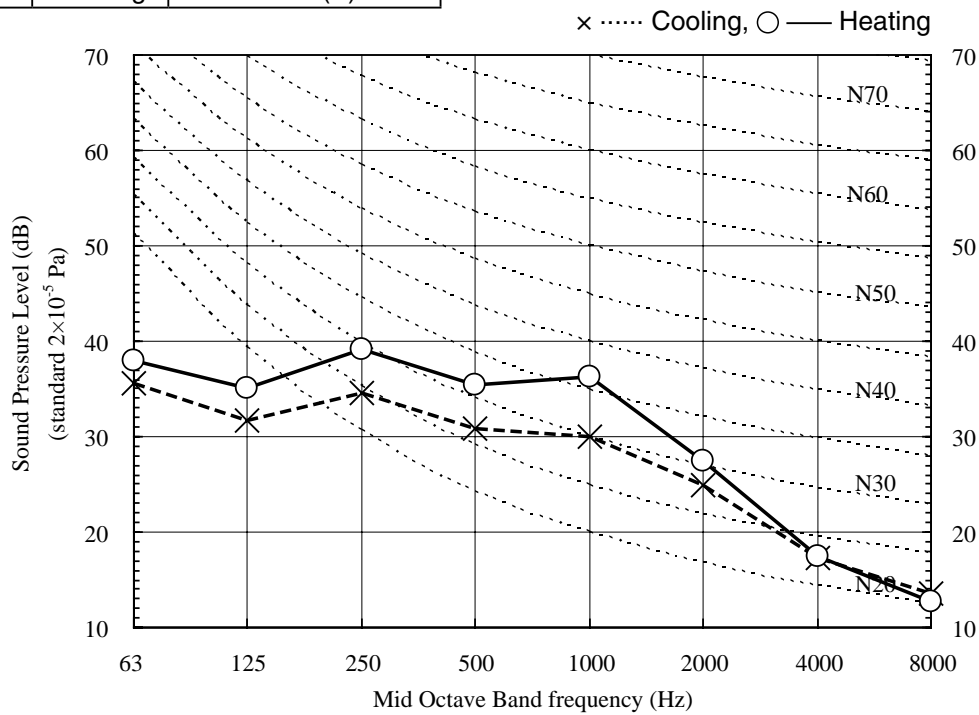
Model	SRK20ZJ-S	
Noise Level	Cooling	33 dB(A)
	Heating	36 dB(A)





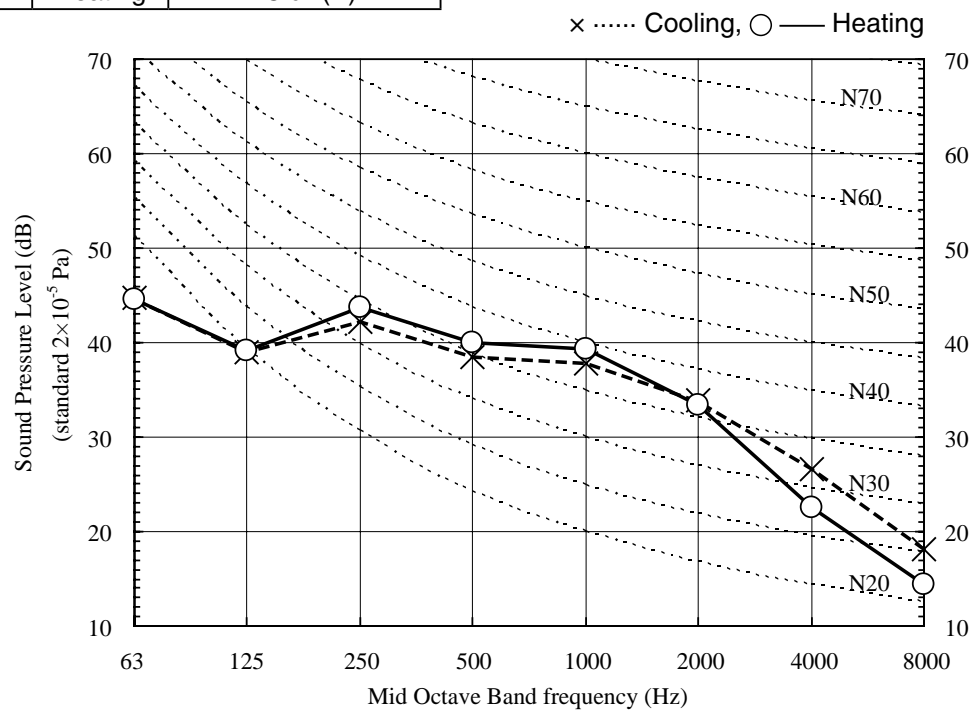
Condition ISO-T1, JIS C9612

Model	SRK25ZJ-S	
Noise Level	Cooling	34 dB(A)
	Heating	39 dB(A)



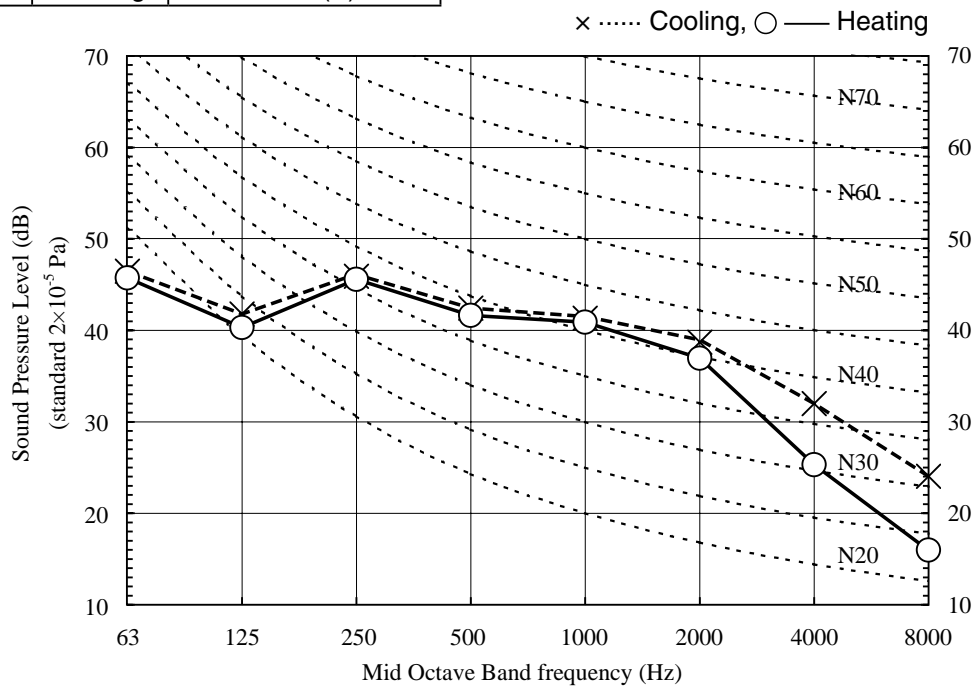
Condition ISO-T1, JIS C9612

Model	SRK35ZJ-S	
Noise Level	Cooling	42 dB(A)
	Heating	43 dB(A)



Condition ISO-T1, JIS C9612

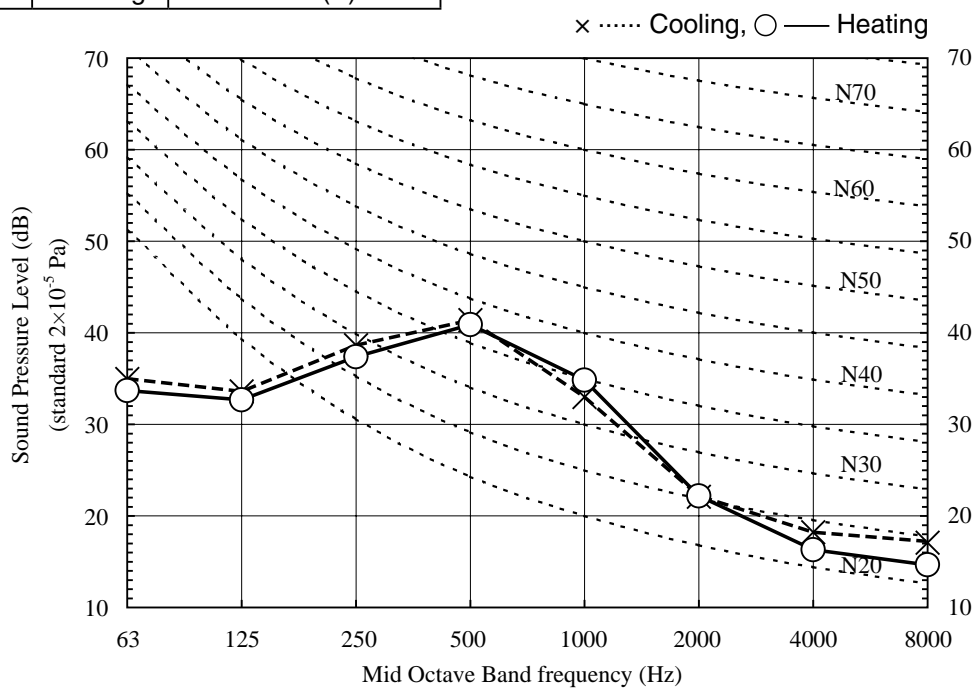
Model	SRK50ZJ-S	
Noise Level	Cooling	46 dB(A)
	Heating	45 dB(A)



(b) Floor standing type (SRF)

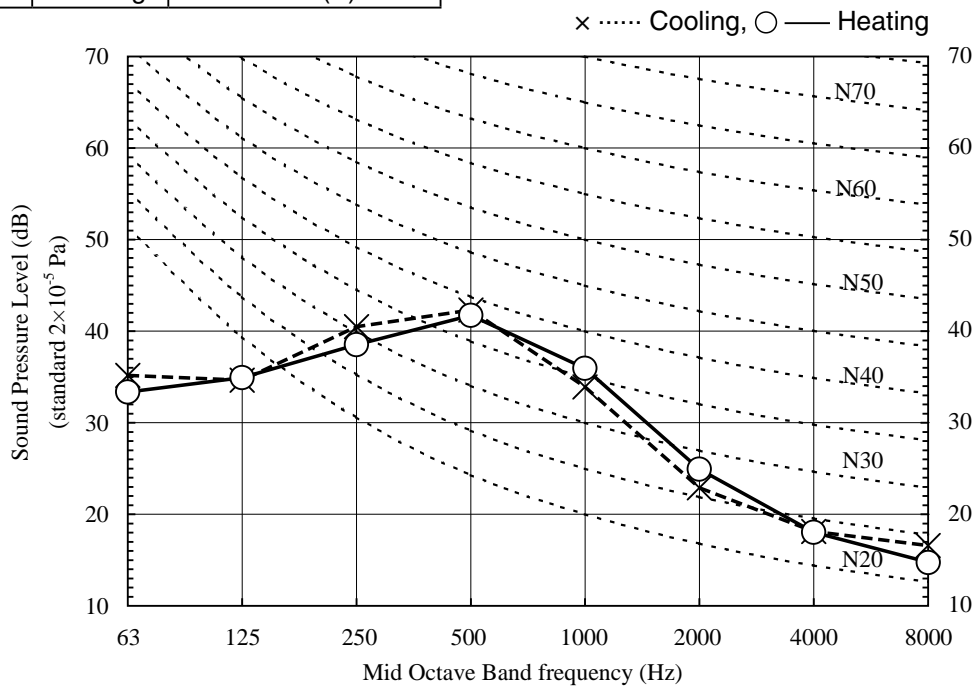
Condition ISO-T1, JIS C9612

Model	SRF25ZJX-S	
Noise Level	Cooling	40 dB(A)
	Heating	40 dB(A)



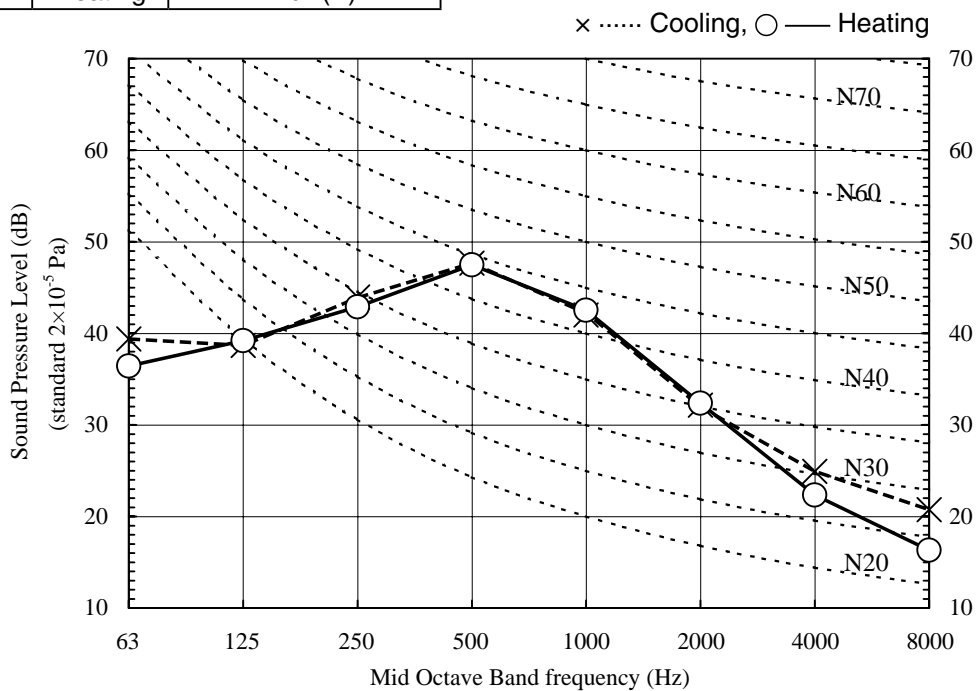
Condition ISO-T1, JIS C9612

Model	SRF35ZJX-S	
Noise Level	Cooling	41 dB(A)
	Heating	41 dB(A)



Condition ISO-T1, JIS C9612

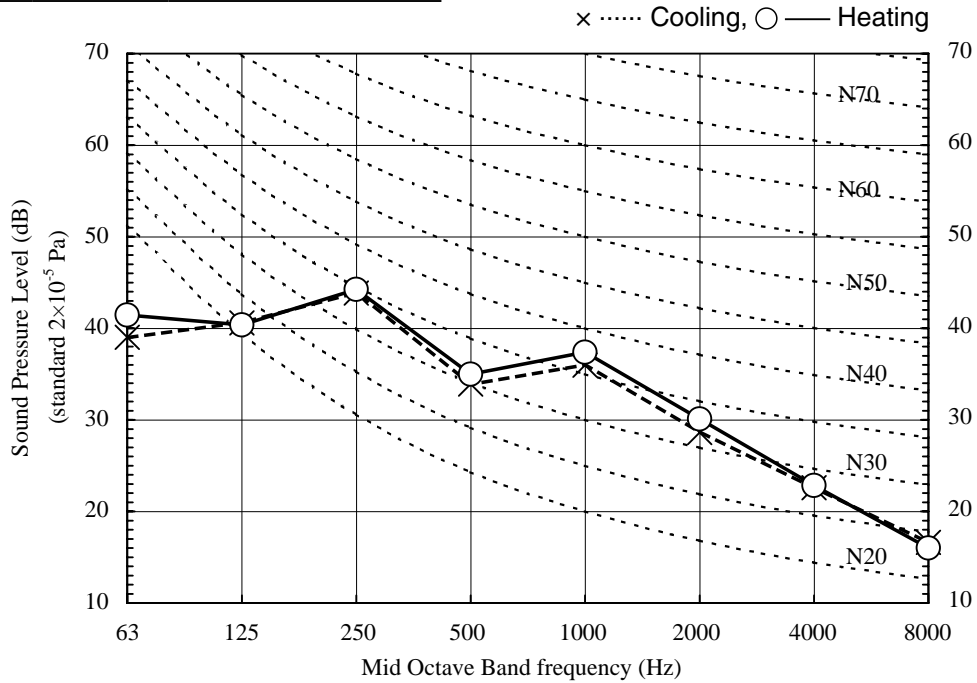
Model	SRF50ZJX-S	
Noise Level	Cooling	47 dB(A)
	Heating	47 dB(A)



(c) Ceiling concealed type (SRR)

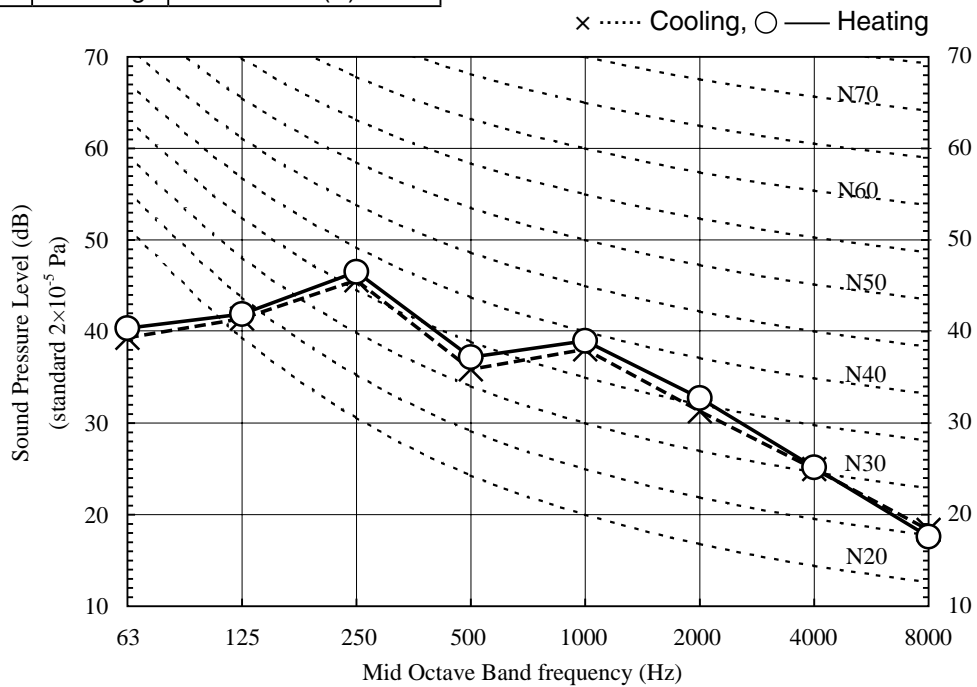
Condition ISO-T1, JIS C9612

Model	SRR25ZJ-S	
Noise Level	Cooling	40 dB(A)
	Heating	41 dB(A)



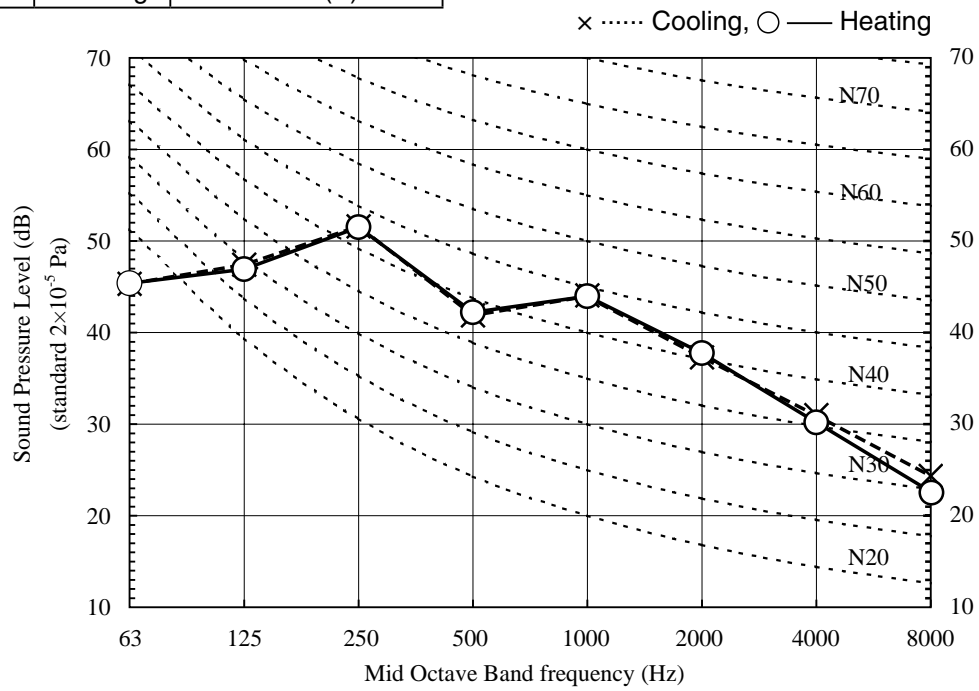
Condition ISO-T1, JIS C9612

Model	SRR35ZJ-S	
Noise Level	Cooling	42 dB(A)
	Heating	43 dB(A)



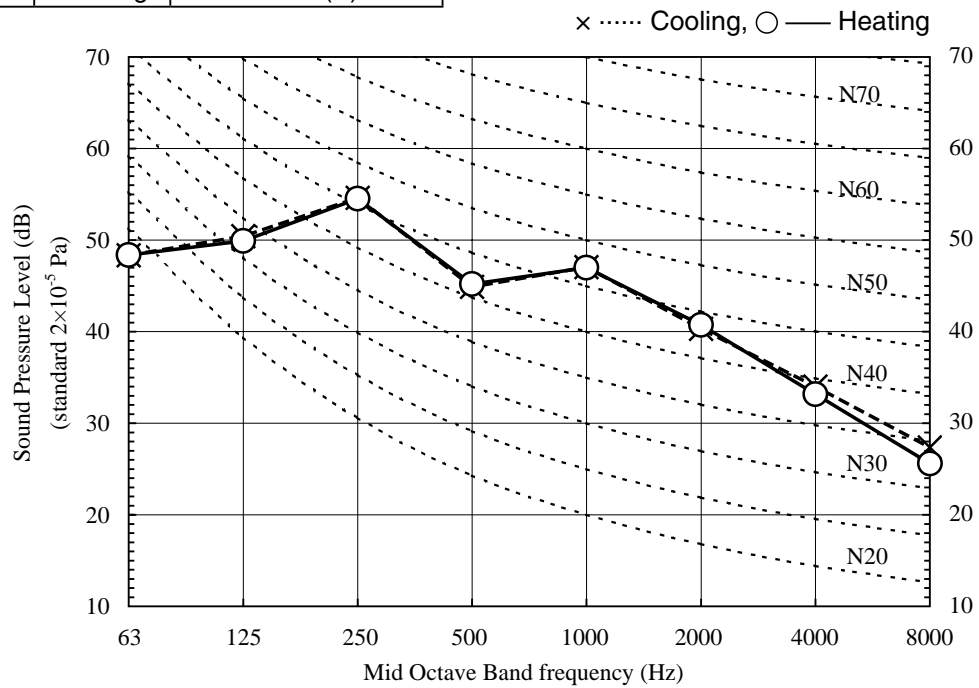
Condition ISO-T1, JIS C9612

Model	SRR50ZJ-S	
Noise Level	Cooling	48 dB(A)
	Heating	48 dB(A)



Condition ISO-T1, JIS C9612

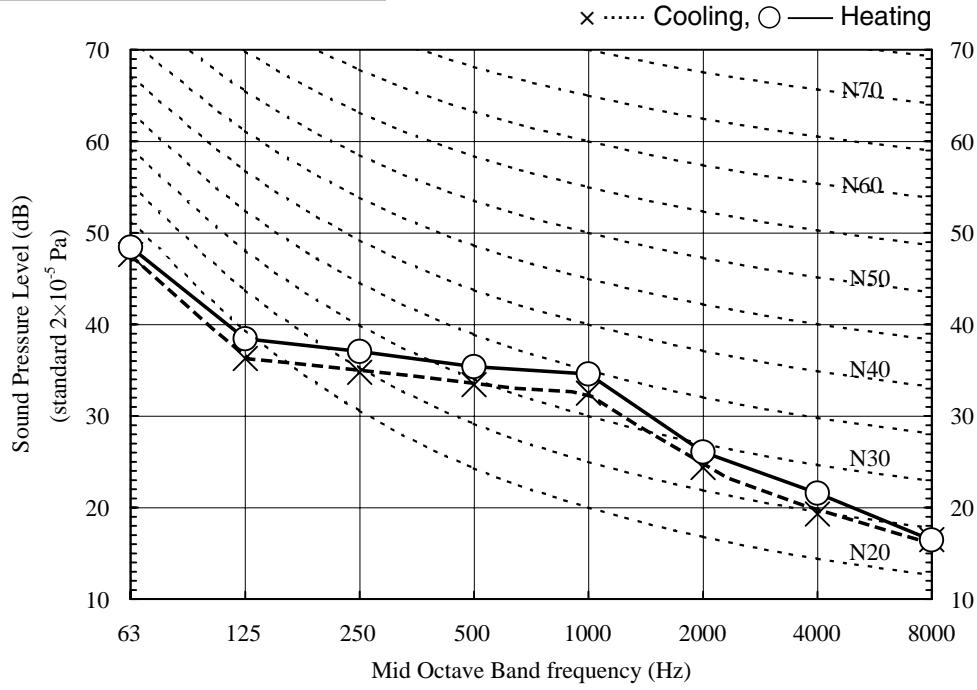
Model	SRR60ZJ-S	
Noise Level	Cooling	51 dB(A)
	Heating	51 dB(A)



(d) Ceiling cassette-4way compact type (FDTC)

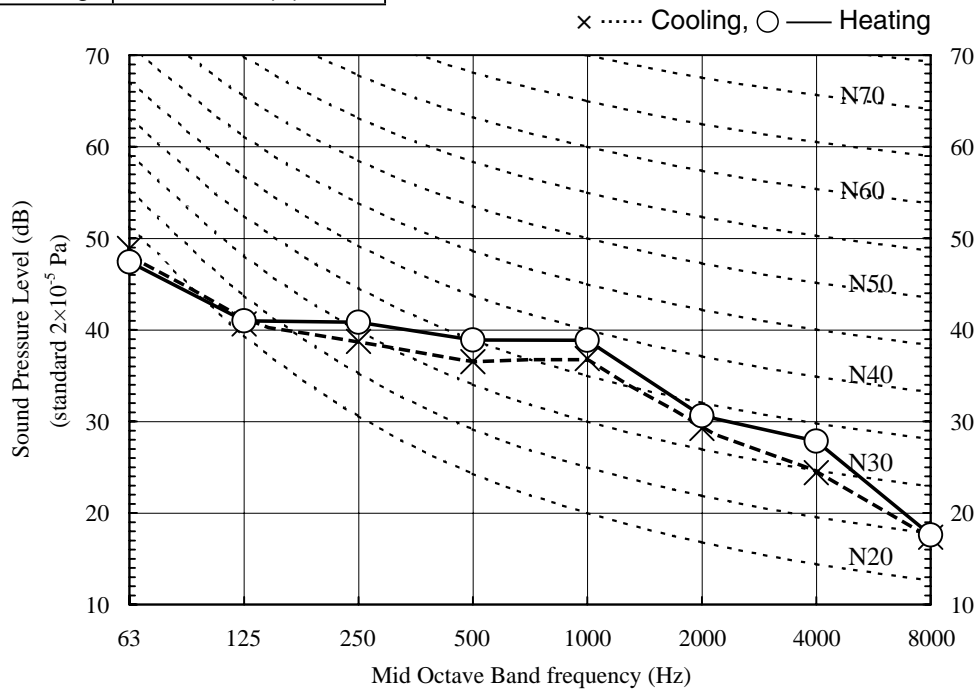
Condition ISO-T1, JIS C9612

Model	FDTC25VD	
Noise Level	Cooling	36 dB(A)
	Heating	38 dB(A)



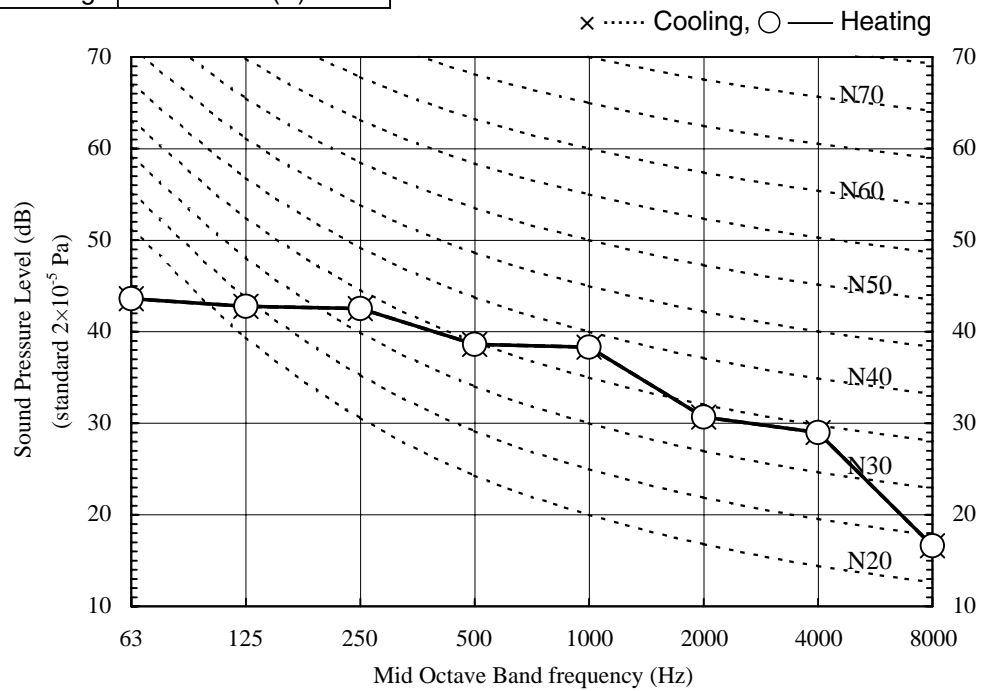
Condition ISO-T1, JIS C9612

Model	FDTC35VD	
Noise Level	Cooling	40 dB(A)
	Heating	42 dB(A)



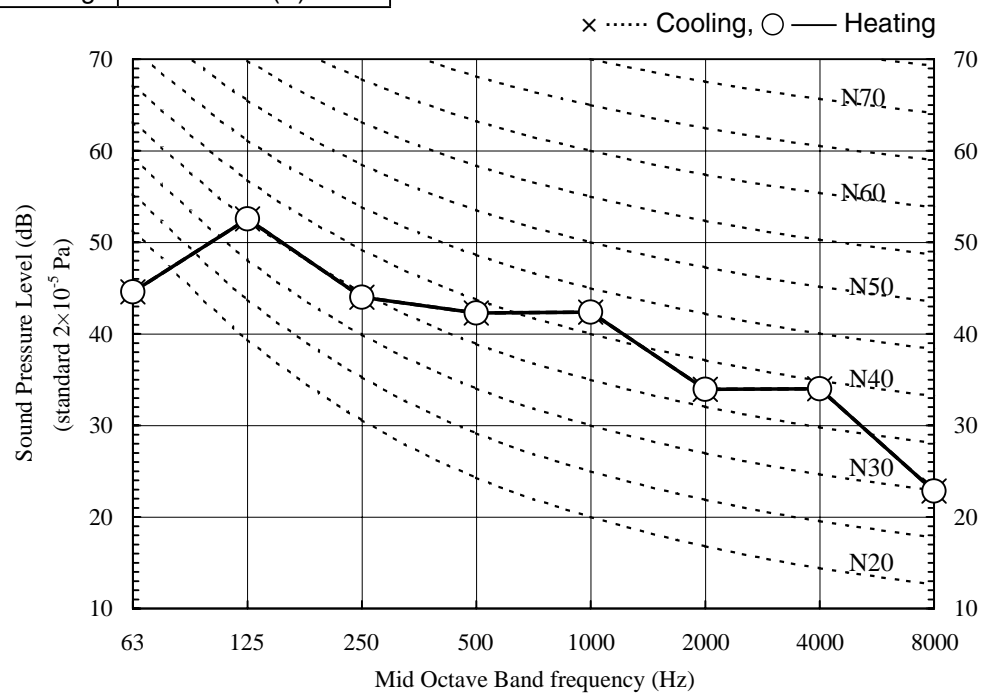
Condition ISO-T1, JIS C9612

Model	FDTC50VD	
Noise	Cooling	42 dB(A)
Level	Heating	42 dB(A)



Condition ISO-T1, JIS C9612

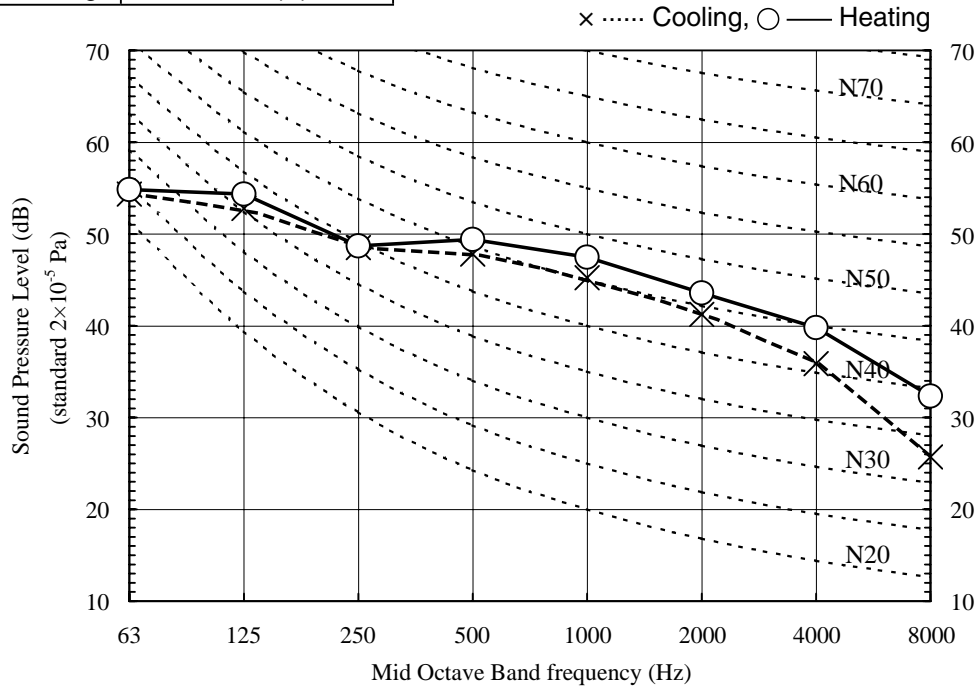
Model	FDTC60VD	
Noise	Cooling	46 dB(A)
Level	Heating	46 dB(A)



(2) Outdoor units

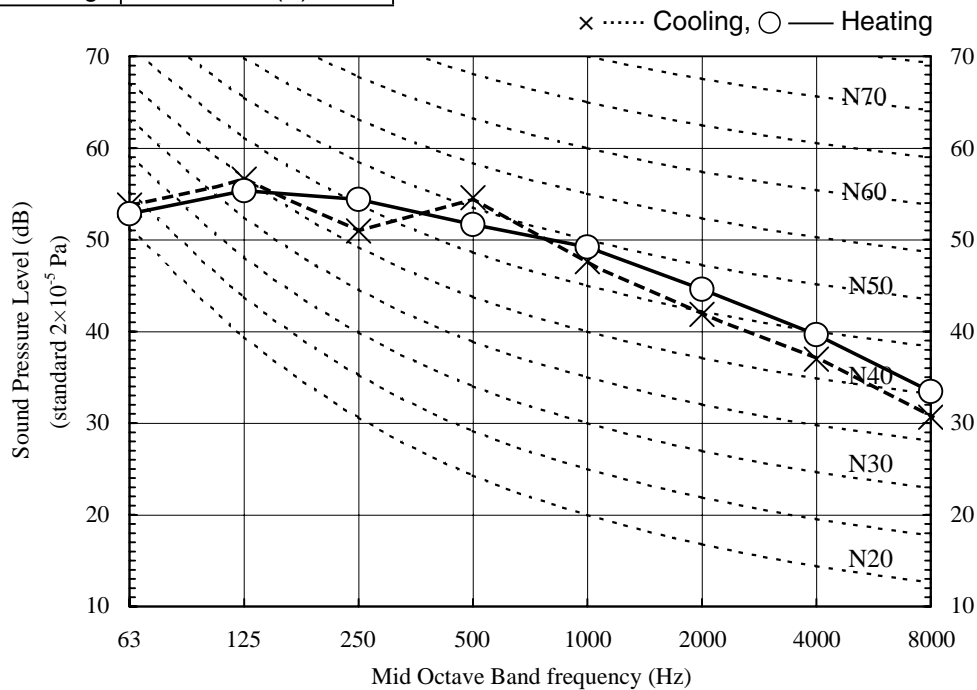
Condition ISO-T1, JIS C9612

Model	SCM60ZJ-S	
Noise Level	Cooling	50 dB(A)
	Heating	52 dB(A)



Condition ISO-T1, JIS C9612

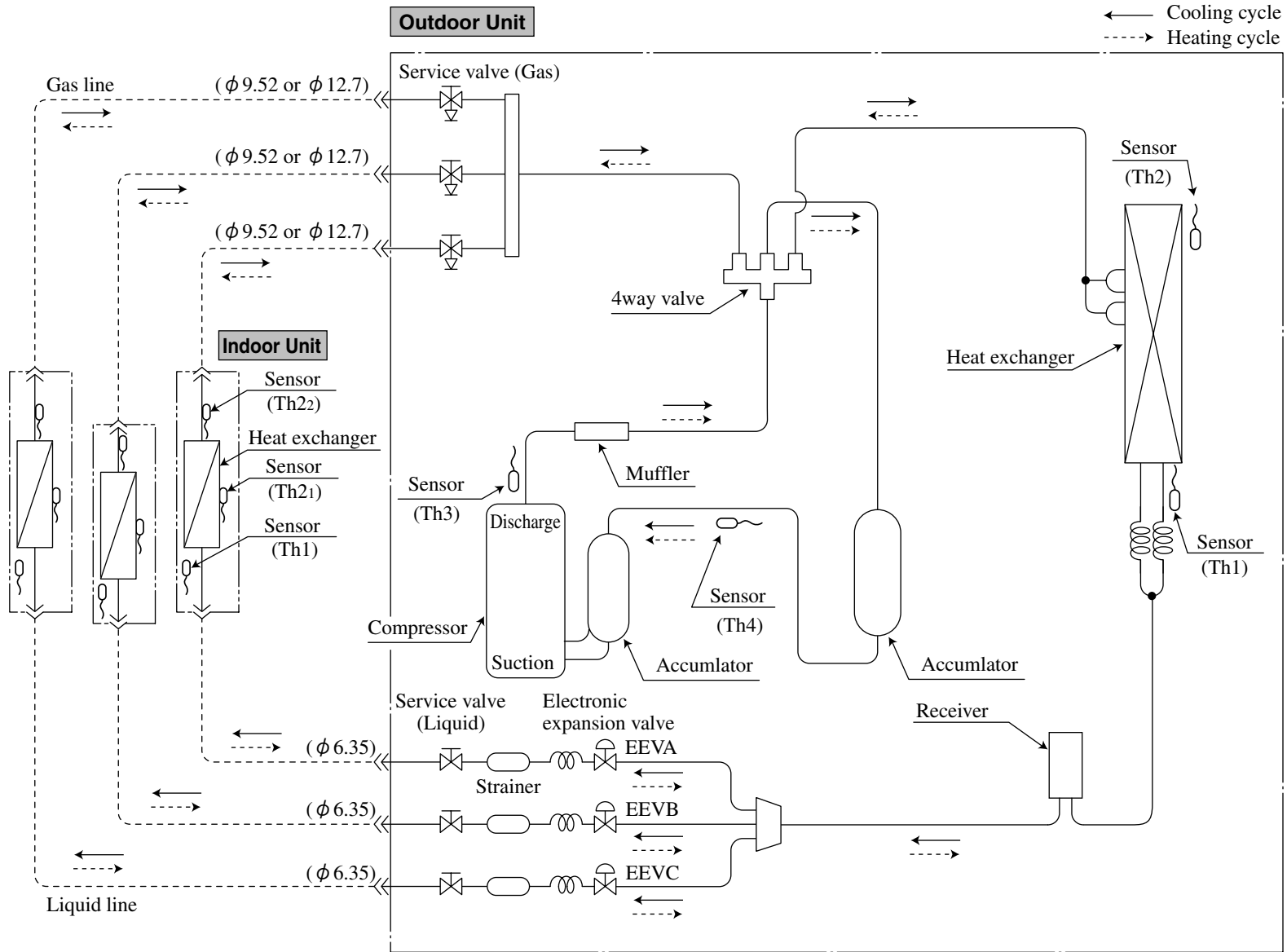
Model	SCM80ZJ-S	
Noise Level	Cooling	54 dB(A)
	Heating	54 dB(A)





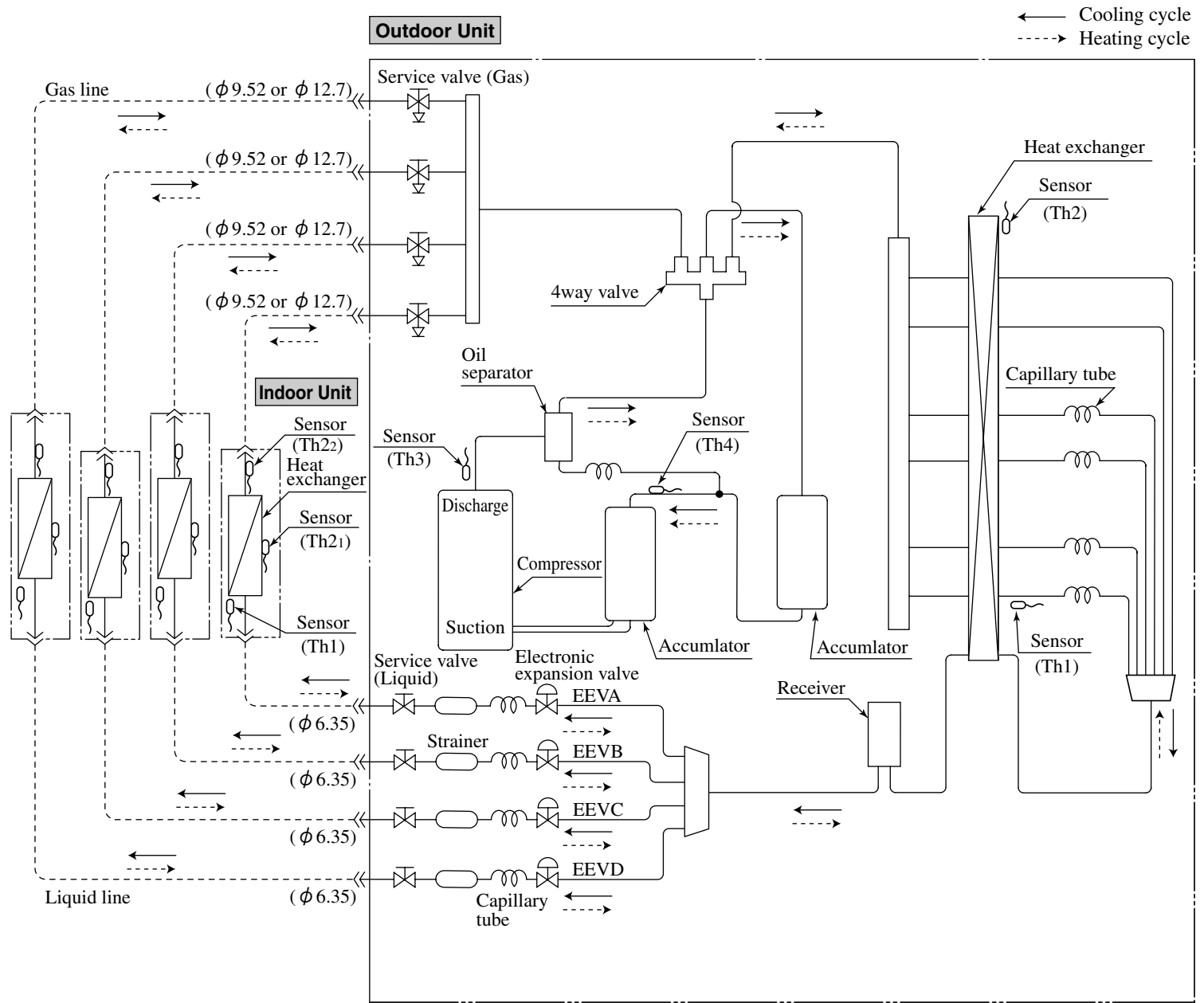
# 5. PIPING SYSTEM

Model SCM60ZJ-S



← Cooling cycle  
 - - - - Heating cycle

Gas line 20, 25, 35 type : φ 9.52  
 50, 60 type : φ 12.7



Gas line 20, 25, 35 type :  $\phi 9.52$   
 50, 60 type :  $\phi 12.7$

# 6. APPLICATION DATA

## (1) Installation of Indoor unit

### (a) Wall mounted type (SRK)

#### 1) Models SRK20ZJX-S, 25ZJX-S, 35ZJX-S, 50ZJX-S, 60ZJX-S

- This instruction manual illustrates the method of installing an indoor unit.
- For electrical wiring work, please see instructions set out on the backside.
- For outdoor unit installation and refrigerant piping, please refer to page 76 and 80.

- A wired remote control unit is supplied separately as an optional part.
- When install the unit, be sure to check whether the selection of installation place, power supply specifications, usage limitation (piping length, height differences between indoor and outdoor units, power supply voltage and etc.) and installation spaces.

RKY012A007A

### SAFETY PRECAUTIONS

- We recommend you to read this "SAFETY PRECAUTIONS" carefully before the installation work in order to gain full advantage of the functions of the unit and to avoid malfunction due to mishandling.
- The precautions described below are divided into **⚠ WARNING** and **⚠ CAUTION**. The matters with possibilities leading to serious consequences such as death or serious personal injury due to erroneous handling are listed in the **⚠ WARNING** and the matters with possibilities leading to personal injury or damage of the unit due to erroneous handling including probability leading to serious consequences in some cases are listed in **⚠ CAUTION**. These are very important precautions for safety. Be sure to observe all of them without fail.
- Be sure to confirm no anomaly on the equipment by commissioning after completed installation and explain the operating methods as well as the maintenance methods of this equipment to the user according to the owner's manual.

- Keep the installation manual together with owner's manual at a place where any user can read at any time. Moreover if necessary, ask to hand them to a new user.
- For installing qualified personnel, take precautions in respect to themselves by using suitable protective clothing, gloves, etc., and then perform the installation works.
- Please pay attention not to fall down the tools, etc. when installing the unit at the high position.
- If unusual noise can be heard during operation, consult the dealer.
- Symbols which appear frequently in the text have the following meaning:

 Observe instructions with great care	 Strictly prohibited	 Provide proper earthing
--	---	--

### ⚠ WARNING

- **Installation must be carried out by the qualified installer.**  
If you install the system by yourself, it may cause serious trouble such as water leaks, electric shocks, fire and personal injury, as a result of a system malfunction.
- **Install the system in full accordance with the instruction manual.**  
Incorrect installation may cause bursts, personal injury, water leaks, electric shocks and fire.
- **Be sure to use only for household and residence.**  
If this appliance is installed in inferior environment such as machine shop and etc., it can cause malfunction.
- **Use the original accessories and the specified components for installation.**  
If parts other than those prescribed by us are used, it may cause water leaks, electric shocks, fire and personal injury.
- **Install the unit in a location with good support.**  
Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.
- **Ventilate the working area well in the event of refrigerant leakage during installation.**  
If the refrigerant comes into contact with naked flames, poisonous gas is produced.
- **When installing in small rooms, take prevention measures not to exceed the density limit of refrigerant in the event of leakage.**  
Consult the expert about prevention measures. If the density of refrigerant exceeds the limit in the event of leakage, lack of oxygen can occur, which can cause serious accidents.
- **After completed installation, check that no refrigerant leaks from the system.**  
If refrigerant leaks into the room and comes into contact with an oven or other hot surface, poisonous gas is produced.
- **Use the prescribed pipes, flare nuts and tools for R410A.**  
Using existing parts (for R22 or R407C) can cause the unit failure and serious accidents due to burst of the refrigerant circuit.
- **Do not put the drainage pipe directly into drainage channels where poisonous gases such as sulphide gas can occur.**  
Poisonous gases will flow into the room through drainage pipe and seriously affect the user's health and safety.
- **Ensure that no air enters in the refrigerant circuit when the unit is installed and removed.**  
If air enters in the refrigerant circuit, the pressure in the refrigerant circuit becomes too high, which can cause burst and personal injury.
- **Tighten the flare nut by torque wrench with specified method.**  
If the flare nut were tightened with excess torque, this may cause burst and refrigerant leakage after a long period.
- **The electrical installation must be carried out by the qualified electrician in accordance with "the norm for electrical work" and "national wiring regulation", and the system must be connected to the dedicated circuit.**  
Power supply with insufficient capacity and incorrect function done by improper work can cause electric shocks and fire.
- **Be sure to shut off the power before starting electrical work.**  
Failure to shut off the power can cause electric shocks, unit failure or incorrect function of equipment.
- **Be sure to use the cables conformed to safety standard and cable ampacity for power distribution work.**  
Unconformable cables can cause electric leak, anomalous heat production or fire.
- **This appliance must be connected to main power supply by means of a circuit breaker or switch (fuse:16A) with a contact separation of at least 3mm.**
- **When plugging this appliance, a plug conforming to the norm IEC60884-1 must be used.**
- **Use the prescribed cables for electrical connection, tighten the cables securely in terminal block and relieve the cables correctly to prevent overloading the terminal blocks.**  
Loose connections or cable mountings can cause anomalous heat production or fire.
- **Arrange the wiring in the control box so that it cannot be pushed up further into the box. Install the service panel correctly.**  
Incorrect installation may result in overheating and fire.
- **Be sure to switch off the power supply in the event of installation, inspection or servicing.**  
If the power supply is not shut off, there is a risk of electric shocks, unit failure or personal injury due to the unexpected start of fan.
- **Do not processing, splice the power cord, or share a socket with other power plugs.**  
This may cause fire or electric shock due to defecting contact, defecting insulation and over-current etc.
- **Do not bundling, winding or processing for the power cord. Or, do not deforming the power plug due to tread it.**  
This may cause fire or heating.

### ⚠ WARNING

- **Do not vent R410A into the atmosphere : R410A is a fluorinated greenhouse gas, covered by the Kyoto Protocol with Global Warming Potential (GWP)=1975.**  
Do not run the unit with removed panels or protections. Touching rotating equipments, hot surfaces or high voltage parts can cause personal injury due to entrapment, burn or electric shocks.
- **Do not perform any change of protective device itself or its setup condition.**  
The forced operation by short-circuiting protective device of pressure switch and temperature controller or the use of non specified component can cause fire or burst.
- **Carry out the electrical work for ground lead with care.**  
Do not connect the ground lead to the gas line, water line, lightning conductor or telephone line's ground lead. Incorrect grounding can cause unit faults such as electric shocks due to short-circuiting.

### ⚠ CAUTION

- **Use the circuit breaker with sufficient breaking capacity.**  
If the breaker does not have sufficient breaking capacity, it can cause the unit malfunction and fire.
- **Earth leakage breaker must be installed.**  
If the earth leakage breaker is not installed, it can cause electric shocks.
- **Install isolator or disconnect switch on the power supply wiring in accordance with the local codes and regulations.**
- **Be sure to install indoor unit properly according to the instruction manual in order to run off the drainage smoothly.**  
Improper installation of indoor unit can cause dropping water into the room and damaging personal property.
- **Install the drainage pipe to run off drainage securely according to the installation manual.**  
Incorrect installation of the drainage pipe can cause dropping water into the room and damaging personal property.
- **Be sure to install the drainage pipe with descending slope of 1/100 or more, and not to make traps and air-bleedings.**  
Check if the drainage runs off securely during commissioning and ensure the space for inspection and maintenance.
- **Secure a space for installation, inspection and maintenance specified in the manual.**  
Insufficient space can result in accident such as personal injury due to falling from the installation place.
- **For installation work, be careful not to get injured with the heat exchanger, piping flare portion or screws etc.**
- **Be sure to insulate the refrigerant pipes so as not to condense the ambient air moisture on them.**  
Insufficient insulation can cause condensation, which can lead to moisture damage on the ceiling, floor, furniture and any other valuables.
- **When perform the air conditioner operation (cooling or drying operation) in which ventilator is installed in the room. In this case, using the air conditioner in parallel with the ventilator, there is the possibility that drain water may backflow in accordance with the room lapse into the negative pressure status. Therefore, set up the opening port such as incorporate the air into the room that may appropriate to ventilation (For example; Open the door a little). In addition, just as above, so set up the opening port if the room lapse into negative pressure status due to register of the wind for the high rise apartment etc.**
- **Do not install the unit in the locations listed below.**
  - Locations where carbon fiber, metal powder or any powder is floating.
  - Locations where any substances that can affect the unit such as sulphide gas, chloride gas, acid and alkaline can occur.
  - Vehicles and ships.
  - Locations where cosmetic or special sprays are often used.
  - Locations with direct exposure of oil mist and steam such as kitchen and machine plant.
  - Locations where any machines which generate high frequency harmonics are used.
  - Locations with salty atmospheres such as coastlines.
  - Locations with heavy snow (If installed, be sure to provide base flame and snow hood mentioned in the manual).
  - Locations where the unit is exposed to chimney smoke.
  - Locations at high altitude (more than 1000m high).
  - Locations with ammoniac atmospheres.
  - Locations where heat radiation from other heat source can affect the unit.
  - Locations without good air circulation.
  - Locations with any obstacles which can prevent inlet and outlet air of the unit.
  - Locations where short circuit of air can occur (in case of multiple units installation).
  - Locations where strong air blows against the air outlet of outdoor unit. It can cause remarkable decrease in performance, corrosion and damage of components, malfunction and fire.
- **Do not install the indoor unit in the locations listed below (Be sure to install the indoor unit according to the installation manual for each model because each indoor unit has each limitation).**
  - Locations with any obstacles which can prevent inlet and outlet air of the unit.
  - Locations where vibration can be amplified due to insufficient strength of structure.
  - Locations where the infrared receiver is exposed to the direct sunlight or the strong light beam (in case of the infrared specification unit).
  - Locations where an equipment affected by high harmonics is placed (TV set or radio receiver is placed within 5m).
  - Locations where drainage cannot run off safely. It can affect performance or function and etc.
- **Do not install the unit near the location where leakage of combustible gases can occur.**  
If leaked gases accumulate around the unit, it can cause fire.
- **Do not install the unit where corrosive gas (such as sulfurous acid gas etc.) or combustible gas (such as thinner and petroleum gases) can accumulate or collect, or where volatile combustible substances are handled.**  
Corrosive gas can cause corrosion of heat exchanger, breakage of plastic parts and etc. And combustible gas can cause fire.
- **Do not use the indoor unit at the place where water splashes may occur such as in laundries.**  
Since the indoor unit is not waterproof, it can cause electric shocks and fire.
- **Do not install nor use the system close to the equipment that generates electromagnetic fields or high frequency harmonics.**  
Equipment such as inverters, standby generators, medical high frequency equipments and telecommunication equipments can affect the system, and cause malfunctions and breakdowns. The system can also affect medical equipment and telecommunication equipment, and obstruct its function or cause jamming.
- **Do not place any variables which will be damaged by getting wet under the indoor unit.**  
When the relative humidity is higher than 80% or drainage pipe is clogged, condensation or drainage water can drop and it can cause the damage of valuables.
- **Do not install the remote control at the direct sunlight.**  
It can cause malfunction or deformation of the remote control.
- **Do not use the unit for special purposes such as storing foods, cooling precision instruments and preservation of animals, plants or art.**  
It can cause the damage of the items.
- **Do not use any materials other than a fuse with the correct rating in the location where fuses are to be used.**  
Connecting the circuit with copper wire or other metal thread can cause unit failure and fire.
- **Do not touch any buttons with wet hands.**  
It can cause electric shocks.
- **Do not touch any refrigerant pipes with your hands when the system is in operation.**  
During operation the refrigerant pipes become extremely hot or extremely cold depending the operating condition, and it can cause burn injury or frost injury.

## BEFORE INSTALLATION

○ Before installation check that the power supply matches the air conditioner.

Standard accessories (Installation kit) Accessories for indoor unit		Q'ty
①	Installation board (Attached to the rear of the indoor unit)	1
②	Wireless remote control	1
③	Remote control holder	1
④	Tapping screws (for installation board 4dia. by 25mm)	4
⑤	Wood screw (for remote control switch holder 3.5(mm), by 16mm)	2
⑥	Battery [R03(AAA, Micro) 1.5V]	2
⑦	Air-cleaning filters	2
⑧	Filter holders (Attached to the front panel of indoor unit)	2
⑨	Insulation (#486 50 x 100 t3)	1

Option parts		Q'ty
Ⓐ	Sealing plate	1
Ⓑ	Sleeve	1
Ⓒ	Incination plate	1
Ⓓ	Putty	1
Ⓔ	Drain hose (extention hose)	1
①	Piping cover (for insulation of connection piping)	1

Necessary tools for the installation work	
1	Plus headed driver
2	Knife
3	Saw
4	Tape measure
5	Hammer
6	Spanner wrench
7	Torque wrench (14.0 ~ 61.0N·m (1.4 ~ 6.1kgf·m))
8	Hole core drill (65mm in diameter)
9	Wrench key (Hexagon) [4m/m]
10	Flaring tool set (Designed specifically for R410A)
11	Gas leak detector (Designed specifically for R410A)
12	Gauge for projection adjustment (Used when flare is made by using conventional flare tool)
13	Pipe bender

## SELECTION OF INSTALLATION LOCATION

(Install at location that meets the following conditions, after getting approval from the customer)

### Indoor unit

- Where there is no obstructions to the air flow and where the cooled and heated air can be evenly distributed.
- A solid place where the unit or the wall will not vibrate.
- A place where there will be enough space for servicing. (Where space mentioned below can be secured)
- Where wiring and the piping work will be easy to conduct.
- The place where receiving part is not exposed to the direct rays of the sun or the strong rays of the street lighting.
- A place where it can be easily drained.
- A place separated at least 1m away from the television or the radio. (To prevent interference to images and sounds.)
- Places where this unit is not affected by the high frequency equipment or electric equipment.
- Avoid installing this unit in place where there is much oil mist.
- Places where there is no electric equipment or household under the installing unit.

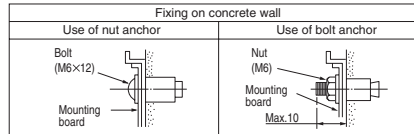
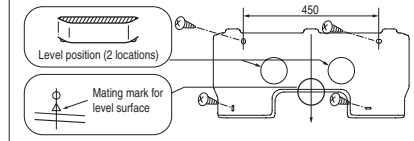
### Wireless remote control

- A place where the air conditioner can be received the signal surely during operating the wireless remote control.
- Places where there is no affected by the TV and radio etc.
- Do not place where exposed to direct sunlight or near heat devices such as a stove.

## INSTALLATION OF INDOOR UNIT

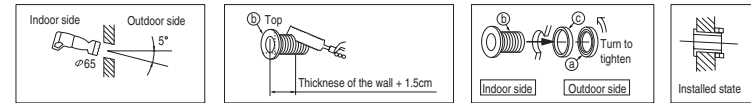
### Installation of Installation board

Look for the inside wall structures (Intersediats support or pillar and finally install the unit after level surface has been checked.)



### Drilling of holes and fixture of sleeve (Option parts)

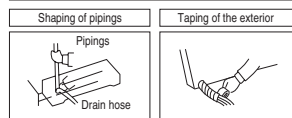
When drilling the wall that contains a metal lath, wire lath or metal plate, be sure to use pipe hole sleeve sold separately.



- Drill a hole with whole core drill.
- In case of rear piping draw out, cut off the lower and the right side portions of the sleeve collar.

### Installing the support of piping

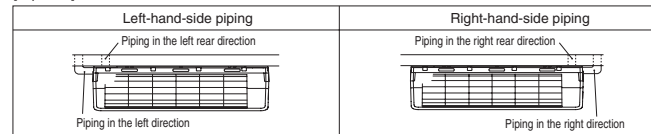
#### In case of piping in the right rear direction



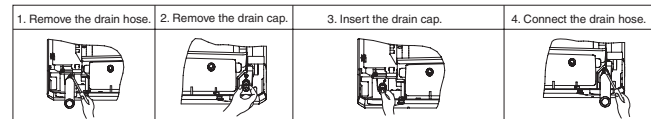
- Hold the bottom of the piping and fix direction before stretching it and shaping it.
- Tape only the portion that goes through the wall.
- Always tape the wiring with the piping.

Sufficient care must be taken not to damage the panel when connecting pipes.

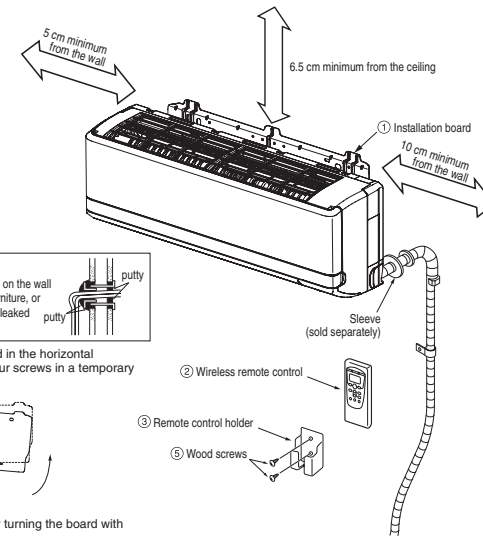
- Matters of special notice when piping from left or central/rear of the unit. [Top view]



#### [Drain hose changing procedures]

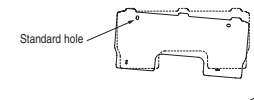


- Remove the screw and drain hose, making it rotate.
- Remove it with hand or pliers.
- Insert the drain cap which was removed at procedure "2" securely using a hexagonal wrench etc. Note: Be careful that if it is not inserted securely, water leakage may occur.
- Insert the drain hose securely, making rotate. And install the screw. Note: Be careful that if it is not inserted securely, water leakage may occur.



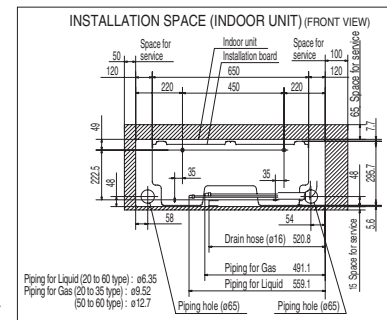
**CAUTION**  
Completely seal the hole on the wall with putty. Otherwise, furniture, or other, may be wetted by leaked water or dewing.

- Adjustment of the installation board in the horizontal direction is to be conducted with four screws in a temporary tightened state.

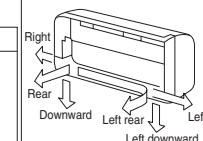


- Adjust so the board will be level by turning the board with the standard hole as the center.

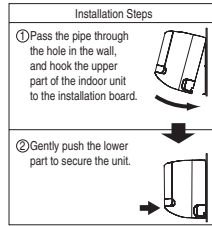
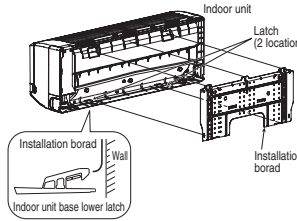
### Relation between setting plate and indoor unit



Piping is possible in the rear, left, left rear, left downward, right or downward direction.

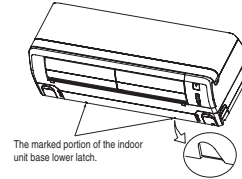


### Fixing of indoor unit

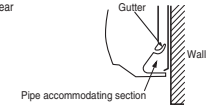


### How to remove the indoor unit from the installation board

- Push up at the marked portion of the indoor unit base lower latch, and slightly pull it toward you. (both right and left hand sides) (The indoor unit base lower latch can be removed from the installation board)
- Push up the indoor unit upward. So the indoor unit will be removed from the installation board.



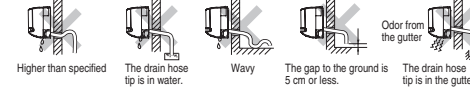
Since this air conditioner has been designed to collect dew drops on the rear surface to the drain pan, do not attach the power cord above the gutter.



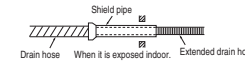
### Drainage

- Arrange the drain hose in a downward angle
- Avoid the following drain piping.

**CAUTION** Go through all installation steps and check if the drainage is all right. Otherwise water leak may occur.

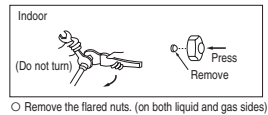


- Pour water to the drain pan located under the heat exchanger, and ensure that the water is discharged outdoor.
- When the extended drain hose is indoor, always use a shield pipe (to be arranged by the user) and ensure it is thermally insulated

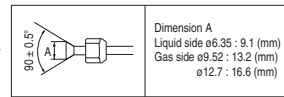


## CONNECTION OF REFRIGERANT PIPINGS

**Preparation** Keep the openings of the pipes covered with tapes etc. to prevent dust, sand, etc. from entering them.



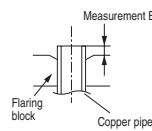
- Remove the flared nuts. (on both liquid and gas sides)



- Install the removed flared nuts to the pipes to be connected, then flared the pipes.

**CAUTION**  
Do not apply refrigerating machine oil to the flared surface.

### Flaring work

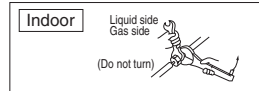


Copper pipe diameter	Clutch type flare tool for R410A	Measurement B (mm)	
		Conventional (R22) flare tool Clutch type	Wing nut type
ø6.35	0.0 - 0.5	1.0 - 1.5	1.5 - 2.0
ø9.52	0.0 - 0.5	1.0 - 1.5	1.5 - 2.0
ø12.7	0.0 - 0.5	1.0 - 1.5	2.0 - 2.5

Use a flare tool designed for R410A or a conventional flare tool. Please note that measurement B (protrusion from the flaring block) will vary depending on the type of a flare tool in use. If a conventional flare tool is used, please use a copper pipe gauge or a similar instrument to check protrusion so that you can keep measurement B to a correct value.

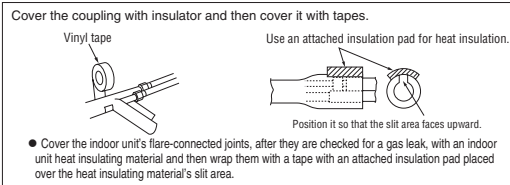
**CAUTION**  
Do not apply excess torque to the flared nuts. Otherwise, the flared nuts may checkdepending.

### Connection



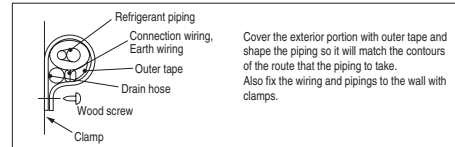
- Connect the pipes on both liquid and gas sides.
- Tighten the nuts to the following torque.  
Liquid side (ø6.35) : 14.0 - 18.0 N·m (1.4 - 1.8 kgf·m)  
Gas side (ø9.52) : 34.0 - 42.0 N·m (3.4 - 4.2 kgf·m)  
(ø12.7) : 49.0 - 61.0 N·m (4.9 - 6.1 kgf·m)

### Insulation of the connection portion



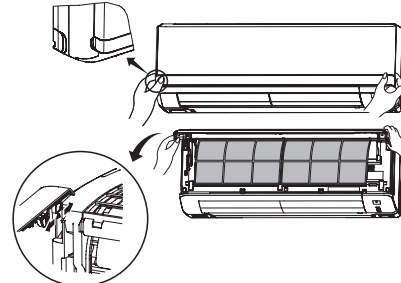
- Cover the indoor unit's flare-connected joints, after they are checked for a gas leak, with an indoor unit heat insulating material and then wrap them with a tape with an attached insulation pad placed over the heat insulating material's slit area.

### Finishing work and fixing



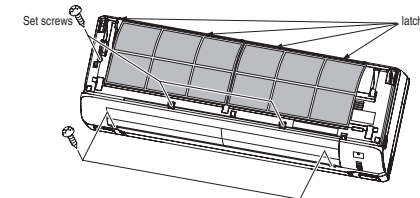
### Open/close and detachment/attachment of the air inlet panel

- To open, pull the panel at both ends of lower part and release latches, then pull up the panel until you feel resistance. (The panel stops at approx. 60° open position)
- To close, hold the panel at both ends of lower part to lower downward and push it slightly until the latch works.
- To remove, pull up the panel to the position shown in right illustration and pull it toward you.
- To install, insert the panel arm into the slot on the front panel from the position shown in right illustration, hold the panel at both ends of lower part, lower it downward slowly, then push it slightly until the latch works.



### How to remove and fit the front panel

- Removing
  - Remove the air inlet panel.
  - Remove the 5 set screws.
  - Remove the 4 latches in the upper section.
  - Move the lower part of the panel forward and push upwards to remove.
- Fitting
  - Do remove the air filter.
  - Cover the body with the front panel.
  - Fit the 4 latches in the upper section.
  - Tighten the 5 set screws.
  - Fit the air filter.
  - Fit the air inlet panel.



## ELECTRICAL WIRING WORK

### Preparation of indoor unit

#### Mounting of connecting wires

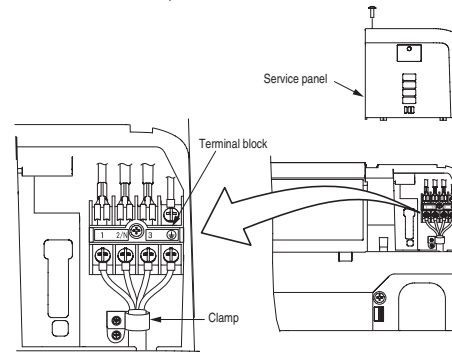
- ① Open the air inlet panel.
- ② Remove the service panel.
- ③ Remove the wiring clamp
- ④ Connect the connecting wire securely to the terminal block.
  - 1) Connect the connection wire securely to the terminal block. If the wire is not affixed completely, contact will be poor, and it is dangerous as the terminal block may heat up and catch fire.
  - 2) Take care not to confuse the terminal numbers for indoor and outdoor connections.
  - 3) Fix the connection wire using the wiring clamp.
- ⑤ Fix the connecting wire by wiring clamp.
- ⑥ Attach the service panel.
- ⑦ Close the air inlet panel.

#### CAUTION

In case of faulty wiring connection, the indoor unit stops, and then the run lamp turns on and the timer lamp blinks.

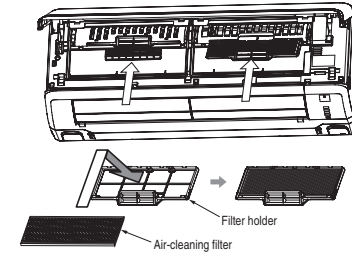
Use cables for interconnection wiring to avoid loosening of the wires.  
CENELEC code for cables Required field cables.

H05RN4G1.5 (example) or 245IEC57  
 H Harmonized cable type  
 05 300/500 volts  
 R Natural-and/or synth. rubber wire insulation  
 N Polychloroprene rubber conductors insulation  
 R Stranded core  
 4or5 Number of conductors  
 G One conductor of the cable is the earth conductor (yellow/green)  
 1.5 Section of copper wire (mm<sup>2</sup>)



### Installing the air-cleaning filters

1. Open the air inlet panel and remove the air filters.
2. Install the filter holders, with the air-cleaning filters installed in the holders. In the air conditioner.
  - Each air-cleaning filter can be installed in the left or right filter holder.
3. Install the air filters and close the inlet panel.



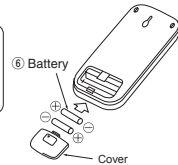
## INSTALLATION OF REMOTE CONTROL SWITCH

#### Mounting method of battery

- Uncover the wireless remote control, and mount the batteries [R03(AAA, Micro), ×2 pieces] in the body regularly. (Fit the poles with the indication marks, ⊕ & ⊖ without fall)

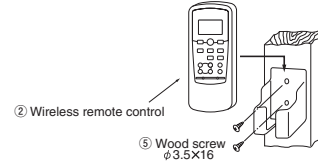
#### CAUTION

Do not use new and old batteries together.



#### Fixing to pillar or wall

- Conventionally, operate the remote control switch by holding in your hand.
- Avoid installing it on a clay wall etc.



## INSTALLATION TEST CHECK POINTS

Check the following points again after completion of the installation, and before turning on the power. Conduct a test run again and ensure that the unit operates properly. At the same time, explain to the customer how to use the unit and how to take care of the unit following the user's manual.

#### After installation

- The power supply voltage is correct as the rating.
- No gas leaks from the joints of the operational valve.
- Power cables and crossover wires are securely fixed to the terminal board.
- Operational valve is fully open.
- The pipe joints for indoor and outdoor pipes have been insulated.

#### Test run

- Air conditioning operation is normal.
- No abnormal noise.
- Water drains smoothly.
- Protective functions are not working.
- The remote control is normal.
- Operation of the unit has been explained to the customer. (Three-minutes restart preventive timer)  
When the air conditioner is restarted or when changing the operation, the unit will not start operating for approximately 3 minutes. This is to protect the unit and it is not a malfunction.

## HOW TO RELOCATE OR DISPOSE OF THE UNIT

- In order to protect the environment, be sure to pump down (recovery of refrigerant).
- Pump down is the method of recovering refrigerant from the indoor unit to the outdoor unit when the pipes are removed from the unit.

#### <How to pump down>

- ① Connect charge hose to service port of outdoor unit.
- ② Liquid side : Close the liquid valve with hexagon wrench key.  
Gas side : Fully open the gas valve  
Carry out cooling operation. (If indoor temperature is low, operate forced cooling operation.)
- ③ After low pressure gauge become 0.01MPa, stop cooling operation and close the gas valve.

- Forced cooling operation  
Turn on a power supply again after a while after turn off a power supply. Then press continually the ON/OFF button 5 seconds or more.



## CONCERNING TERMINAL CONNECTION FOR AN INTERFACE

- ① Remove the front panel and lid of control.
- ② There is a terminal (respectively marked with CNS) for the indoor control board. In connecting an interface, connect to the respective terminal securely with the connection harness supplied with an optional "Interface connection kit SC-BIKN-E" and fasten the connection harness onto the indoor control box with the clamp supplied with the kit. For more details, please refer to the user's manual of your "Interface connection kit SC-BIKN-E".



## 2) Models SRK20ZJ-S, 25ZJ-S, 35ZJ-S, 50ZJ-S

RLA012A012

- This instruction manual illustrates the method of installing an indoor unit.
- For outdoor unit installation and refrigerant piping, please refer to page 76 and 80.
- A wired remote control unit is supplied separately as an optional part.

- When install the unit, be sure to check whether the selection of installation place, power supply specifications, usage limitation (piping length, height differences between indoor and outdoor units, power supply voltage and etc.) and installation spaces.

### SAFETY PRECAUTIONS

- We recommend you to read this "SAFETY PRECAUTIONS" carefully before the installation work in order to gain full advantage of the functions of the unit and to avoid malfunction due to mishandling.
- The precautions described below are divided into **⚠ WARNING** and **⚠ CAUTION**. The matters with possibilities leading to serious consequences such as death or serious personal injury due to erroneous handling are listed in the **⚠ WARNING** and the matters with possibilities leading to personal injury or damage of the unit due to erroneous handling including probability leading to serious consequences in some cases are listed in **⚠ CAUTION**. These are very important precautions for safety. Be sure to observe all of them without fail.
- Be sure to confirm no anomaly on the equipment by commissioning after completed installation and explain the operating methods as well as the maintenance methods of this equipment to the user according to the owner's manual.

- Keep the installation manual together with owner's manual at a place where any user can read at any time. Moreover if necessary, ask to hand them to a new user.
- For installing qualified personnel, take precautions in respect to themselves by using suitable protective clothing, gloves, etc., and then perform the installation works.
- Please pay attention not to fall down the tools, etc. when installing the unit at the high position.
- If unusual noise can be heard during operation, consult the dealer.
- Symbols which appear frequently in the text have the following meaning:

 Observe instructions with great care	 Strictly prohibited	 Provide proper earthing
--	---	--

### ⚠ WARNING

- **Installation must be carried out by the qualified installer.**  
If you install the system by yourself, it may cause serious trouble such as water leaks, electric shocks, fire and personal injury, as a result of a system malfunction.
- **Install the system in full accordance with the instruction manual.**  
Incorrect installation may cause bursts, personal injury, water leaks, electric shocks and fire.
- **Be sure to use only for household and residence.**  
If this appliance is installed in inferior environment such as machine shop and etc., it can cause malfunction.
- **Use the original accessories and the specified components for installation.**  
If parts other than those prescribed by us are used, it may cause water leaks, electric shocks, fire and personal injury.
- **Install the unit in a location with good support.**  
Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.
- **Ventilate the working area well in the event of refrigerant leakage during installation.**  
If the refrigerant comes into contact with naked flames, poisonous gas is produced.
- **When installing in small rooms, take prevention measures not to exceed the density limit of refrigerant in the event of leakage.**  
Consult the expert about prevention measures. If the density of refrigerant exceeds the limit in the event of leakage, lack of oxygen can occur, which can cause serious accidents.
- **After completed installation, check that no refrigerant leaks from the system.**  
If refrigerant leaks into the room and comes into contact with an oven or other hot surface, poisonous gas is produced.
- **Use the prescribed pipes, flare nuts and tools for R410A.**  
Using existing parts (for R22 or R407C) can cause the unit failure and serious accidents due to burst of the refrigerant circuit.

- **Do not put the drainage pipe directly into drainage channels where poisonous gases such as sulphide gas can occur.**  
Poisonous gases will flow into the room through drainage pipe and seriously affect the user's health and safety.
- **Ensure that no air enters in the refrigerant circuit when the unit is installed and removed.**  
If air enters in the refrigerant circuit, the pressure in the refrigerant circuit becomes too high, which can cause burst and personal injury.
- **Do not processing, splice the power cord, or share a socket with other power plugs.**  
This may cause fire or electric shock due to defecting contact, defecting insulation and over-current etc.
- **Do not bundling, winding or processing for the power cord. Or, do not deforming the power plug due to treat it.**  
This may cause fire or heating.

### ⚠ WARNING

- **Do not vent R410A into the atmosphere : R410A is a fluorinated greenhouse gas, covered by the Kyoto Protocol with Global Warming Potential (GWP)=1975.**  
• **Do not run the unit with removed panels or protections.**  
Touching rotating equipments, hot surfaces or high voltage parts can cause personal injury due to entrapment, burn or electric shocks.
- **Do not perform any change of protective device itself or its setup condition.**  
The forced operation by short-circuiting protective device of pressure switch and temperature controller or the use of non specified component can cause fire or burst.
- **Carry out the electrical work for ground lead with care.**  
Do not connect the ground lead to the gas line, water line, lightning conductor or telephone line's ground lead. Incorrect grounding can cause unit faults such as electric shocks due to short-circuiting.

### ⚠ CAUTION

- **Use the circuit breaker with sufficient breaking capacity.**  
If the breaker does not have sufficient breaking capacity, it can cause the unit malfunction and fire.
- **Earth leakage breaker must be installed.**  
If the earth leakage breaker is not installed, it can cause electric shocks.
- **Install isolator or disconnect switch on the power supply wiring in accordance with the local codes and regulations.**
- **Be sure to install indoor unit properly according to the instruction manual in order to run off the drainage smoothly.**  
Improper installation of indoor unit can cause dropping water into the room and damaging personal property.
- **Install the drainage pipe to run off drainage securely according to the installation manual.**  
Incorrect installation of the drainage pipe can cause dropping water into the room and damaging personal property.
- **Be sure to install the drainage pipe with descending slope of 1/100 or more, and not to make traps and air-bleedings.**  
Check if the drainage runs off securely during commissioning and ensure the space for inspection and maintenance.
- **Secure a space for installation, inspection and maintenance specified in the manual.**  
Insufficient space can result in accident such as personal injury due to falling from the installation place.
- **For installation work, be careful not to get injured with the heat exchanger, piping flare portion or screws etc.**
- **Be sure to insulate the refrigerant pipes so as not to condense the ambient air moisture on them.**  
Insufficient insulation can cause condensation, which can lead to moisture damage on the ceiling, floor, furniture and any other valuables.
- **When perform the air conditioner operation (cooling or drying operation) in which ventilator is installed in the room. In this case, using the air conditioner in parallel with the ventilator, there is the possibility that drain water may backflow in accordance with the room lapse into the negative pressure status. Therefore, set up the opening port such as incorporate the air into the room that may appropriate to ventilation (For example; Open the door a little). In addition, just as above, so set up the opening port if the room lapse into negative pressure status due to register of the wind for the high rise apartment etc.**

- **Do not install the unit in the locations listed below.**
  - Locations where carbon fiber, metal powder or any powder is floating.
  - Locations where any substances that can affect the unit such as sulphide gas, chloride gas, acid and alkaline can occur.
  - Vehicles and ships.
  - Locations where cosmetic or special sprays are often used.
  - Locations with direct exposure of oil mist and steam such as kitchen and machine plant.
  - Locations where any machines which generate high frequency harmonics are used.
  - Locations with salty atmospheres such as coastlines.
  - Locations with heavy snow (If installed, be sure to provide base flame and snow hood mentioned in the manual).
  - Locations where the unit is exposed to chimney smoke.
  - Locations at high altitude (more than 1000m high).
  - Locations with ammoniac atmospheres.
  - Locations where heat radiation from other heat source can affect the unit.
  - Locations without good air circulation.
  - Locations with any obstacles which can prevent inlet and outlet air of the unit.
  - Locations where short circuit of air can occur (in case of multiple units installation).
  - Locations where strong air blows against the air outlet of outdoor unit. It can cause remarkable decrease in performance, corrosion and damage of components, malfunction and fire.
- **Do not install the indoor unit in the locations listed below (Be sure to install the indoor unit according to the installation manual for each model because each indoor unit has each limitation).**
  - Locations with any obstacles which can prevent inlet and outlet air of the unit.
  - Locations where vibration can be amplified due to insufficient strength of structure.
  - Locations where the infrared receiver is exposed to the direct sunlight or the strong light beam (in case of the infrared specification unit).
  - Locations where an equipment affected by high harmonics is placed (TV set or radio receiver is placed within 1m).
  - Locations where drainage cannot run off safely. It can affect performance or function and etc.
- **Do not install the unit near the location where leakage of combustible gases can occur.**  
If leaked gases accumulate around the unit, it can cause fire.
- **Do not install the unit where corrosive gas (such as sulfuric acid gas etc.) or combustible gas (such as thinner and petroleum gases) can accumulate or collect, or where volatile combustible substances are handled.**  
Corrosive gas can cause corrosion of heat exchanger, breakage of plastic parts and etc. And combustible gas can cause fire.
- **Do not use the indoor unit at the place where water splashes may occur such as in laundries.**  
Since the indoor unit is not waterproof, it can cause electric shocks and fire.
- **Do not install nor use the system close to the equipment that generates electromagnetic fields or high frequency harmonics.**  
Equipment such as inverters, standby generators, medical high frequency equipments and telecommunication equipments can affect the system, and cause malfunctions and breakdowns. The system can also affect medical equipment and telecommunication equipment, and obstruct its function or cause jamming.
- **Do not place any variables which will be damaged by getting wet under the indoor unit.**  
When the relative humidity is higher than 80% or drainage pipe is clogged, condensation or drainage water can drop and it can cause the damage of valuables.
- **Do not install the remote control at the direct sunlight.**  
It can cause malfunction or deformation of the remote control.
- **Do not use the unit for special purposes such as storing foods, cooling precision instruments and preservation of animals, plants or art.**  
It can cause the damage of the items.
- **Do not use any materials other than a fuse with the correct rating in the location where fuses are to be used.**  
Connecting the circuit with copper wire or other metal thread can cause unit failure and fire.
- **Do not touch any buttons with wet hands.**  
It can cause electric shocks.
- **Do not touch any refrigerant pipes with your hands when the system is in operation.**  
During operation the refrigerant pipes become extremely hot or extremely cold depending the operating condition, and it can cause burn injury or frost injury.

## BEFORE INSTALLATION

○ Before installation check that the power supply matches the air conditioner.

Standard accessories (Installation kit) Accessories for indoor unit		Q'ty
①	Installation board (Attached to the rear of the indoor unit)	1
②	Wireless remote control	1
③	Remote control holder	1
④	Tapping screws (for installation board ø4 X 25mm)	5
⑤	Wood screws (for remote control switch holder ø3.5 X 16mm)	2
⑥	Battery [R03 (AAA, Micro) 1.5V]	2
⑦	Air-cleaning filters	2
⑧	Filter holders (Attached to the front panel of indoor unit)	2
⑨	Insulation (#486 50 x 100 t3)	1

Option parts		Q'ty
a	Sealing plate	1
b	Sleeve	1
c	Inclination plate	1
d	Putty	1
e	Drain hose (extension hose)	1
f	Piping cover (for insulation of connection piping)	1

Necessary tools for the installation work	
1	Plus headed driver
2	Knife
3	Saw
4	Tape measure
5	Hammer
6	Spanner wrench
7	Torque wrench (14.0 - 61.0N·m (1.4 - 6.1kgf·m))
8	Hole core drill (65mm in diameter)
9	Wrench key (Hexagon) [4m/m]
10	Flaring tool set (Designed specifically for R410A)
11	Gas leak detector (Designed specifically for R410A)
12	Gauge for projection adjustment (Used when flare is made by using conventional flare tool)
13	Pipe bender

## SELECTION OF INSTALLATION LOCATION

(Install at location that meets the following conditions, after getting approval from the customer)

### Indoor unit

- Where there is no obstructions to the air flow and where the cooled and heated air can be evenly distributed.
- A solid place where the unit or the wall will not vibrate.
- A place where there will be enough space for servicing. (Where space mentioned below can be secured)
- Where wiring and the piping work will be easy to conduct.
- The place where receiving part is not exposed to the direct rays of the sun or the strong rays of the street lighting.
- A place where it can be easily drained.
- A place separated at least 1m away from the television or the radio. (To prevent interference to images and sounds.)
- Places where this unit is not affected by the high frequency equipment or electric equipment.
- Avoid installing this unit in place where there is much oil mist.
- Places where there is no electric equipment or household under the installing unit.

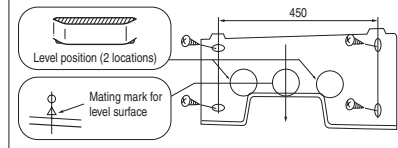
### Wireless remote control

- A place where the air conditioner can be received the signal surely during operating the wireless remote control.
- Places where there is no affected by the TV and radio etc.
- Do not place where exposed to direct sunlight or near heat devices such as a stove.

## INSTALLATION OF INDOOR UNIT

### Installation of Installation board

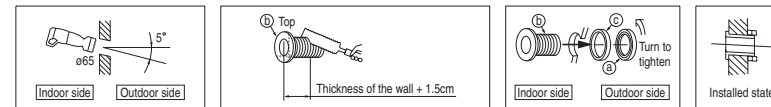
Look for the inside wall structures (Intermediats support or pillar and firmly install the unit after level surface has been checked.)



- Adjustment of the installation board in the horizontal direction is to be conducted with four screws in a temporary tightened state.
- Adjust so the board will be level by turning the board with the standard hole as the center.

### Drilling of holes and fixture of sleeve (Option parts)

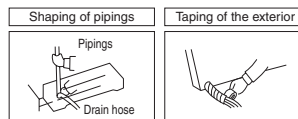
When drilling the wall that contains a metal lath, wire lath or metal plate, be sure to use pipe hole sleeve sold separately.



- Drill a hole with whole core drill.
- In case of rear piping draw out, cut off the lower and the right side portions of the sleeve collar.

### Installing the support of piping

#### In case of piping in the right rear direction

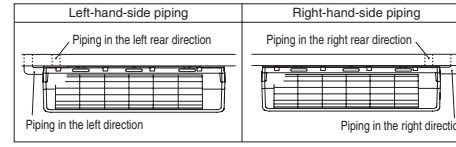


- Hold the bottom of the piping and fix direction before stretching it and shaping it.
- Tape only the portion that goes through the wall.
- Always tape the wiring with the piping.

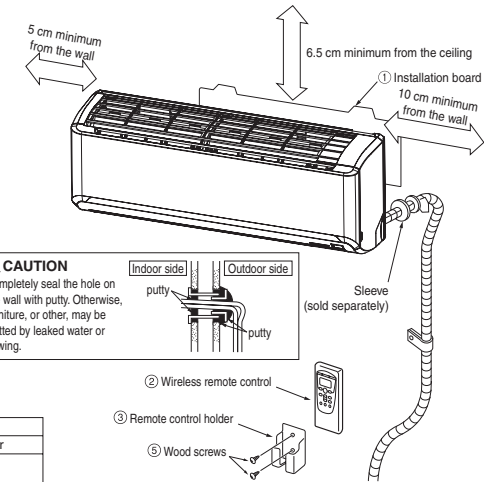
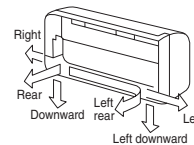
Sufficient care must be taken not to damage the panel when connecting pipes.

#### Matters of special notice when piping from left or central/rear of the unit.

[Top view]

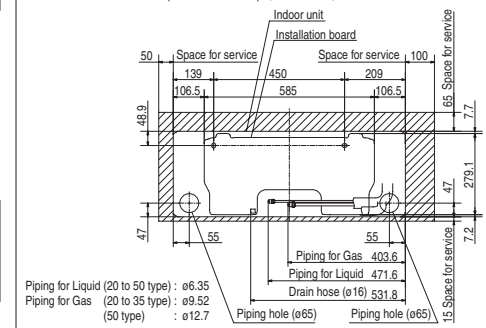


Piping is possible in the rear, left, left rear, left downward, right or downward direction.

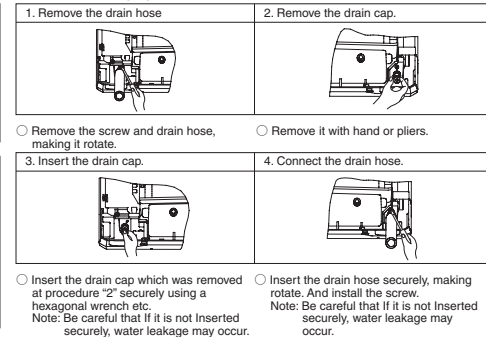


### Relation between setting plate and indoor unit

#### INSTALLATION SPACE (INDOOR UNIT) (FRONT VIEW)

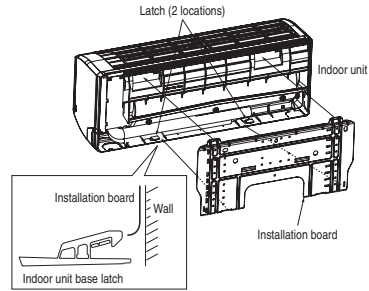


#### [Drain hose changing procedures]





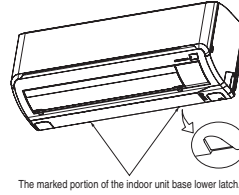
### Fixing of indoor unit



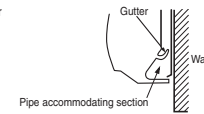
- Installation Steps**
- Pass the pipe through the hole in the wall, and hook the upper part of the indoor unit to the installation board.
  - Gently push the lower part to secure the unit.

### How to remove the indoor unit from the installation board

- Push up at the marked portion of the indoor unit base lower latch, and slightly pull it toward you. (both right and left hand sides) (The indoor unit base lower latch can be removed from the installation board)
- Push up the indoor unit upward. So the indoor unit will be removed from the installation board.



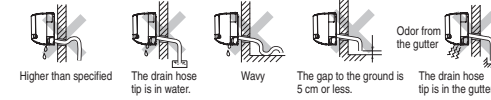
Since this air conditioner has been designed to collect dew drops on the rear surface to the drain pan, do not attach the power cord above the gutter.



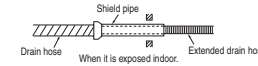
### Drainage

- Arrange the drain hose in a downward angle.
- Avoid the following drain piping.

**CAUTION** Go through all installation steps and check if the drainage is all right. Otherwise water leak may occur.



- Pour water to the drain pan located under the heat exchanger, and ensure that the water is discharged outdoor.
- When the extended drain hose is indoor, always use a shield pipe (to be arranged by the user) and ensure it is thermally insulated.

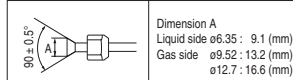


## CONNECTION OF REFRIGERANT PIPINGS

**Preparation** Keep the openings of the pipes covered with tapes etc. to prevent dust, sand, etc. from entering them.



- Remove the flared nuts. (on both liquid and gas sides)

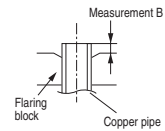


Dimension A  
Liquid side  $\phi 6.35 : 9.1$  (mm)  
Gas side  $\phi 9.52 : 13.2$  (mm)  
 $\phi 12.7 : 16.6$  (mm)

- Install the removed flared nuts to the pipes to be connected, then flared the pipes.

**CAUTION**  
Do not apply refrigerating machine oil to the flared surface.

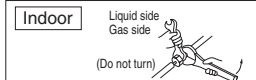
### Flaring work



Copper pipe diameter	Measurement B (mm)		
	Clutch type flare tool for R410A	Conventional (R22) flare tool	
		Clutch type	Wing nut type
$\phi 6.35$	0.0 - 0.5	1.0 - 1.5	1.5 - 2.0
$\phi 9.52$	0.0 - 0.5	1.0 - 1.5	1.5 - 2.0
$\phi 12.7$	0.0 - 0.5	1.0 - 1.5	2.0 - 2.5

Use a flare tool designed for R410A or a conventional flare tool.  
Please note that measurement B (protrusion from the flaring block) will vary depending on the type of a flare tool in use.  
If a conventional flare tool is used, please use a copper pipe gauge or a similar instrument to check protrusion so that you can keep measurement B to a correct value.

### Connection

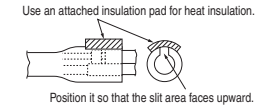
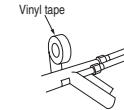


- Connect the pipes on both liquid and gas sides.
- Tighten the nuts to the following torque.  
Liquid side ( $\phi 6.35$ ) : 14.0 - 18.0 N·m (1.4 - 1.8 kgf·m)  
Gas side ( $\phi 9.52$ ) : 34.0 - 42.0 N·m (3.4 - 4.2 kgf·m)  
( $\phi 12.7$ ) : 49.0 - 61.0 N·m (4.9 - 6.1 kgf·m)

**CAUTION**  
Do not apply excess torque to the flared nuts. Otherwise, the flared nuts may check depending.

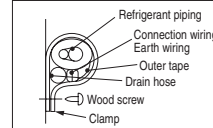
### Insulation of the connection portion

Cover the coupling with insulator and then cover it with tapes.



- Cover the indoor unit's flare-connected joints, after they are checked for a gas leak, with an indoor unit heat insulating material and then wrap them with a tape with an attached insulation pad placed over the heat insulating material's slit area.

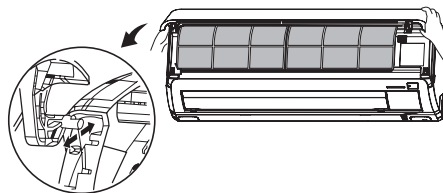
### Finishing work and fixing



Cover the exterior portion with outer tape and shape the piping so it will match the contours of the route that the piping to take.  
Also fix the wiring and pipings to the wall with clamps.

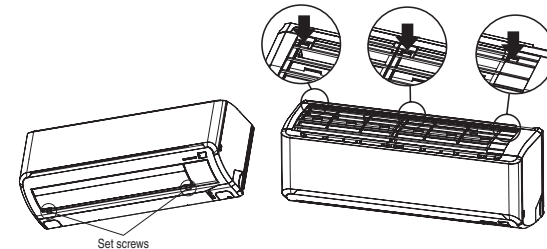
### Open/close and detachment/attachment of the air inlet panel

- To open, pull the panel at both ends of lower part and release latches, then pull up the panel until you feel resistance.  
(The panel stops at approx. 60° open position)
- To close, hold the panel at both ends of lower part to lower downward and push it slightly until the latch works.
- To remove, pull up the panel to the position shown in right illustration and pull it toward you.
- To install, insert the panel arm into the slot on the front panel from the position shown in right illustration, hold the panel at both ends of lower part, lower it downward slowly, then push it slightly until the latch works.



### How to remove and fit the front panel

- Removing
  - Remove the air inlet panel.
  - Remove the 2 set screws.
  - Remove the 3 latches in the upper section.
  - Move the lower part of the panel forward and push upwards to remove.
- Fitting
  - Do remove the air filter.
  - Cover the body with the front panel.
  - Fit the 3 latches in the upper section.
  - Tighten the 2 set screws.
  - Fit the air filter.
  - Fit the air inlet panel.



## ELECTRICAL WIRING WORK

### Preparation of indoor unit

#### Mounting of connecting wires

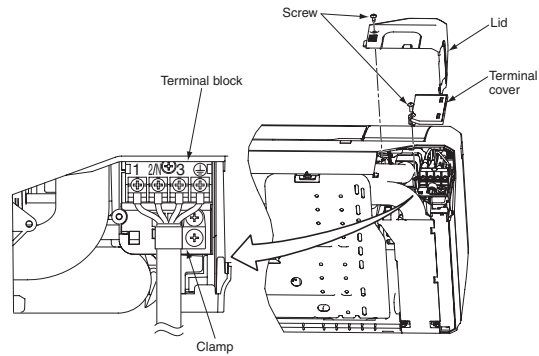
- ① Remove the lid.
- ② Remove the terminal cover.
- ③ Remove the wiring clamp.
- ④ Connect the connecting wire securely to the terminal block.
  - 1) Connect the connection wire securely to the terminal block. If the wire is not affixed completely, contact will be poor, and it is dangerous as the terminal block may heat up and catch fire.
  - 2) Take care not to confuse the terminal numbers for indoor and outdoor connections.
- ⑤ Fix the connecting wire by wiring clamp.
- ⑥ Attach the terminal cover.
- ⑦ Attach the lid.

### CAUTION

In case of faulty wiring connection, the indoor unit stops, and then the run lamp turns on and the timer lamp blinks.

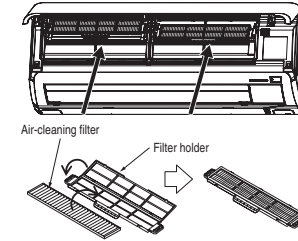
Use cables for interconnection wiring to avoid loosening of the wires.  
CENELEC code for cables Required field cables.

H05RN4G1.5 (example) or 245IEC57
H Harmonized cable type
05 300/500 volts
R Natural-and/or synth, rubber wire insulation
N Polychloroprene rubber conductors insulation
R Stranded core
4or5 Number of conductors
G One conductor of the cable is the earth conductor (yellow/green)
1.5 Section of copper wire (mm <sup>2</sup> )



### Installing the air-cleaning filters

1. Open the air inlet panel and remove the air filters.
2. Install the filter holders, with the air-cleaning filters installed in the holders.
  - Each air-cleaning filter can be installed in the left or right filter holder.
3. Install the air filters and close the inlet panel.



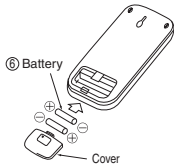
## INSTALLATION OF WIRELESS CONTROL

### Mounting method of battery

- Uncover the wireless remote control, and mount the batteries [R03 (AAA, Micro), ×2 pieces] in the body regularly. (Fit the poles with the indication marks, ⊕ & ⊖ without fail)

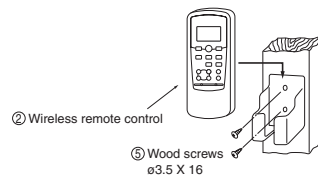
### CAUTION

Do not use new and old batteries together.



### Fixing to pillar or wall

- Conventionally, operate the wireless remote control by holding in your hand.
- Avoid installing it on a clay wall etc.



## INSTALLATION TEST CHECK POINTS

Check the following points again after completion of the installation, and before turning on the power. Conduct a test run again and ensure that the unit operates properly. At the same time, explain to the customer how to use the unit and how to take care of the unit following the user's manual.

### After installation

- The power supply voltage is correct as the rating.
- No gas leaks from the joints of the operation valve.
- Power cables and crossover wires are securely fixed to the terminal board.
- Operation valve is fully open.
- The pipe joints for indoor and outdoor pipes have been insulated.

### Test run

- Air conditioning operation is normal.
- No abnormal noise.
- Water drains smoothly.
- Protective functions are not working.
- The remote control is normal.
- Operation of the unit has been explained to the customer. (Three-minutes restart preventive timer)  
When the air conditioner is restarted or when changing the operation, the unit will not start operating for approximately 3 minutes. This is to protect the unit and it is not a malfunction.

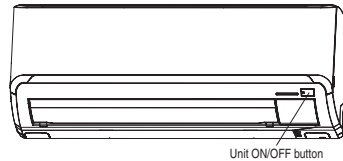
## HOW TO RELOCATE OR DISPOSE OF THE UNIT

- In order to protect the environment, be sure to pump down (recovery of refrigerant).
- Pump down is the method of recovering refrigerant from the indoor unit to the outdoor unit when the pipes are removed from the unit.

### <How to pump down>

- ① Connect charge hose to check joint of outdoor unit.
- ② Liquid side : Close the liquid valve with hexagon wrench key.  
Gas side : Fully open the gas valve.  
Carry out cooling operation. (If indoor temperature is low, operate forced cooling operation.)
- ③ After low pressure gauge become 0.01MPa, stop cooling operation and close the gas valve.

- Forced cooling operation  
Turn on a power supply again after a while after turn off a power supply. Then press continually the ON/OFF button 5 seconds or more.

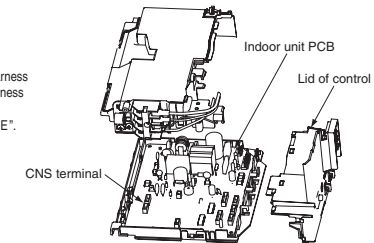


## CONCERNING TERMINAL CONNECTION FOR AN INTERFACE

- ① Remove the front panel and lid of control.
- ② Remove the control.
- ③ There is a terminal (respectively marked with CNS) for the indoor control board.

In connecting an interface, connect to the respective terminal securely with the connection harness supplied with an optional "Interface connection kit SC-BIKN-E" and fasten the connection harness onto the indoor control box with the clamp supplied with the kit.

For more details, please refer to the user's manual of your "Interface connection kit SC-BIKN-E".



## (b) Floor standing type (SRF)

RFB012A002A 

- This instruction manual illustrates the method of installing an indoor unit.
- For electrical wiring work, please see instructions set out on the backside.
- For outdoor unit installation and refrigerant piping, please refer to page 76 and 80.




- A wired remote control unit is supplied separately as an optional part.
- When install the unit, be sure to check whether the selection of installation place, power supply specifications, usage limitation (piping length, height differences between indoor and outdoor units, power supply voltage and etc.) and installation spaces.







### SAFETY PRECAUTIONS

- We recommend you to read this "SAFETY PRECAUTIONS" carefully before the installation work in order to gain full advantage of the functions of the unit and to avoid malfunction due to mishandling.
- The precautions described below are divided into **WARNING** and **CAUTION**. The matters with possibilities leading to serious consequences such as death or serious personal injury due to erroneous handling are listed in the **WARNING** and the matters with possibilities leading to personal injury or damage of the unit due to erroneous handling including probability leading to serious consequences in some cases are listed in the **CAUTION**. These are very important precautions for safety. Be sure to observe all of them without fail.
- Be sure to confirm no anomaly on the equipment by commissioning after completed installation and explain the operating methods as well as the maintenance methods of this equipment to the user according to the owner's manual.

- Keep the installation manual together with owner's manual at a place where any user can read at any time. Moreover if necessary, ask to hand them to a new user.
- For installing qualified personnel, take precautions in respect to themselves by using suitable protective clothing, gloves, etc., and then perform the installation works.
- Please pay attention not to fall down the tools, etc. when installing the unit at the high position.
- If unusual noise can be heard during operation, consult the dealer.
- Symbols which appear frequently in the text have the following meaning:



 <b>WARNING</b>	
<p> • <b>Installation must be carried out by the qualified installer.</b> If you install the system by yourself, it may cause serious trouble such as water leaks, electric shocks, fire and personal injury, as a result of a system malfunction.</p> <p>• <b>Install the system in full accordance with the instruction manual.</b> Incorrect installation may cause bursts, personal injury, water leaks, electric shocks and fire.</p> <p>• <b>Be sure to use only for household and residence.</b> If this appliance is installed in inferior environment such as machine shop and etc., it can cause malfunction.</p> <p>• <b>Use the original accessories and the specified components for installation.</b> If parts other than those prescribed by us are used, it may cause water leaks, electric shocks, fire and personal injury.</p> <p>• <b>Install the unit in a location with good support.</b> Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.</p> <p>• <b>Ventilate the working area well in the event of refrigerant leakage during installation.</b> If the refrigerant comes into contact with naked flames, poisonous gas is produced.</p> <p>• <b>When installing in small rooms, take prevention measures not to exceed the density limit of refrigerant in the event of leakage.</b> Consult the expert about prevention measures. If the density of refrigerant exceeds the limit in the event of leakage, lack of oxygen can occur, which can cause serious accidents.</p> <p>• <b>After completed installation, check that no refrigerant leaks from the system.</b> If refrigerant leaks into the room and comes into contact with an oven or other hot surface, poisonous gas is produced.</p> <p>• <b>Use the prescribed pipes, flare nuts and tools for R410A.</b> Using existing parts (for R22 or R407C) can cause the unit failure and serious accidents due to burst of the refrigerant circuit.</p>	<p>• <b>Tighten the flare nut by torque wrench with specified method.</b> If the flare nut were tightened with excess torque, this may cause burst and refrigerant leakage after a long period.</p> <p>• <b>The electrical installation must be carried out by the qualified electrician in accordance with "the norm for electrical work" and "national wiring regulation", and the system must be connected to the dedicated circuit.</b> Power supply with insufficient capacity and incorrect function done by improper work can cause electric shocks, unit failure or incorrect function of equipment.</p> <p>• <b>Be sure to shut off the power before starting electrical work.</b> Failure to shut off the power can cause electric shocks, unit failure or incorrect function of equipment.</p> <p>• <b>Be sure to use the cables conformed to safety standard and cable ampacity for power distribution work.</b> Unconformable cables can cause electric leak, anomalous heat production or fire.</p> <p>• <b>This appliance must be connected to main power supply by means of a circuit breaker or switch (fuse:16A) with a contact separation of at least 3mm.</b></p> <p>• <b>When plugging this appliance, a plug conforming to the norm IEC60884-1 must be used.</b></p> <p>• <b>Use the prescribed cables for electrical connection, tighten the cables securely in terminal block and relieve the cables correctly to prevent overloading the terminal blocks.</b> Loose connections or cable mountings can cause anomalous heat production or fire.</p> <p>• <b>Arrange the wiring in the control box so that it cannot be pushed up further into the box. Install the service panel correctly.</b> Incorrect installation may result in overheating and fire.</p> <p>• <b>Be sure to switch off the power supply in the event of installation, inspection or servicing.</b> If the power supply is not shut off, there is a risk of electric shocks, unit failure or personal injury due to the unexpected start of fan.</p>
<p> • <b>Do not put the drainage pipe directly into drainage channels where poisonous gases such as sulphide gas can occur.</b> Poisonous gases will flow into the room through drainage pipe and seriously affect the user's health and safety.</p> <p>• <b>Ensure that no air enters in the refrigerant circuit when the unit is installed and removed.</b> If air enters in the refrigerant circuit, the pressure in the refrigerant circuit becomes too high, which can cause burst and personal injury.</p>	<p>• <b>Do not processing, splice the power cord, or share a socket with other power plugs.</b> This may cause fire or electric shock due to defecting contact, defecting insulation and over-current etc.</p> <p>• <b>Do not bundling, winding or processing for the power cord. Or, do not deforming the power plug due to treat it.</b> This may cause fire or heating.</p>

 <b>WARNING</b>	
<p> • <b>Do not vent R410A into the atmosphere : R410A is a fluorinated greenhouse gas, covered by the Kyoto Protocol with Global Warming Potential (GWP)=1975.</b></p> <p>• <b>Do not run the unit with removed panels or protections.</b> Touching rotating equipments, hot surfaces or high voltage parts can cause personal injury due to entrapment, burn or electric shocks.</p>	<p>• <b>Do not perform any change of protective device itself or its setup condition.</b> The forced operation by short-circuiting protective device of pressure switch and temperature controller or the use of non specified component can cause fire or burst.</p>
<p> • <b>Carry out the electrical work for ground lead with care.</b> Do not connect the ground lead to the gas line, water line, lightning conductor or telephone line's ground lead. Incorrect grounding can cause unit faults such as electric shocks due to short-circuiting.</p>	
 <b>CAUTION</b>	
<p> • <b>Use the circuit breaker with sufficient breaking capacity.</b> If the breaker does not have sufficient breaking capacity, it can cause the unit malfunction and fire.</p> <p>• <b>Earth leakage breaker must be installed.</b> If the earth leakage breaker is not installed, it can cause electric shocks.</p> <p>• <b>Install isolator or disconnect switch on the power supply wiring in accordance with the local codes and regulations.</b></p> <p>• <b>Be sure to install indoor unit properly according to the instruction manual in order to run off the drainage smoothly.</b> Improper installation of indoor unit can cause dropping water into the room and damaging personal property.</p> <p>• <b>Install the drainage pipe to run off drainage securely according to the installation manual.</b> Incorrect installation of the drainage pipe can cause dropping water into the room and damaging personal property.</p> <p>• <b>Be sure to install the drainage pipe with descending slope of 1/100 or more, and not to make traps and air-bleedings.</b> Check if the drainage runs off securely during commissioning and ensure the space for inspection and maintenance.</p>	<p>• <b>Secure a space for installation, inspection and maintenance specified in the manual.</b> Insufficient space can result in accident such as personal injury due to falling from the installation place.</p> <p>• <b>For installation work, be careful not to get injured with the heat exchanger, piping flare portion or screws etc.</b></p> <p>• <b>Be sure to insulate the refrigerant pipes so as not to condense the ambient air moisture on them.</b> Insufficient insulation can cause condensation, which can lead to moisture damage on the ceiling, floor, furniture and any other valuables.</p> <p>• <b>When perform the air conditioner operation (cooling or drying operation) in which ventilator is installed in the room. In this case, using the air conditioner in parallel with the ventilator, there is the possibility that drain water may backflow in accordance with the room lapse into the negative pressure status. Therefore, set up the opening port such as incorporate the air into the room that may appropriate to ventilation (For example: Open the door a little). In addition, just as above, so set up the opening port if the room lapse into negative pressure status due to register of the wind for the high rise apartment etc.</b></p>
<p> • <b>Do not install the unit in the locations listed below.</b></p> <ul style="list-style-type: none"> <li>• Locations where carbon fiber, metal powder or any powder is floating.</li> <li>• Locations where any substances that can affect the unit such as sulphide gas, chloride gas, acid and alkaline can occur.</li> <li>• Vehicles and ships.</li> <li>• Locations where cosmetic or special sprays are often used.</li> <li>• Locations with direct exposure of oil mist and steam such as kitchen and machine plant.</li> <li>• Locations where any machines which generate high frequency harmonics are used.</li> <li>• Locations with salty atmospheres such as coastlines.</li> <li>• Locations with heavy snow (If installed, be sure to provide base flame and snow hood mentioned in the manual).</li> <li>• Locations where the unit is exposed to chimney smoke.</li> <li>• Locations at high altitude (more than 1000m high).</li> <li>• Locations with ammoniac atmospheres.</li> <li>• Locations where heat radiation from other heat source can affect the unit.</li> <li>• Locations without good air circulation.</li> <li>• Locations with any obstacles which can prevent inlet and outlet air of the unit.</li> <li>• Locations where short circuit of air can occur (in case of multiple units installation).</li> <li>• Locations where strong air blows against the air outlet of outdoor unit. It can cause remarkable decrease in performance, corrosion and damage of components, malfunction and fire.</li> </ul> <p>• <b>Do not install the indoor unit in the locations listed below (Be sure to install the indoor unit according to the installation manual for each model because each indoor unit has each limitation).</b></p> <ul style="list-style-type: none"> <li>• Locations with any obstacles which can prevent inlet and outlet air of the unit.</li> <li>• Locations where vibration can be amplified due to insufficient strength of structure.</li> <li>• Locations where the infrared receiver is exposed to the direct sunlight or the strong light beam (in case of the infrared specification unit).</li> <li>• Locations where an equipment affected by high harmonics is placed (TV set or radio receiver is placed within 1m).</li> <li>• Locations where drainage cannot run off safely.</li> </ul> <p>It can affect performance or function and etc.</p> <p>• <b>Do not install the unit near the location where leakage of combustible gases can occur.</b> If leaked gases accumulate around the unit, it can cause fire.</p>	<p>• <b>Do not install the unit where corrosive gas (such as sulfurous acid gas etc.) or combustible gas (such as thinner and petroleum gases) can accumulate or collect, or where volatile combustible substances are handled.</b> Corrosive gas can cause corrosion of heat exchanger, breakage of plastic parts and etc. And combustible gas can cause fire.</p> <p>• <b>Do not use the indoor unit at the place where water splashes may occur such as in laundries.</b> Since the indoor unit is not waterproof, it can cause electric shocks and fire.</p> <p>• <b>Do not install nor use the system close to the equipment that generates electromagnetic fields or high frequency harmonics.</b> Equipment such as inverters, standby generators, medical high frequency equipments and telecommunication equipments can affect the system, and cause malfunctions and breakdowns. The system can also affect medical equipment and telecommunication equipment, and obstruct its function or cause jamming.</p> <p>• <b>Do not place any variables which will be damaged by getting wet under the indoor unit.</b> When the relative humidity is higher than 80% or drainage pipe is clogged, condensation or drainage water can drop and it can cause the damage of valuables.</p> <p>• <b>Do not install the remote control at the direct sunlight.</b> It can cause malfunction or deformation of the remote control.</p> <p>• <b>Do not use the unit for special purposes such as storing foods, cooling precision instruments and preservation of animals, plants or art.</b> It can cause the damage of the items.</p> <p>• <b>Do not use any materials other than a fuse with the correct rating in the location where fuses are to be used.</b> Connecting the circuit with copper wire or other metal thread can cause unit failure and fire.</p> <p>• <b>Do not touch any buttons with wet hands.</b> It can cause electric shocks.</p> <p>• <b>Do not touch any refrigerant pipes with your hands when the system is in operation.</b> During operation the refrigerant pipes become extremely hot or extremely cold depending the operating condition, and it can cause burn injury or frost injury.</p>

## BEFORE INSTALLATION

○ Before installation check that the power supply matches the air conditioner.

Standard accessories (Installation kit) Accessories for indoor unit		Q'ty
①	Installation board (Attached to the rear of the indoor unit)	1
②	Wireless remote control	1
③	Remote control holder	1
④	Tapping screws (for installation board 4dia. by 25mm)	9
⑤	Wood screws (for remote control switch holder 3.5(mm), by 16mm)	2
⑥	Battery [R03(AAA, Micro) 1.5V]	2
⑦	Air-cleaning filters	2
⑧	Filter holders (Attached to the front panel of indoor unit)	2
⑨	Pipe cover (200mm)	1
⑩	Band	2

Option parts		Q'ty
Ⓐ	Sealing plate	1
Ⓑ	Sleeve	1
Ⓒ	Inclination plate	1
Ⓓ	Putty	1
Ⓔ	Drain hose (extension hose)	1
①	Piping cover (for insulation of connection piping)	1

Necessary tools for the installation work	
1	Plus headed driver
2	Knife
3	Saw
4	Tape measure
5	Hammer
6	Spanner wrench
7	Torque wrench (14.0 ~ 61.0N·m (1.4 ~ 6.1kgf·m))
8	Hole core drill (65mm in diameter)
9	Wrench key (Hexagon) [4m/m]
10	Flaring tool set (Designed specifically for R410A)
11	Gas leak detector (Designed specifically for R410A)
12	Gauge for projection adjustment (Used when flare is made by using conventional flare tool)
13	Pipe bender

## SELECTION OF INSTALLATION LOCATION

(Install at location that meets the following conditions, after getting approval from the customer)

### Indoor unit

- Where there is no obstructions to the air flow and where the cooled and heated air can be evenly distributed.
- A solid place where the unit or the wall will not vibrate.
- A place where there will be enough space for servicing. (Where space mentioned below can be secured)
- Where wiring and the piping work will be easy to conduct.
- The place where receiving part is not exposed to the direct rays of the sun or the strong rays of the street lighting.
- A place where it can be easily drained.
- A place separated at least 1m away from the television or the radio. (To prevent interference to images and sounds.)
- Places where this unit is not affected by the high frequency equipment or electric equipment.
- Avoid installing this unit in place where there is much oil mist.
- Places where there is no electric equipment or household under the installing unit.
- Install the indoor unit on flat wall.

### Wireless remote control

- A place where the air conditioner can be received the signal surely during operating the wireless remote control.
- Places where there is no affected by the TV and radio etc.
- Do not place where exposed to direct sunlight or near heat devices such as a stove.

## INSTALLATION OF INDOOR UNIT

### Open and detachment of the air inlet panel

- To open, pull the panel at both ends of upper part and release latches, and undo the strings. Then remove the panel.

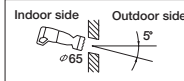
**CAUTION**  
When removing the air-inlet panel, be careful not to drop it on your feet.

### How to remove the front panel

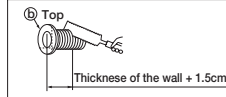
- Remove the air inlet panel.
- Remove the 5 set screws.
- Remove the 3 latches in the upper section. If the latches are difficult to remove, push the latch portion out using a screw driver, for example.
- Move the lower part of the panel forward and remove the 6 latches in the under section.

### Drilling of holes and fixture of sleeve (Option parts)

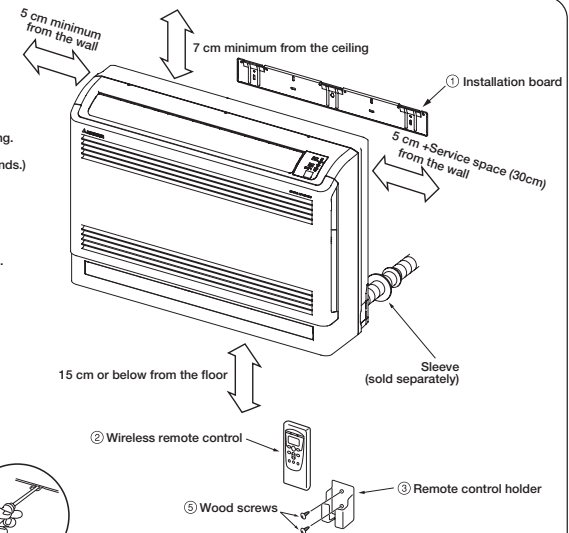
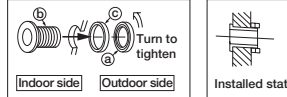
When drilling the wall that contains a metal lath, wire lath or metal plate, be sure to use pipe hole sleeve sold separately.



○ Drill a hole with whole core drill.



○ In case of rear piping draw out, cut off the lower and the right side portions of the sleeve collar.

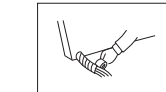


**CAUTION**  
Completely seal the hole on the wall with putty. Otherwise, furniture, or other, may be wetted by leaked water or dewing.

### Installing the support of piping

#### In case of piping in the right rear direction

##### Taping of the exterior

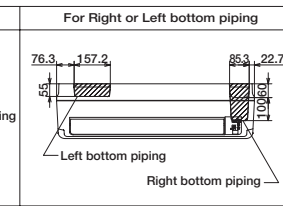
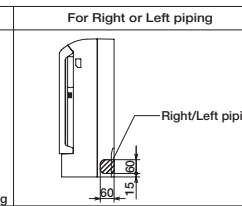
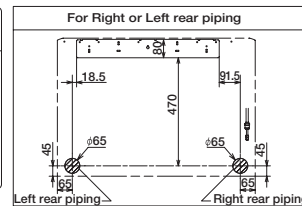
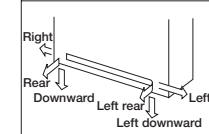


- Tape only the portion that goes through the wall.
- Always tape the wiring with the piping.

Sufficient care must be taken not to damage the panel when connecting pipes.

### Indoor unit piping direction

Piping is possible in the rear, left, left rear, left downward, right or downward direction.

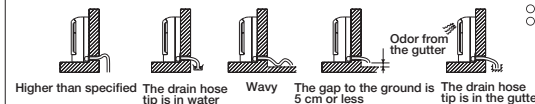


**CAUTION**  
Be careful not to stress the connecting refrigerant pipe. (Do not pull with a force of larger than 5 kgf.) If improperly installed, it may cause abnormal noise and vibration.

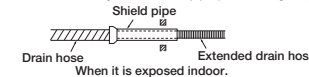
### Drainage

- Arrange the drain hose in a downward angle
- Avoid the following drain piping.

**CAUTION** Go through all installation steps and check if the drainage is all right. Otherwise water leak may occur.



- Pour water to the drain pan located under the heat exchanger, and ensure that the water is discharged outdoor.
- When the extended drain hose is indoor, always use a shield pipe (to be arranged by the user) and ensure it is thermally insulated

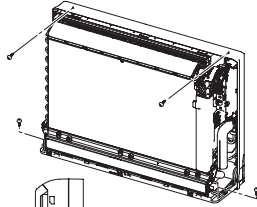


### Fixing of indoor unit

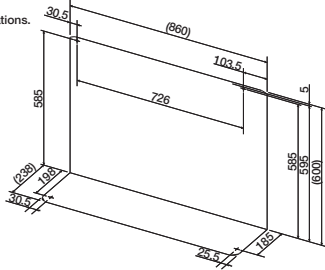
**CAUTION** During the installation, do not lean on the control box or the display, as they may be damaged.  
 Install the indoor unit on flat wall. If improperly installed, it may cause abnormal noise and vibration. (Distortion on the wall shall be no larger than 3 mm.)

#### Floor installation

Secure using upper 2 screws for floor installations. If possible, also attach two lower screws.



If there is an obstacle such as a cable cover, cut off the hatched part before installation.



#### Wall installation

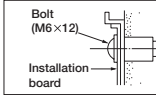
At first secure the installation board using 5 screws and the indoor unit using 2 screws.

#### Installation of Installation board

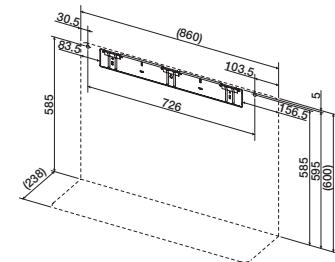
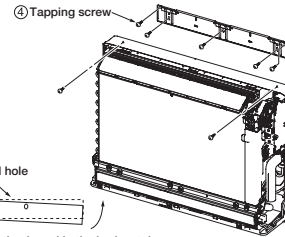
Look for the inside wall structures (Intersediats support or pillar and finally install the unit after level surface has been checked.)



Fixing on concrete wall  
Use of nut anchor



- Adjustment of the installation board in the horizontal direction is to be conducted with five screws in a temporary tightened state.
- Adjust so the board will be level by turning the board with the standard hole as the center.

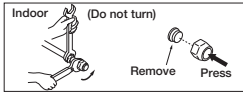


When practicing the half-console, make sure to fix the unit securely. Otherwise, it could fall.

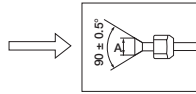
## CONNECTION OF REFRIGERANT PIPINGS

#### Preparation

Keep the openings of the pipes covered with tapes etc. to prevent dust, sand, etc. from entering them.



Remove the flared nuts. (on both liquid and gas sides)



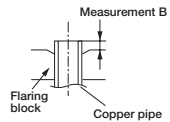
Install the removed flared nuts to the pipes to be connected, then flared the pipes.

Dimension A  
Liquid side  $\phi 6.35: 9.1(\text{mm})$   
Gas side  $\phi 9.52: 13.2(\text{mm})$   
 $\phi 12.7: 16.8(\text{mm})$

#### CAUTION

Do not apply refrigerating machine oil to the flared surface.

#### Flaring work

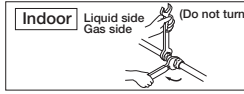


Copper pipe diameter	Measurement B (mm)	
	Clutch type flare tool for R410A	Conventional (R22) flare tool
		Clutch type Wing nut type
$\phi 6.35$	0.0 - 0.5	1.0 - 1.5 1.5 - 2.0
$\phi 9.52$	0.0 - 0.5	1.0 - 1.5 1.5 - 2.0
$\phi 12.7$	0.0 - 0.5	1.0 - 1.5 2.0 - 2.5

Use a flare tool designed for R410A or a conventional flare tool. Please note that measurement B (protrusion from the flaring block) will vary depending on the type of a flare tool in use. If a conventional flare tool is used, please use a copper pipe gauge or a similar instrument to check protrusion so that you can keep measurement B to a correct value.

**CAUTION** Be careful not to stress the connecting refrigerant pipes. (Do not pull with a force of larger than 5 kgf.)

#### Connection



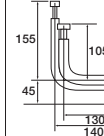
- Connect the pipes on both liquid and gas sides.
- Tighten the nuts to the following torque.  
Liquid side ( $\phi 6.35$ ) : 14.0 - 19.0 N·m (1.4 - 1.8 kgf·m)  
Gas side ( $\phi 9.52$ ) : 34.0 - 42.0 N·m (3.4 - 4.2 kgf·m)  
( $\phi 12.7$ ) : 49.0 - 61.0 N·m (4.9 - 6.1 kgf·m)

#### CAUTION

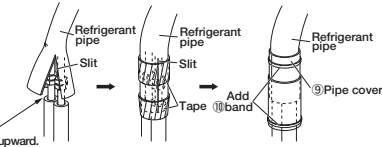
Do not apply excess torque to the flared nuts. Otherwise, the flared nuts may check depending.

#### Insulation of the connection portion

Pass the refrigerant pipe through the piping hole to indoor side. Arrange the pipes according to the direction of piping.



Cover the coupling with insulator and then cover it with tapes. Use an attached pipe cover for heat insulation.



**CAUTION** If heat insulation is insufficient, water leakage may occur. In addition, the room temperature sensor may give a false alert due to heat radiation from the pipes.

Cover the indoor unit's flare-connected joints, after they are checked for a gas leak, with an indoor unit heat insulating material and then wrap them with a tape with an attached pipe cover placed over the heat insulating material's slit area.

## ELECTRICAL WIRING WORK

#### Preparation of indoor unit

#### Mounting of connecting wires

- Remove the fixing screw of clamp.
- Connect the connecting wire securely to the terminal block.
  - Connect the connection wire securely to the terminal block. If the wire is not affixed completely, contact will be poor, and it is dangerous as the terminal block may heat up and catch fire.
  - Take care not to confuse the terminal numbers for indoor and outdoor connections.
- Fix the connecting wire by wiring clamp.
- Pass the connecting wire through the wiring holder.

#### CAUTION

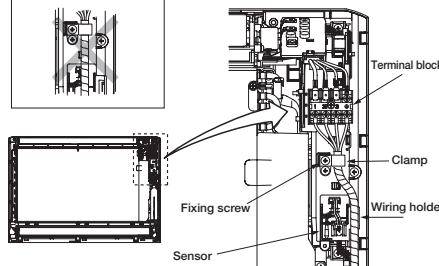
In case of faulty wiring connection, the indoor unit stops, and then the run lamp turns on and the timer lamp blinks.

Use cables for interconnection wiring to avoid loosening of the wires.  
GENELEC code for cables Required field cables.

H05RN4G1.5 (example) or 245IEC57  
H Harmonized cable type  
05 300/500 volts  
R Natural-and/or synth, rubber wire insulation  
N Polychloroprene rubber conductors insulation  
R Stranded core  
4or5 Number of conductors  
G One conductor of the cable is the earth conductor (yellow/green)  
1.5 Section of copper wire (mm<sup>2</sup>)

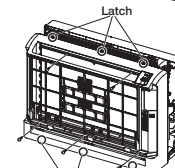
#### CAUTION

- During installation, do not lean on the control box or the display, as they may be damaged.
- Pass the connecting wire securely through the wiring holder. If it passes on the sensor, it may not detect suction temperature and/or humidity.



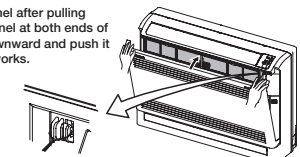
#### How to fit the front panel

- Fitting
  - Do remove the air filter.
  - Cover the body with the front panel.
  - Fit the 6 latches in the lower section.
  - Then 3 latches in the upper section.
  - Tighten the 5 set screws.
  - Fit the air filter.
  - Fit the air inlet panel.



#### Close and attachment of the air inler panel

- To close, attach the panel after pulling the strings, hold the panel at both ends of upper part to lower downward and push it slightly until the latch works.

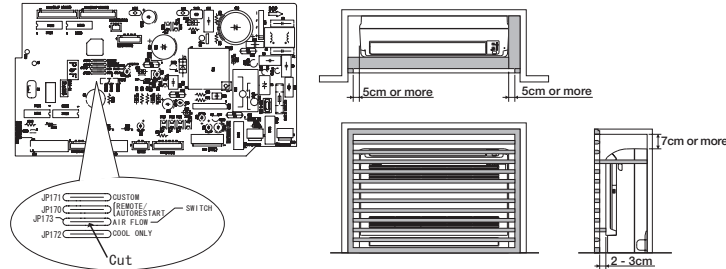




### Concealed installation

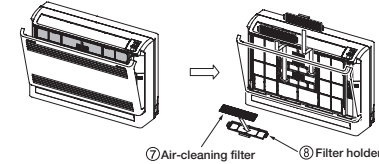
- Install the indoor unit according to the following instructions.
- Secure the upper, right, and left spaces according to the right figure.
  - Do not let the horizontal bar obstruct wind from blowing out upward/downward or reception from the remote controller.
  - The lattice size should be 70 % or greater of the open rate.
  - Cut the jumper cable (JP173) on the indoor circuit board to control the blow-out angle.

**CAUTION**  
Incorrect installation may cause problems such as non-cooling, non-warming, and condensation water leaking into the room.



### Installing the air-cleaning filters

- Open the air inlet panel and remove the air filters.
- Install the filter holders, with the air-cleaning filters installed in the holders. In the air conditioner.
  - Each air-cleaning filter can be installed in the upper or lower filter holder.
- Install the air filters and close the inlet panel.



**CAUTION**  
When installing an air-cleaning filter in the indoor unit, be careful not to injure your hand with the heat exchanger.

## INSTALLATION OF REMOTE CONTROL

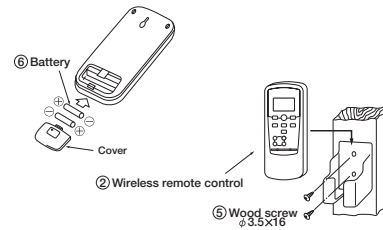
### Mounting method of battery

- Uncover the wireless remote control, and mount the batteries [R03(AAA, Micro), ×2 pieces] in the body regularly. (Fit the poles with the indication marks, ⊕ & ⊖ without fall)

**CAUTION**  
Do not use new and old batteries together.

### Fixing to pillar or wall

- Conventionally, operate the remote control switch by holding in your hand.
- Avoid installing it on a clay wall etc.



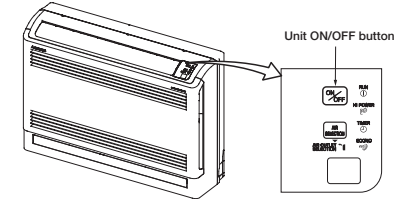
## HOW TO RELOCATE OR DISPOSE OF THE UNIT

- In order to protect the environment, be sure to pump down (recovery of refrigerant).
- Pump down is the method of recovering refrigerant from the indoor unit to the outdoor unit when the pipes are removed from the unit.

- Forced cooling operation  
Turn on a power supply again after a while after turn off a power supply. Then press continually the ON/OFF button 5 seconds or more.

### <How to pump down>

- Connect charge hose to service port of outdoor unit.
- Liquid side : Close the liquid valve with hexagon wrench key.  
Gas side : Fully open the gas valve  
Carry out cooling operation . (If indoor temperature is low, operate forced cooling operation.)
- After low pressure gauge become 0.01MPa, stop cooling operation and close the gas valve.



## INSTALLATION TEST CHECK POINTS

Check the following points again after completion of the installation, and before turning on the power. Conduct a test run again and ensure that the unit operates properly. At the same time, explain to the customer how to use the unit and how to take care of the unit following the user's manual.

### After installation

- The power supply voltage is correct as the rating.
- No gas leaks from the joints of the operational valve.
- Power cables and crossover wires are securely fixed to the terminal board.
- Operational valve is fully open.
- The pipe joints for indoor and outdoor pipes have been insulated.

### Test run

- Air conditioning operation is normal.
- No abnormal noise.
- Water drains smoothly.
- Protective functions are not working.
- The remote control is normal.

Operation of the unit has been explained to the customer. (Three-minutes restart preventive timer)  
When the air conditioner is restarted or when changing the operation, the unit will not start operating for approximately 3 minutes.  
This is to protect the unit and it is not a malfunction.

## CONCERNING TERMINAL CONNECTION FOR AN INTERFACE

- Remove the front panel and lid of control.
- There is a terminal (respectively marked with CNS) for the indoor control board. In connecting an interface, connect to the respective terminal securely with the connection harness supplied with an optional "Interface connection kit SC-BIKN-E" and fasten the connection harness onto the indoor control box with the clamp supplied with the kit. For more details, please refer to the user's manual of your "Interface connection kit SC-BIKN-E".

(c) Ceiling concealed type (SRR)









(d) Ceiling cassette-4way compact type (FDTC)

### 1 Before installation

- Install correctly according to the installation manual.
- Confirm the following points:
  - Unit type/Power supply specification
  - Pipes/Wires/Small parts
  - Accessory items

#### Accessory items

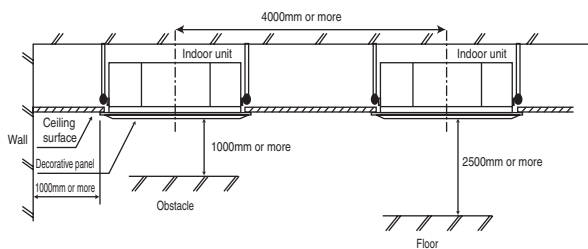
For unit hanging		For refrigerant pipe			For drain pipe			
Flat washer (M10)	Level gauge (insulation)	Pipe cover(big)	Pipe cover (small)	Strap	Pipe cover(big)	Pipe cover(small)	Drain hose	Hose clamp
8	4	1	1	4	1	1	1	1
For unit hanging	For adjustment in hoisting in the unit's main body	For heat insulation of gas pipe	For heat insulation of liquid tube	For pipe cover fixing	For heat insulation of drain socket	For heat insulation of drain socket	For drain pipe connecting	For drain hose mounting

### 2 Selection of installation location for the indoor unit

- Select the suitable areas to install the unit under approval of the user.
  - Areas where the indoor unit can deliver hot and cold wind sufficiently. Suggest to the user to use a circulator if the ceiling height is over 3m to avoid warm air being accumulated on the ceiling.
  - Areas where there is enough space to install and service.
  - Areas where it can be drained properly. Areas where drain pipe descending slope can be taken.
  - Areas where there is no obstruction of airflow on both air return grille and air supply port.
  - Areas where fire alarm will not be accidentally activated by the air conditioner.
  - Areas where the supply air does not short-circuit.
  - Areas where it is not influenced by draft air.
  - Areas not exposed to direct sunlight.
  - Areas where dew point is lower than around 28°C and relative humidity is lower than 80%.  
 (This indoor unit is tested under the condition of JIS (Japan Industrial Standard) high humidity condition and confirmed there is no problem. However, there is some risk of condensation drop if the air conditioner is operated under the severer condition than mentioned above. If there is a possibility to use it under such a condition, attach additional insulation of 10 to 20mm thick for entire surface of indoor unit, refrigeration pipe and drain pipe.)
  - Areas where TV and radio stays away more than 1m. (It could cause jamming and noise.)
  - Areas where any items which will be damaged by getting wet are not placed such as food, table wares, server, or medical equipment under the unit.
  - Areas where there is no influence by the heat which cookware generates.
  - Areas where not exposed to oil mist, powder and/or steam directly such as above fryer.
  - Areas where lighting device such as fluorescent light or incandescent light doesn't affect the operation.  
 (A beam from lighting device sometimes affects the infrared receiver for the wireless remote controller and the air conditioner might not work properly.)
- Check if the place where the air conditioner is installed can hold the weight of the unit. If it is not able to hold, reinforce the structure with boards and beams strong enough to hold it. If the strength is not enough, it could cause injury due to unit falling.
- If there are 2 units of wireless type, keep them away for more than 5m to avoid malfunction due to cross communication.
- When plural indoor units are installed nearby, keep them away for more than 4m.

#### Space for installation and service

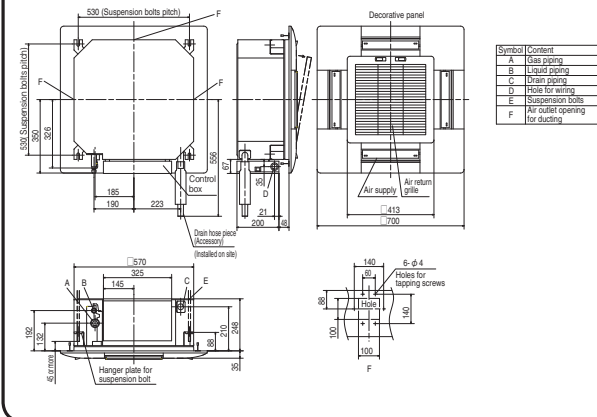
- When it is not possible to keep enough space between indoor unit and wall or between indoor units, close the air supply port where it is not possible to keep space and confirm there is no short circuit of airflow.
- Install the indoor unit at a height of more than 2.5m above the floor.



### 3 Preparation before installation

- If suspension bolt becomes longer, do reinforcement of earthquake resistant.
  - For grid ceiling  
 When suspension bolt length is over 500mm, or the gap between the ceiling and roof is over 700mm, apply earthquake resistant brace to the bolt.
  - In case the unit is hung directly from the slab and is installed on the ceiling plane which has enough strength.  
 When suspension bolt length is over 1000mm, apply the earthquake resistant brace to the bolt.
- Prepare four (4) sets of suspension bolt, nut and spring washer (M10 or M8) on site.

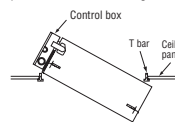
#### Ceiling opening, Suspension bolts pitch, Pipe position



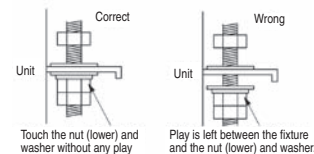
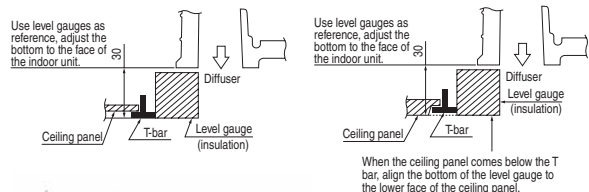
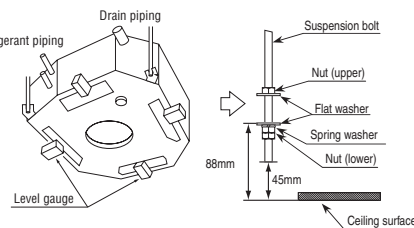
### 4 Installation of indoor unit

#### Work procedure

- This unit is designed for 2 x 2 grid ceiling. If necessary, please detach the T bar temporarily before you install it. If it is installed on a ceiling other than 2 x 2 grid ceiling, provide an inspection port on the control box side.
- Arrange the suspension bolt at the right position (530mm x 530mm).
- Make sure to use four suspension bolts and fix them so as to be able to hold 500N load.
- Ensure that the lower end of the suspension bolt should be 45mm above the ceiling plane. Temporarily put the four lower nuts 88mm above the ceiling plane and the upper nuts at distant place from the lower nuts in order not to obstruct hanging the indoor unit or adjust the indoor unit position, and then hang the indoor unit.

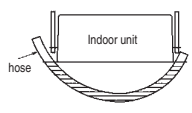


- Adjust the indoor unit position after hanging it by inserting the level gauge attached on the package into the air supply port and checking if the gap between the ceiling plane and the indoor unit is appropriate. In order to adjust the indoor unit position, adjust the lower nuts while the upper nuts are put on distant place. Confirm there is no backlash between the hanger plate for suspension bolt and the lower nut and washer.



#### ④ Installation of indoor unit (continued)

6. Make sure to install the indoor unit horizontally. Confirm the levelness of the indoor unit with a level gauge or transparent hose filled with water. Keep the height difference at both ends of the indoor unit within 3mm.
7. Tighten four upper nuts and fix the unit after height and levelness adjustment.



##### Caution

- Do not adjust the height by adjusting upper nuts. It will cause unexpected stress on the indoor unit and it will lead to deformation of the unit, failure of attaching a panel, and generating noise from the fan.
- Make sure to install the indoor unit horizontally and set the gap between the unit underside and the ceiling plane properly. Improper installation may cause air leakage, dew condensation, water leakage and noise.
- Even after decorative panel attached, still the unit height can be adjusted finely. Refer to the installation manual for decorative panel for details.
- Make sure there is no gap between decoration panel and ceiling surface, and between decoration panel and the indoor unit. The gap may cause air leakage, dew condensation and water leakage.
- In case decorative panel is not installed at the same time, or ceiling material is installed after the unit installed, put the cardboard template for installation attached on the package (packing material of cardboard box) on the bottom of the unit in order to avoid dust coming into the indoor unit.

#### ⑤ Refrigerant pipe

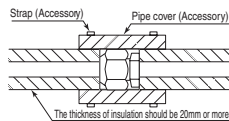
##### Caution

- Use the new refrigerant pipe.
  - When re-using the existing pipe system for R22 or R407C, pay attention to the following items.
    - Change the flare nuts with the attached ones (JIS category 2), and reprocess the flare parts.
    - Do not use thin-walled pipes.
- Use phosphorus deoxidized copper alloy seamless pipe (C1220T specified in JIS H3300) for refrigeration pipe installation.
  - In addition, make sure there is no damage both inside and outside of the pipe, and no harmful substances such as sulfur, oxide, dust or a contaminant stuck on the pipes.
- Do not use any refrigerant other than R410A.
  - Using other refrigerant except R410A (R22 etc.) may degrade inside refrigeration oil. And air getting into refrigeration circuit may cause over-pressure and resultant it may result in bursting, etc.
- Store the copper pipes indoors and seal the both end of them until they are brazed in order to avoid any dust, dirt or water getting into pipe. Otherwise it will cause degradation of refrigeration oil and compressor breakdown, etc.
- Use special tools for R410 refrigerant.

##### Work procedure

1. Remove the flare nut and blind flanges on the pipe of the indoor unit.
  - ※ Make sure to loosen the flare nut with holding the nut on pipe side with a spanner and giving torque to the nut with another spanner in order to avoid unexpected stress to the copper pipe, and then remove them.
    - (Gas may come out at this time, but it is not abnormal.)
    - Pay attention whether the flare nut pops out. (as the indoor unit is sometimes pressured.)
2. Make a flare on liquid pipe and gas pipe, and connect the refrigeration pipes on the indoor unit.
  - ※ Bend the pipe with as big radius as possible and do not bend the pipe repeatedly. In addition, do not twist and crush the pipes.
  - ※ Do a flare connection as follows:
    - Make sure to loosen the flare nut with holding the nut on pipe side with a spanner and giving torque to the nut with another spanner in order to avoid unexpected stress to the copper pipe, and then remove them.
    - When fastening the flare nut, align the refrigeration pipe with the center of flare nut, screw the nut for 3-4 times by hand and then tighten it by spanner with the specified torque mentioned in the table below. Make sure to hold the pipe on the indoor unit securely by a spanner when tightening the nut in order to avoid unexpected stress on the copper pipe.
3. Cover the flare connection part of the indoor unit with attached insulation material after a gas leakage inspection, and tighten both ends with attached straps.
  - Make sure to insulate both gas pipes and liquid pipes completely.
    - ※ Incomplete insulation may cause dew condensation or water dropping.
4. Refrigerant is charged in the outdoor unit.
  - As for the additional refrigerant charge for the indoor unit and piping, refer to the installation manual attached to the outdoor unit.

Pipe diameter	Tightening torque N·m
φ 6.35	14 to 18
φ 9.52	34 to 42
φ 12.7	49 to 61
φ 15.88	68 to 82
φ 19.05	100 to 120



#### ⑥ Drain pipe

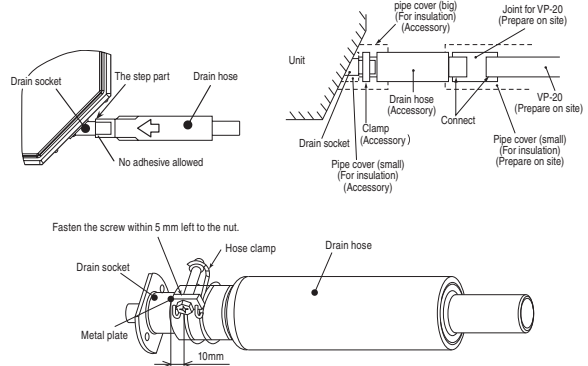
##### Caution

- Install the drain pipe according to the installation manual in order to drain properly. Imperfection in draining may cause flood indoors and wetting the household goods etc.
- Do not put the drain pipe directly into the ditch where toxic gas such as sulfur, the other harmful and inflammable gas is generated. Toxic gas would flow into the room and it would cause serious damage to user's health and safety (some poisoning or deficiency of oxygen). In addition, it may cause corrosion of heat exchanger and bad smell.
- Connect the pipe securely to avoid water leakage from the joint.
- Insulate the pipe properly to avoid condensation drop.
- Check if the water can flow out properly from both the drain outlet on the indoor unit and the end of the drain pipe after installation.
- Make sure to make descending slope of greater than 1/100 and do not make up-down bend and/or trap in the midway. In addition, do not put air vent on the drain pipe. Check if water is drained out properly from the pipe during commissioning. Also, keep sufficient space for inspection and maintenance.

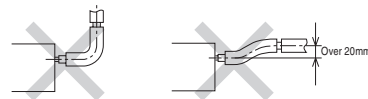
#### ⑥ Drain pipe (continued)

##### Work procedure

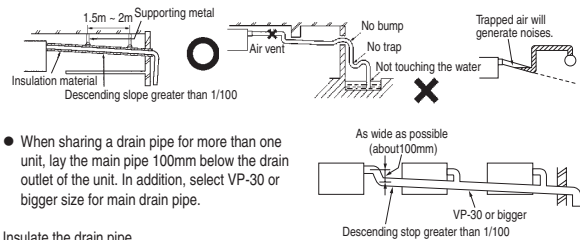
1. Make sure to insert the drain hose (the end mode of soft PVC) to the end of the step part of drain socket.
  - Attach the hose clamp to the drain hose around 10mm from the end, and fasten the screw within 5mm left to the nut.
  - Do not apply adhesives on this end.



2. Prepare a joint for connecting VP-20 pipe, adhere and connect the joint to the drain hose (the end made of rigid PVC), and adhere and connect VP-20 pipe (prepare on site).
  - ※ As for drain pipe, apply VP-20 made of rigid PVC which is on the market.
  - Make sure that the adhesive will not get into the supplied drain hose.
    - It may cause the flexible part broken after the adhesive is dried up and gets rigid.
  - Do not bend or make an excess offset on the drain hose as shown in the picture. Bend or excess offset will cause drain leakage.



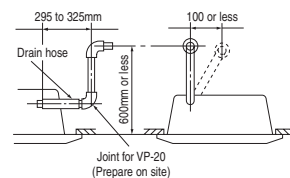
3. Make sure to make descending slope of greater than 1/100 and do not make up-down bend and/or trap in the midway.
  - Pay attention not to give stress on the pipe on the indoor unit side, and support and fix the pipe as close place to the unit as possible when connecting the drain pipe.
  - Do not set up air vent.



4. Insulate the drain pipe.
  - Be sure to insulate the drain socket and rigid PVC pipe installed indoors otherwise it may cause dew condensation and water leakage.
    - ※ After drainage test implementation, cover the drain socket part with pipe cover (small size), then use the pipe cover (big size) to cover the pipe cover (small size), clamps and part of the drain hose, and fix and wrap it with tapes to wrap and make joint part gapless.

##### Drain up

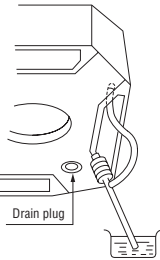
- The position for drain pipe outlet can be raised up to 600mm above the ceiling. Use elbows for installation to avoid obstacles inside ceiling. If the horizontal drain pipe is too long before vertical pipe, the backflow of water will increase when the unit is stopped, and it may cause overflow of water from the drain pan on the indoor unit. In order to avoid overflow, keep the horizontal pipe length and offset of the pipe within the limit shown in the figure below.



### ⑥ Drain pipe (continued)

#### Drain test

- After installation of drain pipe, make sure that drain system work in good condition and no water leakage from joint and drain pan. Check if the motor sound of drain pump is normal or not.
  - Do drain test even if installation of heating season.
  - For new building cases, make sure to complete the test before hanging the ceiling.
1. Pour water of about 1000cc into the drain pan in the indoor unit by pump so as not to get the electrical component wet.
  2. Make sure that water is drained out properly and there is no water leakage from any joints of the drain pipe at the test. Confirm that the water is properly drained out while the drain motor is operating. At the drain socket (transparent), it is possible to check if the water is drained out properly.
  3. Unplug the drain plug on the indoor unit to remove remaining water on the drain pan after the test, and re-plug it. And insulate the drain pipe properly finally.

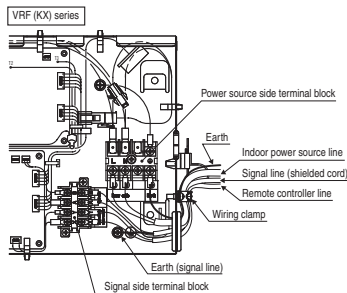
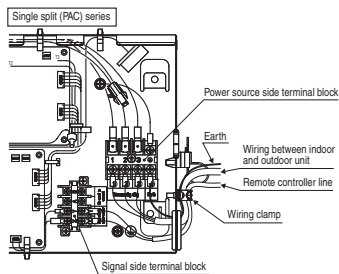


#### Drain pump operation

- In case electrical wiring work finished  
Drain pump can be operated by remote controller (wired).  
For the operation method, refer to [Operation for drain pump] in the installation manual for wiring work.
- In case electrical wiring work not finished  
Drain pump will run continuously when the dip switch "SW7-1" on the indoor unit PCB is turned ON, the Connector CNB is disconnected, and then the power supply (220-240VAC on the terminal block [ ① and ② ] or [ ① and ③ ] ) is turned ON.  
Make sure to turn OFF "SW7-1" and reconnect the Connector CNB after the test.

### ⑦ Wiring-out position and wiring connection

- Electrical installation work must be performed according to the installation manual by an electrical installation service provider qualified by a power provider of the country, and be executed according to the technical standards and other regulations applicable to electrical installation in the country. Be sure to use an exclusive circuit.
  - Use specified cord, fasten the wiring to the terminal securely, and hold the cord securely in order not to apply unexpected stress on the terminal.
  - Do not put both power source line and signal line on the same route. It may cause miscommunication and malfunction.
  - Be sure to do D type earth work.
  - For the details of electrical wiring work, see attached instruction manual for electrical wiring work.
1. Remove a lid of the control box (1 screws).
  2. Hold each wiring inside the unit and fasten them to terminal block securely.
  3. Fix the wiring with clamp.
  4. Install a lid of the control box back to original place.



### ⑧ Panel installation

- After wiring work finished, install the panel on the indoor unit.
- Refer to attached panel installation manual for details.

#### Accessory items

No.	Item	Quantity	Use
1	Hook	1 piece	For fixing temporarily
2	Chain	2 pieces	
3	Bolt	4 pieces	For installing the panel
4	Screw	1 piece	For attaching a hook
5	Screw	2 pieces	For attaching a chain

- Attach the panel on the indoor unit after electrical wiring work.
- Refer to attached manual for panel installation for details. (See next page)

### ⑨ Check list after installation

- Check the following items after all installation work completed.

Check if	Expected trouble	Check
The indoor and outdoor units are fixed securely?	Falling, vibration, noise	
Inspection for leakage is done?	Insufficient capacity	
Insulation work is properly done?	Water leakage	
Water is drained properly?	Water leakage	
Supply voltage is same as mentioned in the model name plate?	PCB burnt out, not working at all	
There is mis-wiring or mis-connection of piping?	PCB burnt out, not working at all	
Earth wiring is connected properly?	Electric shock	
Cable size comply with specified size?	PCB burnt out, not working at all	
Any obstacle blocks airflow on air inlet and outlet?	Insufficient capacity	

PJA012D783





- (2) Installation of outdoor unit
  - (a) Model SCM60ZJ-S







(b) Model SCM80ZJ-S

RPC012A913

MULTI TYPE AIR CONDITIONER  
R410A REFRIGERANT USED

- This installation manual deals with outdoor units and general installation specifications only. For indoor units, refer to page 54~75.
- When install the unit, be sure to check whether the selection of installation place, power supply specifications, usage limitation (piping length, height differences between indoor and outdoor units, power supply voltage and etc.) and installation spaces.

**SAFETY PRECAUTIONS**

- We recommend you to read this "SAFETY PRECAUTIONS" carefully before the installation work in order to gain full advantage of the functions of the unit and to avoid malfunction due to mishandling.
- The precautions described below are divided into **WARNING** and **CAUTION**. The matters with possibilities leading to serious consequences such as death or serious personal injury due to erroneous handling are listed in the **WARNING** and the matters with possibilities leading to personal injury or damage of the unit due to erroneous handling including probability leading to serious consequences in some cases are listed in **CAUTION**. These are very important precautions for safety. Be sure to observe all of them without fail.
- Be sure to confirm no anomaly on the equipment by commissioning after completed installation and explain the operating methods as well as the maintenance methods of this equipment to

the user according to the owner's manual.

- Keep the installation manual together with owner's manual at a place where any user can read at any time. Moreover if necessary, ask to hand them to a new user.
- For installing qualified personnel, take precautions in respect to themselves by using suitable protective clothing, gloves, etc., and then perform the installation works.
- Please pay attention not to fall down the tools, etc. when installing the unit at the high position.
- If unusual noise can be heard during operation, consult the dealer.
- Symbols which appear frequently in the text have the following meaning:

	Observe instructions with great care		Strictly prohibited		Provide proper earthing
--	--------------------------------------	--	---------------------	--	-------------------------

**WARNING**

<p></p> <ul style="list-style-type: none"> <li>• <b>Installation must be carried out by the qualified installer.</b> If you install the system by yourself, it may cause serious trouble such as water leaks, electric shocks, fire and personal injury, as a result of a system malfunction.</li> <li>• <b>Install the system in full accordance with the instruction manual.</b> Incorrect installation may cause bursts, personal injury, water leaks, electric shocks and fire.</li> <li>• <b>Be sure to use only for household and residence.</b> If this appliance is installed in inferior environment such as machine shop and etc., it can cause malfunction.</li> <li>• <b>Use the original accessories and the specified components for installation.</b> If parts other than those prescribed by us are used, it may cause water leaks, electric shocks, fire and personal injury.</li> <li>• <b>Install the unit in a location with good support.</b> Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.</li> <li>• <b>Ensure the unit is stable when installed, so that it can withstand earthquakes and strong winds.</b> Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.</li> <li>• <b>Ventilate the working area well in the event of refrigerant leakage during installation.</b> If the refrigerant comes into contact with naked flames, poisonous gas is produced.</li> <li>• <b>Use the prescribed pipes, flare nuts and tools for R410A.</b> Using existing parts (for R22 or R407C) can cause the unit failure and serious accidents due to burst of the refrigerant circuit.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Tighten the flare nut by torque wrench with specified method.</b> If the flare nut were tightened with excess torque, this may cause burst and refrigerant leakage after a long period.</li> <li>• <b>Do not open the operation valves for liquid line and gas line until completed refrigerant piping work, air tightness test and evacuation.</b> If the compressor is operated in state of opening operation valves before completed connection of refrigerant piping work, air can be sucked into refrigerant circuit, which can cause burst or personal injury due to anomalously high pressure in the refrigerant.</li> <li>• <b>The electrical installation must be carried out by the qualified electrician in accordance with "the norm for electrical work" and "national wiring regulation", and the system must be connected to the dedicated circuit.</b> Power supply with insufficient capacity and incorrect function done by improper work can cause electric shocks and fire.</li> <li>• <b>Be sure to shut off the power before starting electrical work.</b> Failure to shut off the power can cause electric shocks, unit failure or incorrect function of equipment.</li> <li>• <b>Be sure to use the cables conformed to safety standard and cable ampacity for power distribution work.</b> Unconformable cables can cause electric leak, anomalous heat production or fire.</li> <li>• <b>This appliance must be connected to main power supply by means of a circuit breaker or switch (fuse:16A) with a contact separation of at least 3mm.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Use the prescribed cables for electrical connection, tighten the cables securely in terminal block and relieve the cables correctly to prevent overloading the terminal blocks.</b> Loose connections or cable mountings can cause anomalous heat production or fire.</li> <li>• <b>Arrange the wiring in the control box so that it cannot be pushed up further into the box. Install the service panel correctly.</b> Incorrect installation may result in overheating and fire.</li> <li>• <b>Be sure to fix up the service panels.</b> Incorrect fixing can cause electric shocks or fire due to intrusion of dust or water.</li> <li>• <b>Be sure to switch off the power supply in the event of installation, inspection or servicing.</b> If the power supply is not shut off, there is a risk of electric shocks, unit failure or personal injury due to the unexpected start of fan.</li> <li>• <b>Stop the compressor before disconnecting refrigerant pipes in case of pump down operation.</b> If disconnecting refrigerant pipes in state of opening operation valves before compressor stopping, air can be sucked, which can cause burst or personal injury due to anomalously high pressure in the refrigerant circuit.</li> <li>• <b>Only use prescribed optional parts. The installation must be carried out by the qualified installer.</b> If you install the system by yourself, it can cause serious trouble such as water leaks, electric shocks, fire.</li> </ul>
<p></p> <ul style="list-style-type: none"> <li>• <b>Ensure that no air enters in the refrigerant circuit when the unit is installed and removed.</b> If air enters in the refrigerant circuit, the pressure in the refrigerant circuit becomes too high, which can cause burst and personal injury.</li> <li>• <b>Do not processing, splice the power cord, or share a socket with other power plugs.</b> This may cause fire or electric shock due to defecting contact, defecting insulation and over-current etc.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Do not bundling, winding or processing for the power cord. Or, do not deforming the power plug due to tread it.</b> This may cause fire or heating.</li> <li>• <b>Do not run the unit with removed panels or protections.</b> Touching rotating equipments, hot surfaces or high voltage parts can cause personal injury due to entrapment, burn or electric shocks.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Do not perform any change of protective device itself or its setup condition.</b> The forced operation by short-circuiting protective device of pressure switch and temperature controller or the use of non specified component can cause fire or burst.</li> </ul>
<p></p> <ul style="list-style-type: none"> <li>• <b>Carry out the electrical work for ground lead with care.</b> Do not connect the ground lead to the gas line, water line, lightning conductor or telephone line's ground lead. Incorrect grounding can cause unit faults such as electric shocks due to short-circuiting.</li> </ul>		

**CAUTION**

<p></p> <ul style="list-style-type: none"> <li>• <b>Use the circuit breaker with sufficient breaking capacity.</b> If the breaker does not have sufficient breaking capacity, it can cause the unit malfunction and fire.</li> <li>• <b>Earth leakage breaker must be installed.</b> If the earth leakage breaker is not installed, it can cause electric shocks.</li> <li>• <b>Install isolator or disconnect switch on the power supply wiring in accordance with the local codes and regulations.</b></li> <li>• <b>After maintenance, all wiring, wiring ties and the like, should be returned to their original state and wiring route, and the necessary clearance from all metal parts should be secured.</b></li> <li>• <b>Secure a space for installation, inspection and maintenance specified in the manual.</b> Insufficient space can result in accident such as personal injury due to falling from the installation place.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Take care when carrying the unit by hand.</b> If the unit weights more than 20kg, it must be carried by two or more persons. Do not carry by the plastic straps, always use the carry handle when carrying the unit by hand. Use gloves to minimize the risk of cuts by the aluminum fins.</li> <li>• <b>Dispose of any packing materials correctly.</b> Any remaining packing materials can cause personal injury as it contains nails and wood. And to avoid danger of suffocation, be sure to keep the plastic wrapper away from children and to dispose after tear it up.</li> <li>• <b>Be sure to insulate the refrigerant pipes so as not to condense the ambient air moisture on them.</b> Insufficient insulation can cause condensation, which can lead to moisture damage on the ceiling, floor, furniture and any other valuables.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>When perform the air conditioner operation (cooling or drying operation) in which ventilator is installed in the room. In this case, using the air conditioner in parallel with the ventilator, there is the possibility that drain water may backflow in accordance with the room lapse into the negative pressure status. Therefore, set up the opening port such as incorporate the air into the room that may appropriate to ventilation (For example; Open the door a little). In addition, just as above, so set up the opening port if the room lapse into negative pressure status due to register of the wind for the high rise apartment etc.</b></li> </ul>
<p></p> <ul style="list-style-type: none"> <li>• <b>Do not install the unit in the locations listed below.</b> <ul style="list-style-type: none"> <li>• Locations where carbon fiber, metal powder or any powder is floating.</li> <li>• Locations where any substances that can affect the unit such as sulphide gas, chloride gas, acid and alkaline can occur.</li> <li>• Vehicles and ships.</li> <li>• Locations where cosmetic or special sprays are often used.</li> <li>• Locations with direct exposure of oil mist and steam such as kitchen and machine plant.</li> <li>• Locations where any machines which generate high frequency harmonics are used.</li> <li>• Locations with salty atmospheres such as coastlines.</li> <li>• Locations with heavy snow (if installed, be sure to provide</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• base flame and snow hood mentioned in the manual).</li> <li>• Locations where the unit is exposed to chimney smoke.</li> <li>• Locations at high altitude (more than 1000m high).</li> <li>• Locations with ammoniac atmospheres.</li> <li>• Locations where heat radiation from other heat source can affect the unit.</li> <li>• Locations without good air circulation.</li> <li>• Locations with any obstacles which can prevent inlet and outlet air of the unit.</li> <li>• Locations where short circuit of air can occur (in case of multiple units installation).</li> <li>• Locations where strong air blows against the air outlet of outdoor unit.</li> </ul> <p>It can cause remarkable decrease in performance, corrosion and damage of components, malfunction and fire.</p>	<ul style="list-style-type: none"> <li>• <b>Do not install the outdoor unit in the locations listed below.</b> <ul style="list-style-type: none"> <li>• Locations where discharged hot air or operating sound of the outdoor unit can bother neighborhood.</li> <li>• Locations where outlet air of the outdoor unit blows directly to plants.</li> <li>• Locations where vibration can be amplified and transmitted due to insufficient strength of structure.</li> <li>• Locations where vibration and operation sound generated by the outdoor unit can affect seriously (on the wall or at the place near bed room).</li> <li>• Locations where an equipment affected by high harmonics is placed (TV set or radio receiver is placed within 1m).</li> <li>• Locations where drainage cannot run off safely. It can affect surrounding environment and cause a claim.</li> </ul> </li> </ul>

**CAUTION**

- Do not install the unit near the location where leakage of combustible gases can occur. If leaked gases accumulate around the unit, it can cause fire.
- Do not install the unit where corrosive gas (such as sulfuric acid gas etc.) or combustible gas (such as thinner and petroleum gases) can accumulate or collect, or where volatile combustible substances are handled. Corrosive gas can cause corrosion of heat exchanger, breakage of plastic parts and etc. And combustible gas can cause fire.
- Do not install nor use the system close to the equipment that generates electromagnetic fields or high frequency harmonics. Equipment such as inverters, standby generators, medical high frequency equipments and telecommunication equipments can affect the system, and cause malfunctions and breakdowns. The system can also affect medical equipment and telecommunication equipment, and obstruct its function or cause jamming.
- Do not install the outdoor unit in a location where insects and small animals can inhabit. Insects and small animals can enter the electric parts and cause damage or fire. Instruct the user to keep the surroundings clean.
- Do not use the base flange for outdoor unit which is corroded or damaged due to long periods of operation. Using an old and damage base flange can cause the unit falling down and cause personal injury.
- Do not use any materials other than a fuse with the correct rating in the location where fuses are to be used. Connecting the circuit with copper wire or other metal thread can cause unit failure and fire.
- Do not touch any buttons with wet hands. It can cause electric shocks.
- Do not touch any refrigerant pipes with your hands when the system is in operation. During operation the refrigerant pipes become extremely hot or extremely cold depending the operating condition, and it can cause burn injury or frost injury.
- Do not touch the suction or aluminum fin on the outdoor unit. This may cause injury.
- Do not put anything on the outdoor unit and operating unit. This may cause damage the objects or injury due to falling to the object.

**Check before installation work**

- Model name and power source
- Refrigerant piping length
- Piping, wiring and miscellaneous small parts
- Indoor unit installation manual

Accessories for outdoor unit	Q'ty
① Grommet (Heat pump type only)	2
② Drain elbow (Heat pump type only)	1
③ Variable diameter joint $\phi 9.52 \Rightarrow \phi 12.7$	2

Note: Provide flare nuts when using the variable diameter joint (for  $\phi 12.7$ ).

Option parts	Q'ty	Necessary tools for the installation work	
Ⓐ Sealing plate	1	1 Plus headed driver	9 Wrench key (Hexagon) [4m/m]
Ⓑ Sleeve	1	2 Knife	10 Vacuum pump
Ⓒ Inclination plate	1	3 Saw	11 Vacuum pump adapter (Anti-reverse flow type) (Designed specifically for R410A)
Ⓓ Putty	1	4 Tape measure	12 Gauge manifold (Designed specifically for R410A)
Ⓔ Drain hose (extension hose)	1	5 Hammer	13 Charge hose (Designed specifically for R410A)
Ⓕ Piping cover (for insulation of connection piping)	1	6 Spanner wrench	14 Flaring tool set (Designed specifically for R410A)
		7 Torque wrench [14.0~62.0N·m (1.4~6.2kgf·m)]	15 Gas leak detector (Designed specifically for R410A)
		8 Hole core drill (65mm in diameter)	16 Gauge for projection adjustment (Used when flare is made by using conventional flare tool)

**CAUTION** • This model requires a minimum of 2 indoor units.

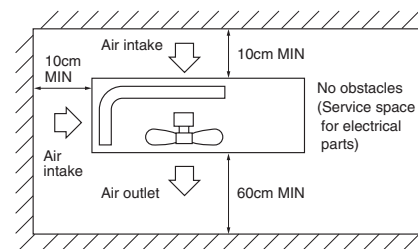
**1 SELECTION OF INSTALLATION LOCATION**

Install at location that meets the following conditions after getting approval from the customer.

- Where the following installation space is available, and where air does not gather.
- Where rain and sunlight do not directly hit the unit, and where there is enough air circulation.
- Also, where the unit cannot be buried by snow. a location which can sustain the weight of the unit, and where noises and vibrations are not enhanced.
- Where blasts of cold or hot air and noise do not bother the neighbors.
- Where the unit does not receive heat radiation from other heat sources.
- Where there are no obstructions (animals, plants, etc.) to the suction inlet and blowing outlet.
- Where water may drain out.
- ※ Please avoid the following locations.
  - Where there is constant exposure to harsh winds such as the top floors of a building. Also, locations with exposure to salty air.
  - Where there are oil splashes, vapor, and smoke.
  - Where there are possibilities of flammable gas leaks.

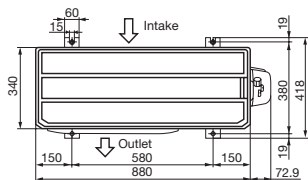
① Installation Space (on a flat surface)

- Blowing out port and suction port on the back side of the unit can be installed at a distance of 10cm from walls. (In case the barrier is 1.2m or above in height, or is overhead, the sufficient space between the unit and wall shall be secured.)
- When the unit is installed, the space of the following dimension and above shall be secured.

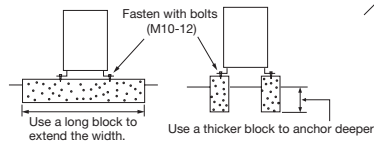


**Installation**

① Anchor bolt fixed position



② Notabilia for installation

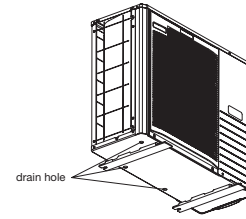


- In installing the unit, fix the unit's legs with bolts specified on the left.
  - The protrusion of an anchor bolt on the front side must be kept within 15 mm.
  - Securely install the unit so that it does not fall over during earthquakes or strong winds, etc.
  - Refer to the above illustrations for information regarding concrete foundations.
  - Install the unit in a level area. (With a gradient of 5 mm or less.)
- Improper installation can result in a compressor failure, broken piping within the unit and abnormal noise generation.

## 2 INSTALLATION OF OUTDOOR UNIT

### Drainage

- There are 3 holes in the bottom panel of the outdoor unit to drain condensation.
- Install the outdoor unit so it will be horizontal.
- Also, secure the legs of the unit to a firm foundation to prevent any instabilities.
- Secure it firmly so the unit will not fall during earthquakes and from sudden gusts of wind.
- In areas where the temperatures drop below 0°C for several continuous days, do not install a drain elbow. (water discharge could stop due to freezing.)



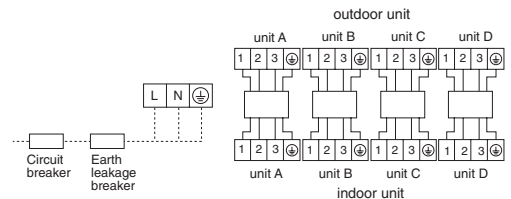
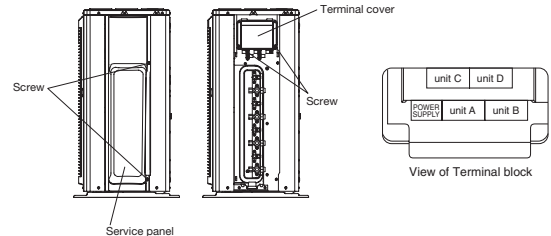
### Connection of the power supply cable and the connecting cables for indoor and outdoor units.

- This multi-type room air conditioner receives its power from outside.
- To ensure correct connections, mark each ends of the cables with number, A to D. It is important to use the same number the corresponding cables and pipes.
- An earth leakage breaker and a circuit breaker must be installed. Their capacities are 25A.

- ① Remove the service panel. (Remove the 2 sets screws of the service panel.)
- ② Remove the terminal cover. (Remove the 2 sets screws of the terminal cover.)
- ③ Connect the power supply cable and the connection wire securely to the terminal block.

[POWER SUPPLY CODE]  
CENELEC code for cables requiring fields cables. H05RNR3G4.0  
[INTERCONNECTING WIRING CODE]  
CENELEC code for cables requiring fields cables. H05RNR4G1.5

- 1) In wiring, make sure that the wire terminal numbers of outdoor unit terminal block are match to the wire terminal numbers of indoor unit terminal block.
- 2) Terminal number A of the outdoor unit is used for A indoor unit and terminal number B for B indoor unit respectively.
- ④ After connecting the wire, use wiring clamps to secure the wiring.
- ⑤ Fit the terminal cover and the service panel.



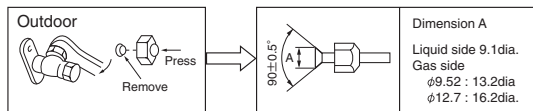
## 3 CONNECTION OF REFRIGERANT PIPINGS

- Regarding the change in the sizes of gas side pipes (usage of the variable joints); If a 5.0, 6.0 kw class indoor unit (gas side pipe 12.7) is going to be connected to the operation valves (9.52), variable joints available as accessories must be applied to the gas side operation valves.
- Securely fit the copper packing between the operation valve and the variable diameter joint to prevent shifting.

### [Connection of pipes]

#### NOTE

- Cover the pipes with tape so that dust and sand do not enter the pipe until they are connected.
- When connecting the pipes to the outdoor unit, be careful about the discharge of fluorocarbon gas or oil.
- Make sure to match the pipes between the indoor unit and the outdoor unit with the correct operation valves.



- Remove the flared nuts. (on both liquid and gas sides)
- Install the removed flared nuts to the pipes to be connected, then flare the pipes.

### CAUTION

Do not apply excess torque to the flared nuts. Otherwise, the flared nuts may crack depending on the conditions and refrigerant leak may occur.

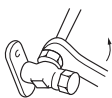
### CAUTION

Do not apply refrigerating machine oil to the flared surface.

### Connection

#### Outdoor

Liquid side  
Gas side



- Connect the pipes on both liquid and gas sides.
- Tighten the nuts to the following torque.  
Liquid side : 14.0~18.0N·m (1.4~1.8kgf·m)  
Gas side (φ9.52): 33.0~42.0N·m (3.3~4.2kgf·m)  
(φ12.7): 49.0~61.0N·m (4.9~6.1kgf·m)

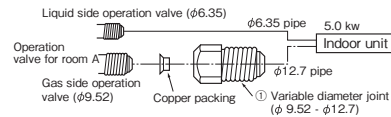
- When the total refrigerant pipe length for all the rooms exceeds the length of the uncharged pipe (40m), additional refrigerant is required. (If 40m or less, additional charge is not required.)  
Additional charge amount per meter = 20g/m

#### Gas Leakage Test

- Ensure that there are no gas leaks from the pipe joints by using a leak detector or soap water.

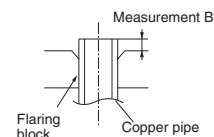
### [Examples of use of variable diameter joints]

- Connection of indoor unit of Class 5.0 to A unit.



Copper pipe diameter	Measurement B (mm)		
	Clutch type flare tool for R410A	Conventional (R22) flare tool	
		Clutch type	Wing nut type
φ6.35	0.0~0.5	1.0~1.5	1.5~2.0
φ9.52	0.0~0.5	1.0~1.5	1.5~2.0
φ12.7	0.0~0.5	1.0~1.5	2.0~2.5

Use a flare tool designed for R410A or a conventional flare tool. Please note that measurement B (protrusion from the flaring block) will vary depending on the type of a flare tool in use.  
If a conventional flare tool is used, please use a copper pipe gauge or a similar instrument to check protrusion so that you can keep measurement B to a correct value.



### [Limit]

piping length	one indoor unit	MAX 25m
	all indoor unit	MAX 70m
height difference	MAX 20m	MAX 25m
length of chargeless refrigerant pipe	40m	

#### 4 AIR PURGING

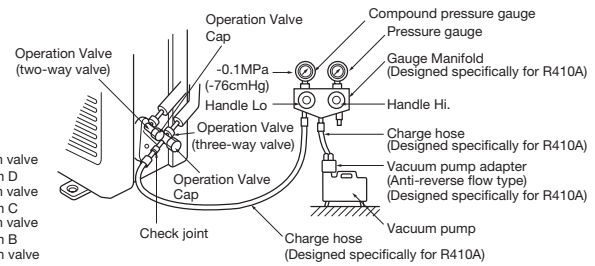
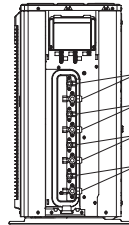
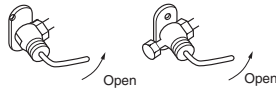
NOTE : Fully open the operation valves (on both liquid and gas sides) after completing air purging.

- Since the system uses service ports differing in diameter from those found on the conventional models, a charge hose (for R22) presently in use is not applicable. Please use one designed specifically for R410A.
- Remove the cap on both gas and liquid sides before starting operation.
- After completing the operation, do not forget to tighten the cap (gas may leak).

- Please use an anti-reverse flow type vacuum pump adapter so as to prevent vacuum pump oil from running back into the system. Oil running back into an air-conditioning system may cause the refrigerant cycle to break down.
- Conduct air purging for all connected indoor units.

#### Procedure

- (1) Secure all flare nuts on both indoor and outdoor sides to prevent leaks from the pipes.
- (2) Connect the operation valves, charge hose, manifold valve and vacuum pump as shown in the right figure.
- (3) Fully open the handle Lo for the manifold valve, and pump a vacuum for 15 minutes. Ensure that the meter is indicating -0.1MPa (-76cmHg).
- (4) After vacuuming, fully open the operation valve (both liquid and gas sides) with a hexagon wrench.



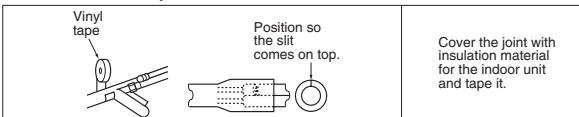
Securely tighten the operation valve cap and the check joint blind nut after adjustment.

Operation valve size (mm)	Operation valve cap tightening torque (N·m)	Check joint blind nut tightening torque (N·m)
φ6.35 (1/4")	20~30	10~12
φ9.52 (3/8")		
φ12.7 (1/2")	25~35	

- (5) Remove the charge hose from service port.
- (6) Repeat the above steps (1) ~ (5) for all connected indoor units.
- (7) Ensure that there are no gas leaks from the joints in the indoor and outdoor units.

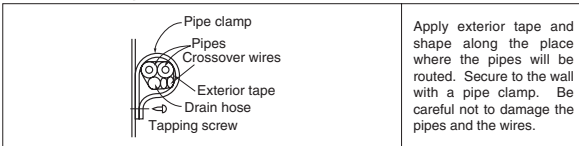
#### 5 HEAT INSULATION FOR JOINTS

##### Heat insulation for joints



Cover the joint with insulation material for the indoor unit and tape it.

##### Finish and fixing



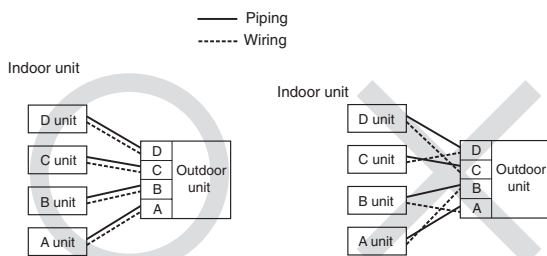
Apply exterior tape and shape along the place where the pipes will be routed. Secure to the wall with a pipe clamp. Be careful not to damage the pipes and the wires.

#### 7 BEWARE OF WRONG CONNECTIONS IN REFRIGERANT PIPING AND WIRING.

- Make sure to match the piping and wiring from each unit to the outdoor unit.
- Be careful because if connections are wrong, normal operation cannot be achieved and may damage the compressor.

[Correct connections]

[Example of wrong connections]



#### EARTHING WORK

- Earth work shall be carried out without fail in order to prevent electric shock and noise generation.
- The connection of the earth cable to the following substances causes dangerous failures, therefore it shall never be done. (City water pipe, Town gas pipe, TV antenna, lightning conductor, telephoneline, etc.)

#### 6 TEST RUN AND HANDLING INSTRUCTIONS

##### Installation test check points

Check the following points again after completion of the installation, and before turning on the power.

Conduct a test run again and ensure that the unit operates properly. At the same time, explain to the customer how to use the unit and how to take care of the unit following the installation manual.

If the compressor does not operate after the operation has started, wait for 5-10 minutes. (This may be due to delayed start.)

(Three-minute restart preventive timer)

When the air conditioner is restarted or when changing the operation, the unit will not start operating for approximately 3minutes. This is to protect the unit and it is not a malfunction.

##### After installation

- The power supply voltage is correct as the rating.
- No gas leaks from the joints of the operation valve.
- Power cables and crossover wires are securely fixed to the terminal board.
- Each indoor and outdoor unit is properly connected (no wrong wiring or piping).
- Operation valve is fully open.
- Refrigerant has been additionally charged (when the total pipe length exceeds the refrigerant charged pipe length).
- The pipe joints for indoor and outdoor pipes have been insulated.
- Earthing work has been conducted properly.

##### Test run

- Air conditioning and heating are normal.
- No abnormal noise.
- Water drains smoothly.
- Protective functions are not working.
- Operation of the unit has been explained to the customer.
- The remote control is normal.

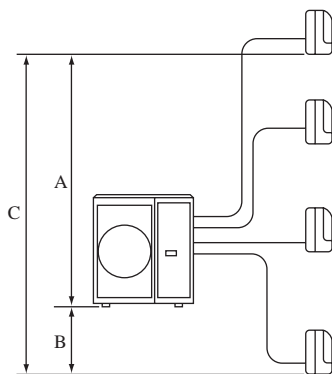
##### Operation of indicator lamps

INDICATION LAMP	COLOR	FUNCTION
LED E (1)	RED	WARNING LAMP
SELF DIAGNOSIS FUNCTION BY LED E		
1 TIME FLASH		CURRENT CUT
2 TIME FLASH		TROUBLE OF OUTDOOR UNIT
3 TIME FLASH		OVER CURRENT
4 TIME FLASH		TRANSMISSION ERROR IN OUTDOOR UNIT PCB
5 TIME FLASH		OVER HEAT OF COMPRESSOR
6 TIME FLASH		ERROR OF SIGNAL TRANSMISSION
7 TIME FLASH		LOCK OF COMPRESSOR
8 TIME FLASH		SENSOR ERROR (EXCEPT DISCHARGE PIPE SENSOR)
LIGHT ON		OUTDOOR FAN MOTOR ERROR
FOUR SEC LIGHT AND FOUR SEC OFF		DISCHARGE PIPE SENSOR ERROR



## 7. RANGE OF USAGE & LIMITATIONS

Item		Models	SCM60ZJ-S	SCM80ZJ-S
Indoor return air temperature (Upper, lower limits)	Cooling		Approximately 18 to 32°C	
	Heating		Approximately 15 to 30°C	
Outdoor air temperature (Upper, lower limits)	Cooling		Approximately -15 to 43°C	
	Heating		Approximately -15 to 24°C	
Indoor units that can be used in combination	Number of connected units		2 to 3 units	2 to 4 units
	Total of indoor Units (class kW)		11.0kW	13.5kW
Total length for all rooms			Max. 40m	Max. 70m
Length for one indoor unit			Max. 25m	
Difference in height between indoor and outdoor units	When indoor unit is above outdoor unit (A)		15m	20m
	When indoor unit is below outdoor unit (B)		15m	20m
Difference in height between indoor units (C)			Max. 25m	
Compressor stop/start frequency	1 cycle time		6 min or more (from stop to stop or from start to start)	
	Stop time		3 min or more	
Power source voltage	Voltage fluctuation		Within ±10% of rated voltage	
	Voltage drop during start		Within ±15% of rated voltage	
	Interval unbalance		Within ±3% of rated voltage	



## 8. TABLE OF INDOOR UNIT COMBINATION

- The combinations of the indoor units is indicated by numbers. They are read as follows.  
(Example) SRK22ZJX-S→22 SRK25ZJX-S→25
- The capacity of the indoor units is shown by rooms. If this exceeds the maximum capacity of the outdoor unit, the demand capacity will be proportionally distributed.
- If units are to be combined, use the table below to make the proper selection.

• Number of connectable indoor units

	SCM60ZJ-S	SCM80ZJ-S
MIN	2	2
MAX	3	4

(a) SCM60ZJ-S

1) All indoor unit SRK\*\*ZJX-S type only

<Cooling>

Indoor unit combination		Cooling capacity (kW)						Power consumption (W)			Standard current (A)		
		Room cooling capacity (kW)			Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	Min.	Standard	Max.						
1 room	20	2.0	-	-	1.8	2.0	2.8	500	540	950	2.5	2.4	2.3
	25	2.5	-	-	1.8	2.5	3.4	500	720	1080	3.3	3.2	3.0
	35	3.5	-	-	1.8	3.5	3.9	500	1090	1240	5.0	4.8	4.6
	50	5.0	-	-	1.8	5.0	5.8	500	1780	2100	8.2	7.8	7.5
	60	6.0	-	-	1.8	6.0	6.3	500	2260	2370	10.4	9.9	9.5
2 room	20 + 20	2.00	2.00	-	3.0	4.0	5.7	570	750	1750	3.4	3.3	3.2
	20 + 25	2.00	2.50	-	3.0	4.5	5.9	570	990	1910	4.5	4.3	4.2
	20 + 35	1.93	3.37	-	3.0	5.3	6.2	570	1550	2110	7.1	6.8	6.5
	20 + 50	1.89	4.71	-	3.0	6.6	6.9	570	2280	2390	10.5	10.0	9.6
	20 + 60	1.68	5.03	-	3.0	6.7	6.9	570	2320	2390	10.7	10.2	9.8
	25 + 25	2.45	2.45	-	3.0	4.9	6.2	570	1270	2110	5.8	5.6	5.3
	25 + 35	2.42	3.38	-	3.0	5.8	6.5	570	1840	2270	8.4	8.1	7.7
	25 + 50	2.23	4.47	-	3.0	6.7	6.9	570	2320	2390	10.7	10.2	9.8
	25 + 60	1.97	4.73	-	3.0	6.7	6.9	570	2320	2390	10.7	10.2	9.8
	35 + 35	3.30	3.30	-	3.0	6.6	6.9	570	2280	2390	10.5	10.0	9.6
	35 + 50	2.76	3.94	-	3.0	6.7	6.9	570	2320	2390	10.7	10.2	9.8
	35 + 60	2.47	4.23	-	3.0	6.7	6.9	570	2320	2390	10.7	10.2	9.8
	50 + 50	3.35	3.35	-	3.0	6.7	6.9	570	2320	2390	10.7	10.2	9.8
50 + 60	3.05	3.65	-	3.0	6.7	6.9	570	2320	2390	10.7	10.2	9.8	
3 room	20 + 20 + 20	1.90	1.90	1.90	3.6	5.7	7.5	690	1390	2390	6.6	6.3	6.0
	20 + 20 + 25	1.82	1.82	2.27	3.6	5.9	7.5	690	1410	2390	6.7	6.4	6.1
	20 + 20 + 35	1.60	1.60	2.80	3.6	6.0	7.5	690	1430	2390	6.8	6.5	6.2
	20 + 20 + 50	1.40	1.40	3.50	3.6	6.3	7.5	690	1480	2390	7.0	6.7	6.4
	20 + 20 + 60	1.28	1.28	3.84	3.6	6.4	7.5	690	1500	2390	7.1	6.8	6.5
	20 + 25 + 25	1.69	2.11	2.11	3.6	5.9	7.5	690	1410	2390	6.7	6.4	6.1
	20 + 25 + 35	1.53	1.91	2.67	3.6	6.1	7.5	690	1460	2390	6.9	6.6	6.3
	20 + 25 + 50	1.35	1.68	3.37	3.6	6.4	7.5	690	1500	2390	7.1	6.8	6.5
	20 + 25 + 60	1.26	1.57	3.77	3.6	6.6	7.5	690	1520	2390	7.2	6.9	6.6
	20 + 35 + 35	1.40	2.45	2.45	3.6	6.3	7.5	690	1480	2390	7.0	6.7	6.4
	20 + 35 + 50	1.26	2.20	3.14	3.6	6.6	7.5	690	1520	2390	7.2	6.9	6.6
	25 + 25 + 25	2.00	2.00	2.00	3.6	6.0	7.5	690	1430	2390	6.8	6.5	6.2
	25 + 25 + 35	1.79	1.79	2.51	3.6	6.1	7.5	690	1460	2390	6.9	6.6	6.3
	25 + 25 + 50	1.60	1.60	3.20	3.6	6.4	7.5	690	1500	2390	7.1	6.8	6.5
	25 + 25 + 60	1.52	1.52	3.65	3.6	6.7	7.5	690	1540	2390	7.3	7.0	6.7
	25 + 35 + 35	1.68	2.36	2.36	3.6	6.4	7.5	690	1500	2390	7.1	6.8	6.5
	25 + 35 + 50	1.52	2.13	3.05	3.6	6.7	7.5	690	1540	2390	7.3	7.0	6.7
35 + 35 + 35	2.20	2.20	2.20	3.6	6.6	7.5	690	1520	2390	7.2	6.9	6.6	

<Heating>

Indoor unit combination		Heating capacity (kW)						Power consumption (W)			Standard current (A)		
		Room heating capacity (kW)			Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	Min.	Standard	Max.						
1 room	20	3.0	-	-	1.5	3.0	3.7	600	780	1330	3.6	3.4	3.3
	25	3.4	-	-	1.5	3.4	4.2	600	950	1510	4.4	4.2	4.0
	35	4.5	-	-	1.5	4.5	5.0	600	1290	1790	5.9	5.7	5.4
	50	5.8	-	-	1.5	5.8	6.4	600	1780	2310	8.2	7.8	7.5
	60	6.8	-	-	1.5	6.8	7.3	600	2120	2660	9.7	9.3	8.9
2 room	20 + 20	3.00	3.00	-	2.1	6.0	7.3	630	1490	2100	6.8	6.5	6.3
	20 + 25	2.71	3.39	-	2.1	6.1	7.5	630	1570	2550	7.2	6.9	6.6
	20 + 35	2.36	4.14	-	2.1	6.5	7.6	630	1680	3000	7.7	7.4	7.1
	20 + 50	2.00	5.00	-	2.1	7.0	7.6	630	1900	3000	8.7	8.3	8.0
	20 + 60	1.78	5.33	-	2.1	7.1	7.6	630	1940	3000	8.9	8.5	8.2
	25 + 25	3.15	3.15	-	2.1	6.3	7.6	630	1630	3000	7.5	7.2	6.9
	25 + 35	2.79	3.91	-	2.1	6.7	7.6	630	1760	3000	8.1	7.7	7.4
	25 + 50	2.37	4.73	-	2.1	7.1	7.6	630	1940	3000	8.9	8.5	8.2
	25 + 60	2.09	5.01	-	2.1	7.1	7.6	630	1940	3000	8.9	8.5	8.2
	35 + 35	3.50	3.50	-	2.1	7.0	7.6	630	1900	3000	8.7	8.3	8.0
	35 + 50	2.92	4.18	-	2.1	7.1	7.6	630	1940	3000	8.9	8.5	8.2
	35 + 60	2.62	4.48	-	2.1	7.1	7.6	630	1940	3000	8.9	8.5	8.2
	50 + 50	3.55	3.55	-	2.1	7.1	7.6	630	1940	3000	8.9	8.5	8.2
50 + 60	3.23	3.87	-	2.1	7.1	7.6	630	1940	3000	8.9	8.5	8.2	
3 room	20 + 20 + 20	2.20	2.20	2.20	3.2	6.6	7.8	660	1350	3000	6.4	6.1	5.9
	20 + 20 + 25	2.06	2.06	2.58	3.2	6.7	7.8	660	1390	3000	6.6	6.3	6.0
	20 + 20 + 35	1.81	1.81	3.17	3.2	6.8	7.8	660	1510	3000	7.1	6.8	6.6
	20 + 20 + 50	1.56	1.56	3.89	3.2	7.0	7.8	660	1690	3000	8.0	7.7	7.3
	20 + 20 + 60	1.44	1.44	4.32	3.2	7.2	7.8	660	1860	3000	8.8	8.4	8.1
	20 + 25 + 25	1.94	2.43	2.43	3.2	6.8	7.8	660	1510	3000	7.1	6.8	6.6
	20 + 25 + 35	1.73	2.16	3.02	3.2	6.9	7.8	660	1560	3000	7.4	7.1	6.8
	20 + 25 + 50	1.49	1.87	3.74	3.2	7.1	7.8	660	1740	3000	8.2	7.9	7.6
	20 + 25 + 60	1.37	1.71	4.11	3.2	7.2	7.8	660	1860	3000	8.8	8.4	8.1
	20 + 35 + 35	1.56	2.72	2.72	3.2	7.0	7.8	660	1690	3000	8.0	7.7	7.3
	20 + 35 + 50	1.37	2.40	3.43	3.2	7.2	7.8	660	1860	3000	8.8	8.4	8.1
	25 + 25 + 25	2.27	2.27	2.27	3.2	6.8	7.8	660	1510	3000	7.1	6.8	6.6
	25 + 25 + 35	2.06	2.06	2.88	3.2	7.0	7.8	660	1690	3000	8.0	7.7	7.3
	25 + 25 + 50	1.80	1.80	3.60	3.2	7.2	7.8	660	1860	3000	8.8	8.4	8.1
	25 + 25 + 60	1.64	1.64	3.93	3.2	7.2	7.8	660	1860	3000	8.8	8.4	8.1
	25 + 35 + 35	1.87	2.62	2.62	3.2	7.1	7.8	660	1740	3000	8.2	7.9	7.6
	25 + 35 + 50	1.64	2.29	3.27	3.2	7.2	7.8	660	1860	3000	8.8	8.4	8.1
35 + 35 + 35	2.40	2.40	2.40	3.2	7.2	7.8	660	1860	3000	8.8	8.4	8.1	

2) Indoor unit except all indoor unit SRK\*\*ZJX-S type only

<Cooling>

Indoor unit combination		Cooling capacity (kW)						Power consumption (W)			Standard current (A)		
		Room cooling capacity (kW)			Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	Min.	Standard	max.						
1 room	20	2.0	-	-	1.8	2.0	2.7	500	570	950	2.6	2.5	2.4
	25	2.5	-	-	1.8	2.5	3.2	500	760	1080	3.5	3.3	3.2
	35	3.5	-	-	1.8	3.5	3.7	500	1150	1240	5.3	5.1	4.8
	50	5.0	-	-	1.8	5.0	5.6	500	1860	2100	8.5	8.2	7.8
	60	6.0	-	-	1.8	6.0	6.1	500	2350	2370	10.8	10.3	9.9
2 room	20 + 20	2.00	2.00	-	3.0	4.0	5.6	570	800	1750	3.7	3.5	3.4
	20 + 25	2.00	2.50	-	3.0	4.5	5.8	570	1050	1910	4.8	4.6	4.4
	20 + 35	1.93	3.37	-	3.0	5.3	6.1	570	1620	2110	7.4	7.1	6.8
	20 + 50	1.89	4.71	-	3.0	6.6	6.8	570	2330	2390	10.7	10.2	9.8
	20 + 60	1.68	5.03	-	3.0	6.7	6.8	570	2370	2390	10.9	10.4	10.0
	25 + 25	2.45	2.45	-	3.0	4.9	6.1	570	1340	2110	6.2	5.9	5.6
	25 + 35	2.42	3.38	-	3.0	5.8	6.4	570	1920	2270	8.8	8.4	8.1
	25 + 50	2.23	4.47	-	3.0	6.7	6.8	570	2370	2390	10.9	10.4	10.0
	25 + 60	1.97	4.73	-	3.0	6.7	6.8	570	2370	2390	10.9	10.4	10.0
	35 + 35	3.30	3.30	-	3.0	6.6	6.8	570	2330	2390	10.7	10.2	9.8
	35 + 50	2.76	3.94	-	3.0	6.7	6.8	570	2370	2390	10.9	10.4	10.0
	35 + 60	2.47	4.23	-	3.0	6.7	6.8	570	2370	2390	10.9	10.4	10.0
	50 + 50	3.35	3.35	-	3.0	6.7	6.8	570	2370	2390	10.9	10.4	10.0
50 + 60	3.05	3.65	-	3.0	6.7	6.8	570	2370	2390	10.9	10.4	10.0	
3 room	20 + 20 + 20	1.90	1.90	1.90	3.6	5.7	7.3	690	1430	2390	6.8	6.5	6.2
	20 + 20 + 25	1.82	1.82	2.27	3.6	5.9	7.3	690	1450	2390	6.9	6.6	6.3
	20 + 20 + 35	1.60	1.60	2.80	3.6	6.0	7.3	690	1470	2390	7.0	6.7	6.4
	20 + 20 + 50	1.40	1.40	3.50	3.6	6.3	7.3	690	1520	2390	7.2	6.9	6.6
	20 + 20 + 60	1.28	1.28	3.84	3.6	6.4	7.3	690	1540	2390	7.3	7.0	6.7
	20 + 25 + 25	1.69	2.11	2.11	3.6	5.9	7.3	690	1450	2390	6.9	6.6	6.3
	20 + 25 + 35	1.53	1.91	2.67	3.6	6.1	7.3	690	1500	2390	7.1	6.8	6.5
	20 + 25 + 50	1.35	1.68	3.37	3.6	6.4	7.3	690	1540	2390	7.3	7.0	6.7
	20 + 25 + 60	1.26	1.57	3.77	3.6	6.6	7.3	690	1560	2390	7.4	7.1	6.8
	20 + 35 + 35	1.40	2.45	2.45	3.6	6.3	7.3	690	1520	2390	7.2	6.9	6.6
	20 + 35 + 50	1.26	2.20	3.14	3.6	6.6	7.3	690	1560	2390	7.4	7.1	6.8
	25 + 25 + 25	2.00	2.00	2.00	3.6	6.0	7.3	690	1470	2390	7.0	6.7	6.4
	25 + 25 + 35	1.79	1.79	2.51	3.6	6.1	7.3	690	1500	2390	7.1	6.8	6.5
	25 + 25 + 50	1.60	1.60	3.20	3.6	6.4	7.3	690	1540	2390	7.3	7.0	6.7
	25 + 25 + 60	1.52	1.52	3.65	3.6	6.7	7.3	690	1580	2390	7.5	7.2	6.9
	25 + 35 + 35	1.68	2.36	2.36	3.6	6.4	7.3	690	1540	2390	7.3	7.0	6.7
25 + 35 + 50	1.52	2.13	3.05	3.6	6.7	7.3	690	1580	2390	7.5	7.2	6.9	
35 + 35 + 35	2.20	2.20	2.20	3.6	6.6	7.3	690	1560	2390	7.4	7.1	6.8	

<Heating>

Indoor unit combination		Heating capacity (kW)						Power consumption (W)			Standard current (A)		
		Room heating capacity (kW)			Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	Min.	Standard	max.						
1 room	20	3.0	-	-	1.5	3.0	3.5	600	970	1330	4.5	4.3	4.1
	25	3.4	-	-	1.5	3.4	4.0	600	1140	1510	5.2	5.0	4.8
	35	4.5	-	-	1.5	4.5	4.8	600	1480	1790	6.8	6.5	6.2
	50	5.8	-	-	1.5	5.8	6.1	600	1960	2310	9.0	8.6	8.2
	60	6.8	-	-	1.5	6.8	7.0	600	2250	2660	10.3	9.9	9.5
2 room	20 + 20	3.00	3.00	-	2.1	6.0	7.0	630	1520	2100	7.0	6.7	6.4
	20 + 25	2.71	3.39	-	2.1	6.1	7.2	630	1600	2550	7.3	7.0	6.7
	20 + 35	2.36	4.14	-	2.1	6.5	7.3	630	1710	3000	7.9	7.5	7.2
	20 + 50	2.00	5.00	-	2.1	7.0	7.3	630	1940	3000	8.9	8.5	8.2
	20 + 60	1.78	5.33	-	2.1	7.1	7.3	630	1980	3000	9.1	8.7	8.3
	25 + 25	3.15	3.15	-	2.1	6.3	7.3	630	1660	3000	7.6	7.3	7.0
	25 + 35	2.79	3.91	-	2.1	6.7	7.3	630	1790	3000	8.2	7.9	7.5
	25 + 50	2.37	4.73	-	2.1	7.1	7.3	630	1980	3000	9.1	8.7	8.3
	25 + 60	2.09	5.01	-	2.1	7.1	7.3	630	1980	3000	9.1	8.7	8.3
	35 + 35	3.50	3.50	-	2.1	7.0	7.3	630	1940	3000	8.9	8.5	8.2
	35 + 50	2.92	4.18	-	2.1	7.1	7.3	630	1980	3000	9.1	8.7	8.3
	35 + 60	2.62	4.48	-	2.1	7.1	7.3	630	1980	3000	9.1	8.7	8.3
	50 + 50	3.55	3.55	-	2.1	7.1	7.3	630	1980	3000	9.1	8.7	8.3
50 + 60	3.23	3.87	-	2.1	7.1	7.3	630	1980	3000	9.1	8.7	8.3	
3 room	20 + 20 + 20	2.20	2.20	2.20	3.2	6.6	7.6	660	1380	3000	6.5	6.3	6.0
	20 + 20 + 25	2.06	2.06	2.58	3.2	6.7	7.6	660	1420	3000	6.7	6.4	6.2
	20 + 20 + 35	1.81	1.81	3.17	3.2	6.8	7.6	660	1540	3000	7.3	7.0	6.7
	20 + 20 + 50	1.56	1.56	3.89	3.2	7.0	7.6	660	1730	3000	8.2	7.8	7.5
	20 + 20 + 60	1.44	1.44	4.32	3.2	7.2	7.6	660	1900	3000	9.0	8.6	8.2
	20 + 25 + 25	1.94	2.43	2.43	3.2	6.8	7.6	660	1540	3000	7.3	7.0	6.7
	20 + 25 + 35	1.73	2.16	3.02	3.2	6.9	7.6	660	1590	3000	7.5	7.2	6.9
	20 + 25 + 50	1.49	1.87	3.74	3.2	7.1	7.6	660	1780	3000	8.4	8.1	7.7
	20 + 25 + 60	1.37	1.71	4.11	3.2	7.2	7.6	660	1900	3000	9.0	8.6	8.2
	20 + 35 + 35	1.56	2.72	2.72	3.2	7.0	7.6	660	1730	3000	8.2	7.8	7.5
	20 + 35 + 50	1.37	2.40	3.43	3.2	7.2	7.6	660	1900	3000	9.0	8.6	8.2
	25 + 25 + 25	2.27	2.27	2.27	3.2	6.8	7.6	660	1540	3000	7.3	7.0	6.7
	25 + 25 + 35	2.06	2.06	2.88	3.2	7.0	7.6	660	1730	3000	8.2	7.8	7.5
	25 + 25 + 50	1.80	1.80	3.60	3.2	7.2	7.6	660	1900	3000	9.0	8.6	8.2
	25 + 25 + 60	1.64	1.64	3.93	3.2	7.2	7.6	660	1900	3000	9.0	8.6	8.2
	25 + 35 + 35	1.87	2.62	2.62	3.2	7.1	7.6	660	1780	3000	8.4	8.1	7.7
	25 + 35 + 50	1.64	2.29	3.27	3.2	7.2	7.6	660	1900	3000	9.0	8.6	8.2
	35 + 35 + 35	2.40	2.40	2.40	3.2	7.2	7.6	660	1900	3000	9.0	8.6	8.2

(b) SCM80ZJ-S

1) All indoor unit SRK\*\*ZJX-S type only

<Cooling>

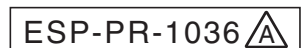
Indoor unit combination		Cooling capacity (kW)							Power consumption (W)			Standard current (A)		
		Room cooling capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	Max.						
1 room	20	2.0	-	-	-	1.8	2.0	2.8	480	500	950	2.3	2.2	2.1
	25	2.5	-	-	-	1.8	2.5	3.4	480	680	1080	3.1	3.0	2.9
	35	3.5	-	-	-	1.8	3.5	3.9	480	1010	1240	4.6	4.4	4.3
	50	5.0	-	-	-	1.8	5.0	6.1	480	1530	2100	7.0	6.7	6.4
	60	6.0	-	-	-	1.8	6.0	7.0	480	1880	2700	8.6	8.3	7.9
2 room	20 + 20	2.00	2.00	-	-	3.0	4.0	6.1	550	850	1910	3.9	3.7	3.6
	20 + 25	2.00	2.50	-	-	3.0	4.5	6.4	550	1070	2060	4.9	4.7	4.5
	20 + 35	2.00	3.50	-	-	3.0	5.5	6.9	550	1470	2320	6.7	6.5	6.2
	20 + 50	1.97	4.93	-	-	3.0	6.9	7.9	550	2070	2830	9.5	9.1	8.7
	20 + 60	1.85	5.55	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6
	25 + 25	2.50	2.50	-	-	3.0	5.0	6.8	550	1250	2270	5.7	5.5	5.3
	25 + 35	2.46	3.44	-	-	3.0	5.9	7.2	550	1660	2470	7.6	7.3	7.0
	25 + 50	2.47	4.93	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6
	25 + 60	2.18	5.22	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6
	35 + 35	3.45	3.45	-	-	3.0	6.9	7.6	550	2070	2680	9.5	9.1	8.7
	35 + 50	3.05	4.35	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6
	35 + 60	2.73	4.67	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6
	50 + 50	3.70	3.70	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6
	50 + 60	3.36	4.04	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6
60 + 60	3.70	3.70	-	-	3.0	7.4	7.9	550	2290	2830	10.5	10.1	9.6	
3 room	20 + 20 + 20	2.00	2.00	2.00	-	3.7	6.0	8.5	670	1380	2830	6.3	6.1	5.8
	20 + 20 + 25	2.00	2.00	2.50	-	3.7	6.5	8.5	670	1560	2830	7.2	6.9	6.6
	20 + 20 + 35	1.89	1.89	3.31	-	3.7	7.1	8.5	670	1880	2830	8.6	8.3	7.9
	20 + 20 + 50	1.73	1.73	4.33	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 20 + 60	1.56	1.56	4.68	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 25 + 25	1.94	2.43	2.43	-	3.7	6.8	8.5	670	1740	2830	8.0	7.6	7.3
	20 + 25 + 35	1.88	2.34	3.28	-	3.7	7.5	8.5	670	2050	2830	9.4	9.0	8.6
	20 + 25 + 50	1.64	2.05	4.11	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 25 + 60	1.49	1.86	4.46	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 35 + 35	1.73	3.03	3.03	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 35 + 50	1.49	2.60	3.71	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 35 + 60	1.36	2.37	4.07	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 50 + 50	1.30	3.25	3.25	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	20 + 50 + 60	1.20	3.00	3.60	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 25 + 25	2.37	2.37	2.37	-	3.7	7.1	8.5	670	1880	2830	8.6	8.3	7.9
	25 + 25 + 35	2.29	2.29	3.21	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 25 + 50	1.95	1.95	3.90	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 25 + 60	1.77	1.77	4.25	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 35 + 35	2.05	2.87	2.87	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 35 + 50	1.77	2.48	3.55	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 35 + 60	1.63	2.28	3.90	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 50 + 50	1.56	3.12	3.12	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	25 + 50 + 60	1.44	2.89	3.47	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
	35 + 35 + 35	2.60	2.60	2.60	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4
35 + 35 + 50	2.28	2.28	3.25	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4	
35 + 35 + 60	2.10	2.10	3.60	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4	
35 + 50 + 50	2.02	2.89	2.89	-	3.7	7.8	8.5	670	2230	2830	10.2	9.8	9.4	

## &lt;Cooling&gt;

Indoor unit combination		Cooling capacity (kW)							Power consumption (W)			Standard current (A)		
		Room cooling capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	Max.						
4 room	20 + 20 + 20 + 20	1.95	1.95	1.95	1.95	4.4	7.8	9.2	890	2120	2830	9.6	9.2	8.8
	20 + 20 + 20 + 25	1.84	1.84	1.84	2.29	4.4	7.8	9.2	890	2120	2830	9.6	9.2	8.8
	20 + 20 + 20 + 35	1.66	1.66	1.66	2.91	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 20 + 20 + 50	1.44	1.44	1.44	3.59	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 20 + 20 + 60	1.33	1.33	1.33	4.00	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	20 + 20 + 25 + 25	1.76	1.76	2.19	2.19	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 20 + 25 + 35	1.58	1.58	1.98	2.77	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 20 + 25 + 50	1.37	1.37	1.72	3.43	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 20 + 25 + 60	1.28	1.28	1.60	3.84	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	20 + 20 + 35 + 35	1.44	1.44	2.51	2.51	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 20 + 35 + 50	1.28	1.28	2.24	3.20	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	20 + 20 + 35 + 60	1.19	1.19	2.07	3.56	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	20 + 25 + 25 + 25	1.66	2.08	2.08	2.08	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 25 + 25 + 35	1.50	1.88	1.88	2.63	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 25 + 25 + 50	1.33	1.67	1.67	3.33	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	20 + 25 + 25 + 60	1.23	1.54	1.54	3.69	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	20 + 25 + 35 + 35	1.37	1.72	2.40	2.40	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	20 + 25 + 35 + 50	1.23	1.54	2.15	3.08	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	20 + 35 + 35 + 35	1.28	2.24	2.24	2.24	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	25 + 25 + 25 + 25	1.98	1.98	1.98	1.98	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	25 + 25 + 25 + 35	1.80	1.80	1.80	2.51	4.4	7.9	9.2	890	2140	2830	9.7	9.3	8.9
	25 + 25 + 25 + 50	1.60	1.60	1.60	3.20	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	25 + 25 + 25 + 60	1.48	1.48	1.48	3.56	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	25 + 25 + 35 + 35	1.67	1.67	2.33	2.33	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
	25 + 25 + 35 + 50	1.48	1.48	2.07	2.96	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0
25 + 35 + 35 + 35	1.54	2.15	2.15	2.15	4.4	8.0	9.2	890	2160	2830	9.9	9.4	9.0	

<Heating>

Indoor unit combination		Heating capacity (kW)							Power consumption (W)			Standard current (A)		
		Room heating capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	Max.						
1 room	20	3.0	-	-	-	1.5	3.0	3.7	600	840	1330	3.9	3.7	3.5
	25	3.4	-	-	-	1.5	3.4	4.2	600	1000	1510	4.6	4.4	4.2
	35	4.5	-	-	-	1.5	4.5	5.0	600	1330	1790	6.1	5.8	5.6
	50	5.8	-	-	-	1.5	5.8	6.5	600	1780	2310	8.2	7.8	7.5
	60	6.8	-	-	-	1.5	6.8	7.5	600	2100	2660	9.6	9.2	8.8
2 room	20 + 20	2.70	2.70	-	-	2.1	5.4	7.4	630	1340	1870	6.2	5.9	5.6
	20 + 25	2.62	3.28	-	-	2.1	5.9	7.7	630	1530	2130	7.0	6.7	6.4
	20 + 35	2.51	4.39	-	-	2.1	6.9	8.3	630	1910	2650	8.8	8.4	8.0
	20 + 50	2.37	5.93	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	20 + 60	2.08	6.23	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	25 + 25	3.20	3.20	-	-	2.1	6.4	8.1	630	1700	2480	7.8	7.5	7.2
	25 + 35	3.08	4.32	-	-	2.1	7.4	8.6	630	2090	2910	9.6	9.2	8.8
	25 + 50	2.77	5.53	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	25 + 60	2.44	5.86	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	35 + 35	4.15	4.15	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	35 + 50	3.42	4.88	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	35 + 60	3.06	5.24	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	50 + 50	4.15	4.15	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
	50 + 60	3.77	4.53	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4
60 + 60	4.15	4.15	-	-	2.1	8.3	8.8	630	2460	3430	11.3	10.8	10.4	
3 room	20 + 20 + 20	2.57	2.57	2.57	-	3.2	7.7	9.3	660	1830	3430	8.4	8.0	7.7
	20 + 20 + 25	2.46	2.46	3.08	-	3.2	8.0	9.3	660	1930	3430	8.9	8.5	8.1
	20 + 20 + 35	2.27	2.27	3.97	-	3.2	8.5	9.3	660	2090	3430	9.6	9.2	8.8
	20 + 20 + 50	2.00	2.00	5.00	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 20 + 60	1.80	1.80	5.40	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 25 + 25	2.34	2.93	2.93	-	3.2	8.2	9.3	660	1990	3430	9.1	8.7	8.4
	20 + 25 + 35	2.20	2.75	3.85	-	3.2	8.8	9.3	660	2180	3430	10.0	9.6	9.2
	20 + 25 + 50	1.89	2.37	4.74	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 25 + 60	1.71	2.14	5.14	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 35 + 35	2.00	3.50	3.50	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 35 + 50	1.71	3.00	4.29	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 35 + 60	1.57	2.74	4.70	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 50 + 50	1.50	3.75	3.75	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	20 + 50 + 60	1.38	3.46	4.15	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 25 + 25	2.83	2.83	2.83	-	3.2	8.5	9.3	660	2090	3430	9.6	9.2	8.8
	25 + 25 + 35	2.65	2.65	3.71	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 25 + 50	2.25	2.25	4.50	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 25 + 60	2.05	2.05	4.91	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 35 + 35	2.37	3.32	3.32	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 35 + 50	2.05	2.86	4.09	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 35 + 60	1.88	2.63	4.50	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 50 + 50	1.80	3.60	3.60	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	25 + 50 + 60	1.67	3.33	4.00	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	35 + 35 + 35	3.00	3.00	3.00	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	35 + 35 + 50	2.63	2.63	3.75	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	35 + 35 + 60	2.42	2.42	4.15	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5
	35 + 50 + 50	2.33	3.33	3.33	-	3.2	9.0	9.3	660	2250	3430	10.3	9.9	9.5





## &lt;Heating&gt;

Indoor unit combination		Heating capacity (kW)							Power consumption (W)			Standard current (A)		
		Room heating capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	max.						
4 room	20 + 20 + 20 + 20	2.28	2.28	2.28	2.28	3.6	9.1	9.8	800	2220	3430	10.2	9.7	9.3
	20 + 20 + 20 + 25	2.14	2.14	2.14	2.68	3.6	9.1	9.8	800	2220	3430	10.2	9.7	9.3
	20 + 20 + 20 + 35	1.94	1.94	1.94	3.39	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	20 + 20 + 20 + 50	1.67	1.67	1.67	4.18	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	20 + 20 + 20 + 60	1.55	1.55	1.55	4.65	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 20 + 25 + 25	2.04	2.04	2.56	2.56	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	20 + 20 + 25 + 35	1.84	1.84	2.30	3.22	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	20 + 20 + 25 + 50	1.62	1.62	2.02	4.04	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 20 + 25 + 60	1.49	1.49	1.86	4.46	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 20 + 35 + 35	1.67	1.67	2.93	2.93	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	20 + 20 + 35 + 50	1.49	1.49	2.60	3.72	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 20 + 35 + 60	1.38	1.38	2.41	4.13	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 25 + 25 + 25	1.94	2.42	2.42	2.42	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	20 + 25 + 25 + 35	1.75	2.19	2.19	3.07	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	20 + 25 + 25 + 50	1.55	1.94	1.94	3.88	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 25 + 25 + 60	1.43	1.79	1.79	4.29	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 25 + 35 + 35	1.62	2.02	2.83	2.83	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 25 + 35 + 50	1.43	1.79	2.50	3.58	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	20 + 35 + 35 + 35	1.49	2.60	2.60	2.60	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	25 + 25 + 25 + 25	2.30	2.30	2.30	2.30	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	25 + 25 + 25 + 35	2.09	2.09	2.09	2.93	3.6	9.2	9.8	800	2240	3430	10.3	9.8	9.4
	25 + 25 + 25 + 50	1.86	1.86	1.86	3.72	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	25 + 25 + 25 + 60	1.72	1.72	1.72	4.13	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	25 + 25 + 35 + 35	1.94	1.94	2.71	2.71	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
	25 + 25 + 35 + 50	1.72	1.72	2.41	3.44	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5
25 + 35 + 35 + 35	1.79	2.50	2.50	2.50	3.6	9.3	9.8	800	2260	3430	10.4	10.0	9.5	

2) Indoor unit except all indoor unit SRK\*\*ZJX-S type only

<Cooling>

Indoor unit combination		Cooling capacity (kW)							Power consumption (W)			Standard current (A)		
		Room cooling capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	Max.						
1 room	20	2.0	-	-	-	1.8	2.0	2.7	480	530	950	2.4	2.3	2.2
	25	2.5	-	-	-	1.8	2.5	3.2	480	730	1080	3.4	3.2	3.1
	35	3.5	-	-	-	1.8	3.5	3.7	480	1120	1240	5.1	4.9	4.7
	50	5.0	-	-	-	1.8	5.0	5.8	480	1710	2100	7.9	7.5	7.2
	60	6.0	-	-	-	1.8	6.0	6.7	480	2140	2700	9.8	9.4	9.0
2 room	20 + 20	2.00	2.00	-	-	3.0	4.0	5.8	550	930	1910	4.3	4.1	3.9
	20 + 25	2.00	2.50	-	-	3.0	4.5	6.1	550	1170	2060	5.4	5.1	4.9
	20 + 35	2.00	3.50	-	-	3.0	5.5	6.6	550	1590	2320	7.3	7.0	6.7
	20 + 50	1.97	4.93	-	-	3.0	6.9	7.5	550	2200	2830	10.1	9.7	9.3
	20 + 60	1.85	5.55	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2
	25 + 25	2.50	2.50	-	-	3.0	5.0	6.5	550	1360	2270	6.2	6.0	5.7
	25 + 35	2.46	3.44	-	-	3.0	5.9	6.8	550	1780	2470	8.2	7.8	7.5
	25 + 50	2.47	4.93	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2
	25 + 60	2.18	5.22	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2
	35 + 35	3.45	3.45	-	-	3.0	6.9	7.5	550	2200	2680	10.1	9.7	9.3
	35 + 50	3.05	4.35	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2
	35 + 60	2.73	4.67	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2
	50 + 50	3.70	3.70	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2
	50 + 60	3.36	4.04	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2
60 + 60	3.70	3.70	-	-	3.0	7.4	7.5	550	2430	2830	11.2	10.7	10.2	
3 room	20 + 20 + 20	2.00	2.00	2.00	-	3.7	6.0	8.1	670	1450	2830	6.7	6.4	6.1
	20 + 20 + 25	2.00	2.00	2.50	-	3.7	6.5	8.1	670	1630	2830	7.5	7.2	6.9
	20 + 20 + 35	1.89	1.89	3.31	-	3.7	7.1	8.1	670	1950	2830	9.0	8.6	8.2
	20 + 20 + 50	1.73	1.73	4.33	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 20 + 60	1.56	1.56	4.68	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 25 + 25	1.94	2.43	2.43	-	3.7	6.8	8.1	670	1820	2830	8.4	8.0	7.7
	20 + 25 + 35	1.88	2.34	3.28	-	3.7	7.5	8.1	670	2130	2830	9.8	9.4	9.0
	20 + 25 + 50	1.64	2.05	4.11	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 25 + 60	1.49	1.86	4.46	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 35 + 35	1.73	3.03	3.03	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 35 + 50	1.49	2.60	3.71	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 35 + 60	1.36	2.37	4.07	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 50 + 50	1.30	3.25	3.25	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	20 + 50 + 60	1.20	3.00	3.60	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	25 + 25 + 25	2.37	2.37	2.37	-	3.7	7.1	8.1	670	1950	2830	9.0	8.6	8.2
	25 + 25 + 35	2.29	2.29	3.21	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	25 + 25 + 50	1.95	1.95	3.90	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	25 + 25 + 60	1.77	1.77	4.25	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	25 + 35 + 35	2.05	2.87	2.87	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	25 + 35 + 50	1.77	2.48	3.55	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
	25 + 35 + 60	1.63	2.28	3.90	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8
25 + 50 + 50	1.56	3.12	3.12	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8	
25 + 50 + 60	1.44	2.89	3.47	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8	
35 + 35 + 35	2.60	2.60	2.60	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8	
35 + 35 + 50	2.28	2.28	3.25	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8	
35 + 35 + 60	2.10	2.10	3.60	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8	
35 + 50 + 50	2.02	2.89	2.89	-	3.7	7.8	8.1	670	2320	2830	10.7	10.2	9.8	

<Cooling>

Indoor unit combination		Cooling capacity (kW)							Power consumption (W)			Standard current (A)		
		Room cooling capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	Max.						
4 room	20 + 20 + 20 + 20	1.95	1.95	1.95	1.95	4.4	7.8	8.7	890	2180	2830	9.9	9.5	9.1
	20 + 20 + 20 + 25	1.84	1.84	1.84	2.29	4.4	7.8	8.7	890	2180	2830	9.9	9.5	9.1
	20 + 20 + 20 + 35	1.66	1.66	1.66	2.91	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 20 + 20 + 50	1.44	1.44	1.44	3.59	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 20 + 20 + 60	1.33	1.33	1.33	4.00	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	20 + 20 + 25 + 25	1.76	1.76	2.19	2.19	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 20 + 25 + 35	1.58	1.58	1.98	2.77	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 20 + 25 + 50	1.37	1.37	1.72	3.43	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 20 + 25 + 60	1.28	1.28	1.60	3.84	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	20 + 20 + 35 + 35	1.44	1.44	2.51	2.51	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 20 + 35 + 50	1.28	1.28	2.24	3.20	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	20 + 20 + 35 + 60	1.19	1.19	2.07	3.56	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	20 + 25 + 25 + 25	1.66	2.08	2.08	2.08	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 25 + 25 + 35	1.50	1.88	1.88	2.63	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 25 + 25 + 50	1.33	1.67	1.67	3.33	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	20 + 25 + 25 + 60	1.23	1.54	1.54	3.69	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	20 + 25 + 35 + 35	1.37	1.72	2.40	2.40	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	20 + 25 + 35 + 50	1.23	1.54	2.15	3.08	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	20 + 35 + 35 + 35	1.28	2.24	2.24	2.24	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	25 + 25 + 25 + 25	1.98	1.98	1.98	1.98	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	25 + 25 + 25 + 35	1.80	1.80	1.80	2.51	4.4	7.9	8.7	890	2200	2830	10.0	9.6	9.2
	25 + 25 + 25 + 50	1.60	1.60	1.60	3.20	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	25 + 25 + 25 + 60	1.48	1.48	1.48	3.56	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	25 + 25 + 35 + 35	1.67	1.67	2.33	2.33	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
	25 + 25 + 35 + 50	1.48	1.48	2.07	2.96	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3
25 + 35 + 35 + 35	1.54	2.15	2.15	2.15	4.4	8.0	8.7	890	2220	2830	10.1	9.7	9.3	

<Heating>

Indoor unit combination		Heating capacity (kW)							Power consumption (W)			Standard current (A)		
		Room heating capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	Max.						
1 room	20	3.0	-	-	-	1.5	3.0	3.5	600	1060	1330	4.9	4.7	4.5
	25	3.4	-	-	-	1.5	3.4	4.0	600	1220	1510	5.6	5.4	5.1
	35	4.5	-	-	-	1.5	4.5	4.8	600	1510	1790	6.9	6.6	6.4
	50	5.8	-	-	-	1.5	5.8	6.2	600	1950	2310	9.0	8.6	8.2
	60	6.8	-	-	-	1.5	6.8	7.1	600	2240	2660	10.3	9.8	9.4
2 room	20 + 20	2.70	2.70	-	-	2.1	5.4	7.0	630	1370	1870	6.3	6.0	5.8
	20 + 25	2.62	3.28	-	-	2.1	5.9	7.3	630	1560	2130	7.2	6.9	6.6
	20 + 35	2.51	4.39	-	-	2.1	6.9	7.9	630	1950	2650	9.0	8.6	8.2
	20 + 50	2.37	5.93	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	20 + 60	2.08	6.23	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	25 + 25	3.20	3.20	-	-	2.1	6.4	7.7	630	1740	2480	8.0	7.6	7.3
	25 + 35	3.08	4.32	-	-	2.1	7.4	8.2	630	2130	2910	9.8	9.4	9.0
	25 + 50	2.77	5.53	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	25 + 60	2.44	5.86	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	35 + 35	4.15	4.15	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	35 + 50	3.42	4.88	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	35 + 60	3.06	5.24	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	50 + 50	4.15	4.15	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
	50 + 60	3.77	4.53	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6
60 + 60	4.15	4.15	-	-	2.1	8.3	8.4	630	2510	3430	11.5	11.0	10.6	
3 room	20 + 20 + 20	2.57	2.57	2.57	-	3.2	7.7	9.1	660	1870	3430	8.6	8.2	7.9
	20 + 20 + 25	2.46	2.46	3.08	-	3.2	8.0	9.1	660	1970	3430	9.0	8.7	8.3
	20 + 20 + 35	2.27	2.27	3.97	-	3.2	8.5	9.1	660	2130	3430	9.8	9.4	9.0
	20 + 20 + 50	2.00	2.00	5.00	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 20 + 60	1.80	1.80	5.40	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 25 + 25	2.34	2.93	2.93	-	3.2	8.2	9.1	660	2030	3430	9.3	8.9	8.5
	20 + 25 + 35	2.20	2.75	3.85	-	3.2	8.8	9.1	660	2220	3430	10.2	9.7	9.3
	20 + 25 + 50	1.89	2.37	4.74	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 25 + 60	1.71	2.14	5.14	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 35 + 35	2.00	3.50	3.50	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 35 + 50	1.71	3.00	4.29	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 35 + 60	1.57	2.74	4.70	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 50 + 50	1.50	3.75	3.75	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	20 + 50 + 60	1.38	3.46	4.15	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 25 + 25	2.83	2.83	2.83	-	3.2	8.5	9.1	660	2130	3430	9.8	9.4	9.0
	25 + 25 + 35	2.65	2.65	3.71	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 25 + 50	2.25	2.25	4.50	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 25 + 60	2.05	2.05	4.91	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 35 + 35	2.37	3.32	3.32	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 35 + 50	2.05	2.86	4.09	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 35 + 60	1.88	2.63	4.50	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 50 + 50	1.80	3.60	3.60	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	25 + 50 + 60	1.67	3.33	4.00	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
	35 + 35 + 35	3.00	3.00	3.00	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7
35 + 35 + 50	2.63	2.63	3.75	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7	
35 + 35 + 60	2.42	2.42	4.15	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7	
35 + 50 + 50	2.33	3.33	3.33	-	3.2	9.0	9.1	660	2300	3430	10.6	10.1	9.7	

<Heating>

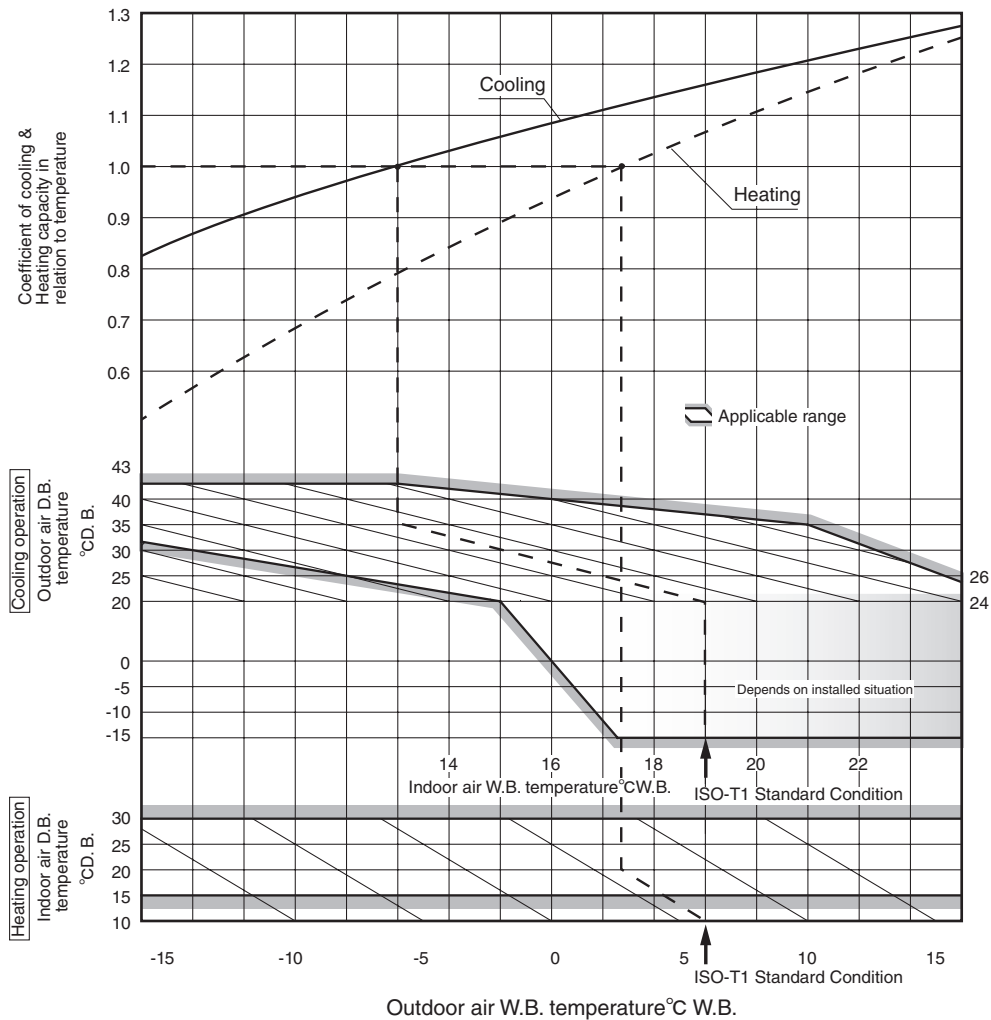
Indoor unit combination		Heating capacity (kW)							Power consumption (W)			Standard current (A)		
		Room heating capacity (kW)				Total capacity (kW)			Min.	Standard	Max.	220V	230V	240V
		A	B	C	D	Min.	Standard	Max.						
4 room	20 + 20 + 20 + 20	2.28	2.28	2.28	2.28	3.6	9.1	9.5	800	2270	3430	10.4	10.0	9.6
	20 + 20 + 20 + 25	2.14	2.14	2.14	2.68	3.6	9.1	9.5	800	2270	3430	10.4	10.0	9.6
	20 + 20 + 20 + 35	1.94	1.94	1.94	3.39	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	20 + 20 + 20 + 50	1.67	1.67	1.67	4.18	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	20 + 20 + 20 + 60	1.55	1.55	1.55	4.65	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 20 + 25 + 25	2.04	2.04	2.56	2.56	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	20 + 20 + 25 + 35	1.84	1.84	2.30	3.22	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	20 + 20 + 25 + 50	1.62	1.62	2.02	4.04	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 20 + 25 + 60	1.49	1.49	1.86	4.46	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 20 + 35 + 35	1.67	1.67	2.93	2.93	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	20 + 20 + 35 + 50	1.49	1.49	2.60	3.72	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 20 + 35 + 60	1.38	1.38	2.41	4.13	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 25 + 25 + 25	1.94	2.42	2.42	2.42	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	20 + 25 + 25 + 35	1.75	2.19	2.19	3.07	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	20 + 25 + 25 + 50	1.55	1.94	1.94	3.88	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 25 + 25 + 60	1.43	1.79	1.79	4.29	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 25 + 35 + 35	1.62	2.02	2.83	2.83	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 25 + 35 + 50	1.43	1.79	2.50	3.58	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	20 + 35 + 35 + 35	1.49	2.60	2.60	2.60	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	25 + 25 + 25 + 25	2.30	2.30	2.30	2.30	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	25 + 25 + 25 + 35	2.09	2.09	2.09	2.93	3.6	9.2	9.5	800	2290	3430	10.5	10.1	9.6
	25 + 25 + 25 + 50	1.86	1.86	1.86	3.72	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	25 + 25 + 25 + 60	1.72	1.72	1.72	4.13	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	25 + 25 + 35 + 35	1.94	1.94	2.71	2.71	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
	25 + 25 + 35 + 50	1.72	1.72	2.41	3.44	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8
25 + 35 + 35 + 35	1.79	2.50	2.50	2.50	3.6	9.3	9.5	800	2310	3430	10.7	10.2	9.8	

## 9. SELECTION CHART

Correct the cooling and heating capacity in accordance with the conditions as follows. The net cooling and heating capacity can be obtained in the following way.

**Net capacity = Capacity shown on specification × Correction factors as follows.**

### (1) Coefficient of cooling and heating capacity in relation to temperatures



### (2) Correction of cooling and heating capacity in relation to one way length of refrigerant piping

It is necessary to correct the cooling and heating capacity in relation to the one way piping length between the indoor and outdoor units.

Piping length [m]	7	10	15	20	25
Cooling	1.0	0.99	0.975	0.965	0.95
Heating	1.0	1.0	1.0	1.0	1.0

### (3) Correction relative to frosting on outdoor heat exchanger during heating

In additions to the foregoing corrections (1), (2) the heating capacity needs to be adjusted also with respect to the frosting on the outdoor heat exchanger.

Air inlet temperature of outdoor unit in °CWB	-15	-10	-9	-7	-5	-3	-1	1	3	5 or more
Adjustment coefficient	0.95	0.95	0.94	0.93	0.91	0.88	0.86	0.87	0.92	1.00

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# **INVERTER MULTI-SPLIT SYSTEM RESIDENTIAL AIR CONDITIONERS**

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