2. WALL MOUNTED TYPE ROOM AIR-CONDITIONER

(Split system, Air cooled cooling only type)

SRK50CA
SRK56CA

CONTENTS

2.1 GENERAL INFORMATION

2.1.1 Specific features

The "Mitsubishi Daiya" room air-conditioner: **SRK series** are of split and wall mounted type and the unit consists of indoor unit and outdoor unit with refrigerant precharged in factory. The indoor unit is composed of room air cooling equipment with operation control switch and the outdoor unit is composed of condensing unit with compressor.

(1) Remote control flap

The flap can be automatically controlled by operating wireless remote control.

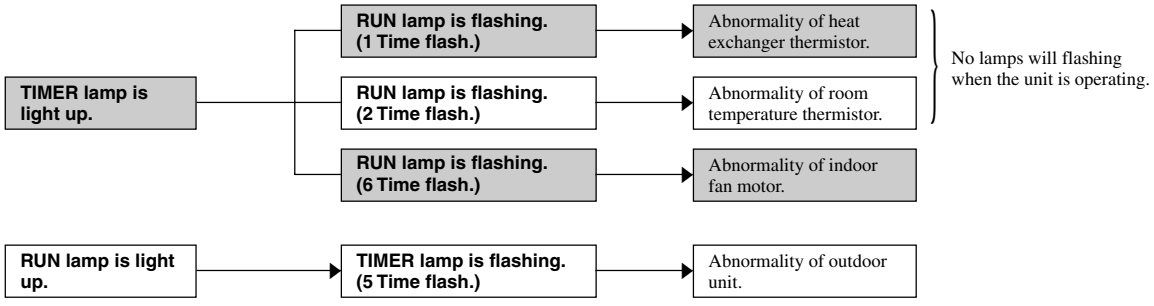
- AUTO (Natural flow) : Flap operation is automatically control.
- Swing : This will swing the flap up and down.
- Memory flap : Once the flap position is set, the unit memorizes the position and continues to operate at the same position from the next time.

(2) Automatic Operation

When the remote control switch is set on "auto", it will either automatically decide operation mode such as cooling and thermal dry, or operate in the operation mode before it has been turned to automatic control.

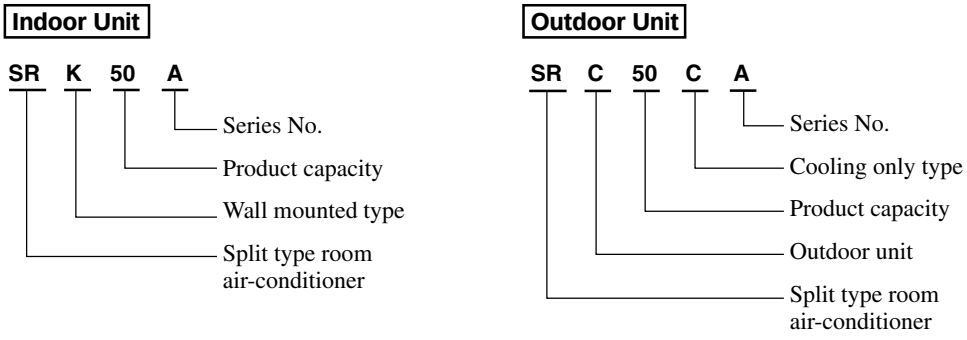
(3) Self diagnosis Function

We are constantly trying to do better service to our customers by installing such judges that show abnormality of operation as follows.



2.1.2 How to read the model name

Example :



2.2 SELECTION DATA

2.2.1 Specifications

Model SRK50A (Indoor unit)
SRC50CA (Outdoor unit)

Item			Model	SRK50A	SRC50CA
Cooling capacity(1)			W	4500	
Power source				1 Phase, 220/230/240V, 50 Hz	
Operation data(1)	Cooling input		kW	1.79	
	Running current (Cooling)		A	8.4/8.0/7.7	
	Inrush current		A	39/41/42	
	COP (In cooling)			2.51	
	Noise level	Sound level	dB	Hi : 44 Lo : 37	51
		Power level		Hi : 58 Lo : 51	65
Exterior dimensions Height × Width × Depth			mm	298 × 798 × 203	640 × 850 × 290
Color				Noble white	Stucco white
Net weight			kg	10	44
Refrigerant equipment Compressor types & Q'ty				–	RM5523GNE4 (Rotary type) × 1
Motor			kW	–	1.7
Starting method				–	Line starting
Heat exchanger				Louver fins & grooved tubing	
Refrigerant control				Capillary tubes	
Refrigerant(3)			kg	R22 1.45	
Refrigerant oil			ℓ	0.7 (BARREL FREEZE 32SAM)	
Air handling equipment Fan type & Q'ty				Tangential fan × 1	Propeller fan × 1
Motor			W	23	35
Air flow (at High)			CMM	11	39
Air filter, Q'ty				Polypropylene net (washable) × 2	–
Shock & vibration absorber				–	Cushion rubber (for compressor)
Electric heater				–	–
Operation control Operation switch				Wireless-Remote controller	–
Room temperature control				MC. Thermostat	–
Pilot lamp				RUN (Green), TIMER (Yellow), ECONO (Orange), HI POWER (Green)	–
Safety equipment				–	Dome mounted protector (for compressor) Internal thermostat (for fan motor)
Refrigerant piping	O.D		mm (in)	Liquid line: ϕ6.35 (1/4") Gas line: ϕ12.7 (1/2")	
	Connecting method			Flare connecting	
	Attached length of piping			Liquid line: 0.5m Gas line : 0.43m	–
	Insulation			Necessary (Both sides)	
Drain hose				Connectable	
Power source cord				3 m (3 cores with Earth)	
Connection wiring	Size × Core number			1.5 mm² × 3 cores (Including earth cable)	
	Connecting method			Terminal block (Screw fixing type)	
Accessories (included)				Mounting kit	
Optional parts				–	

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

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27°C	19°C	35°C	24°C	ISO-T1, JIS C9612

(2) The operation data are applied to the 220V, 230V or 240V districts respectively.

(3) The refrigerant quantity to be charged includes the refrigerant in 7 m connecting piping.
(Purging is not required even in the short piping.)
If the piping length is longer, (When it is 7 to 15 m, add 20 g refrigerant per meter.)

(4) When the unit is operated in cooling or dehumidification mode at the outside air temperature of 1ºC and less, there is a possibility that water leakage occurs at the indoor unit.

Model SRK56A (Indoor unit)
SRC56CA (Outdoor unit)

Item			Model	SRK56A	SRC56CA
Cooling capacity(1)			W	5000	
Power source				1 Phase, 220/230/240V, 50 Hz	
Operation data(1)	Cooling input		kW	2.08	
	Running current (Cooling)		A	9.7/9.3/8.7	
	Inrush current		A	44/46/48	
	COP (In cooling)			2.40	
	Noise level	Sound level	dB	Hi : 45 Lo : 38	54
		Power level		Hi : 59 Lo : 52	68
Exterior dimensions Height × Width × Depth			mm	298 × 798 × 203	640 × 850 × 290
Color				Noble white	Stucco white
Net weight			kg	10	44
Refrigerant equipment Compressor types & Q'ty				–	RM5526GNE4 (Rotary type) × 1
Motor			kW	–	1.9
Starting method				–	Line starting
Heat exchanger				Louver fins & grooved tubing	
Refrigerant control				Capillary tubes	
Refrigerant(3)			kg	R22 1.45	
Refrigerant oil			ℓ	0.7 (BARREL FREEZE 32SAM)	
Air handling equipment Fan type & Q'ty				Tangential fan × 1	Propeller fan × 1
Motor			W	23	35
Air flow (at High)			CMM	11	39
Air filter, Q'ty				Polypropylene net (washable) × 2	–
Shock & vibration absorber				–	Cushion rubber (for compressor)
Electric heater				–	–
Operation control Operation switch				Wireless-Remote controller	–
Room temperature control				MC. Thermostat	–
Pilot lamp				RUN (Green), TIMER (Yellow), ECONO (Orange), HI POWER (Green)	–
Safety equipment				–	Dome mounted protector (for compressor) Internal thermostat (for fan motor)
Refrigerant piping	O.D		mm (in)	Liquid line: ϕ6.35 (1/4") Gas line: ϕ12.7 (1/2")	
	Connecting method			Flare connecting	
	Attached length of piping			Liquid line: 0.5m Gas line : 0.43m	–
	Insulation			Necessary (Both sides)	
Drain hose				Connectable	
Power source cord				3 m (3 cores with Earth)	
Connection wiring	Size × Core number			1.5 mm² × 3 cores (Including earth cable)	
	Connecting method			Terminal block (Screw fixing type)	
Accessories (included)				Mounting kit	
Optional parts				–	

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

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27°C	19°C	35°C	24°C	ISO-T1, JIS C9612

(2) The operation data are applied to the 220V, 230V or 240V districts respectively.

(3) The refrigerant quantity to be charged includes the refrigerant in 7 m connecting piping.
(Purging is not required even in the short piping.)
If the piping length is longer, (When it is 7 to 15 m, add 20 g refrigerant per meter.)

(4) When the unit is operated in cooling or dehumidification mode at the outside air temperature of 1ºC and less, there is a possibility that water leakage occurs at the indoor unit.

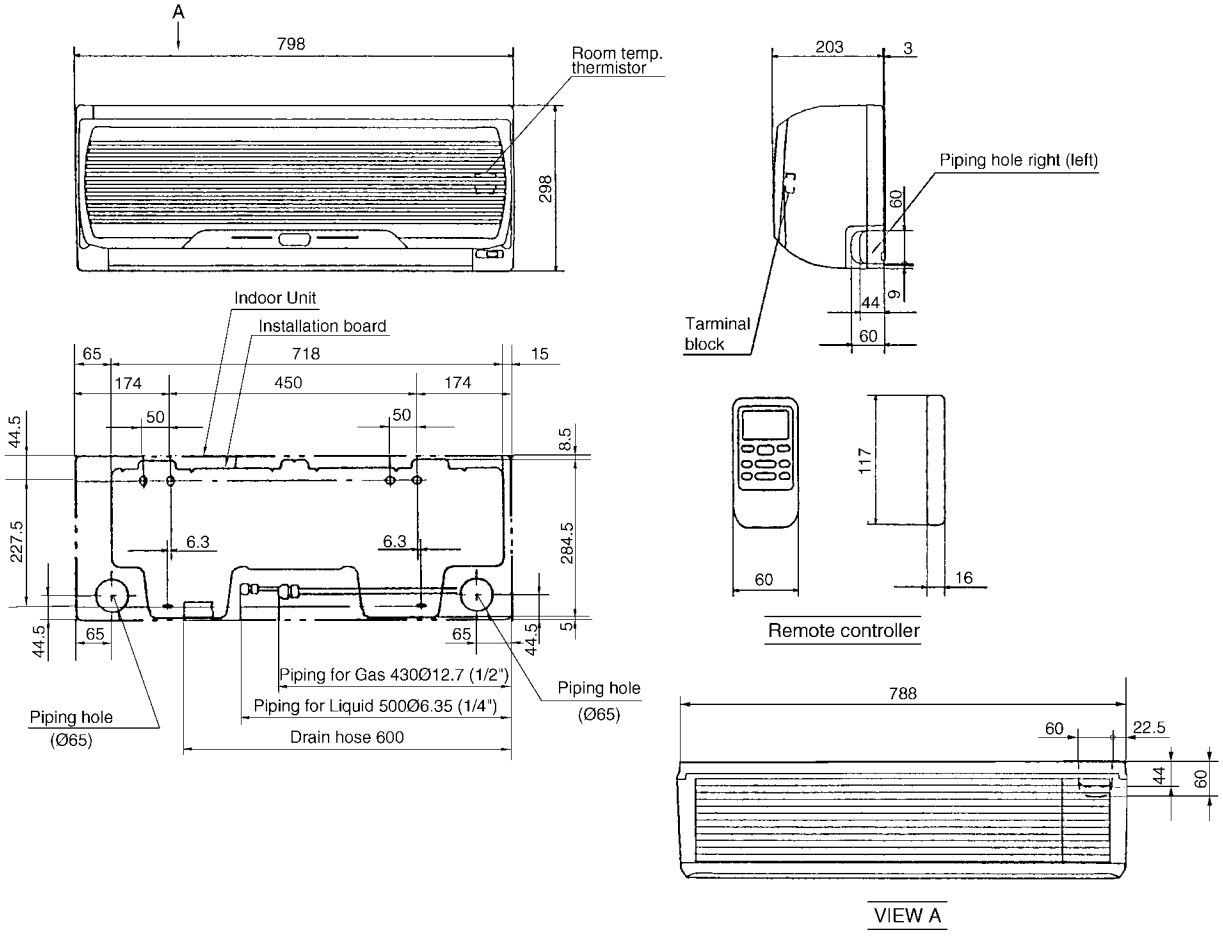
2.2.2 Range of usage & limitations

Item \ Models	All models
Indoor return air temperature (Upper, lower limits)	Refer to the selection chart
Outdoor air temperature (Upper, lower limits)	
Refrigerant line (one way) length	Max. 15m
Vertical height difference between outdoor unit and indoor unit	Max. 5m (Outdoor unit is higher) Max. 5m (Outdoor unit is lower)
Power source voltage	Rating ± 10%
Voltage at starting	Min. 85% of rating
Frequency of ON-OFF cycle	Max. 10 times/h
ON and OFF interval	Max. 3 minutes

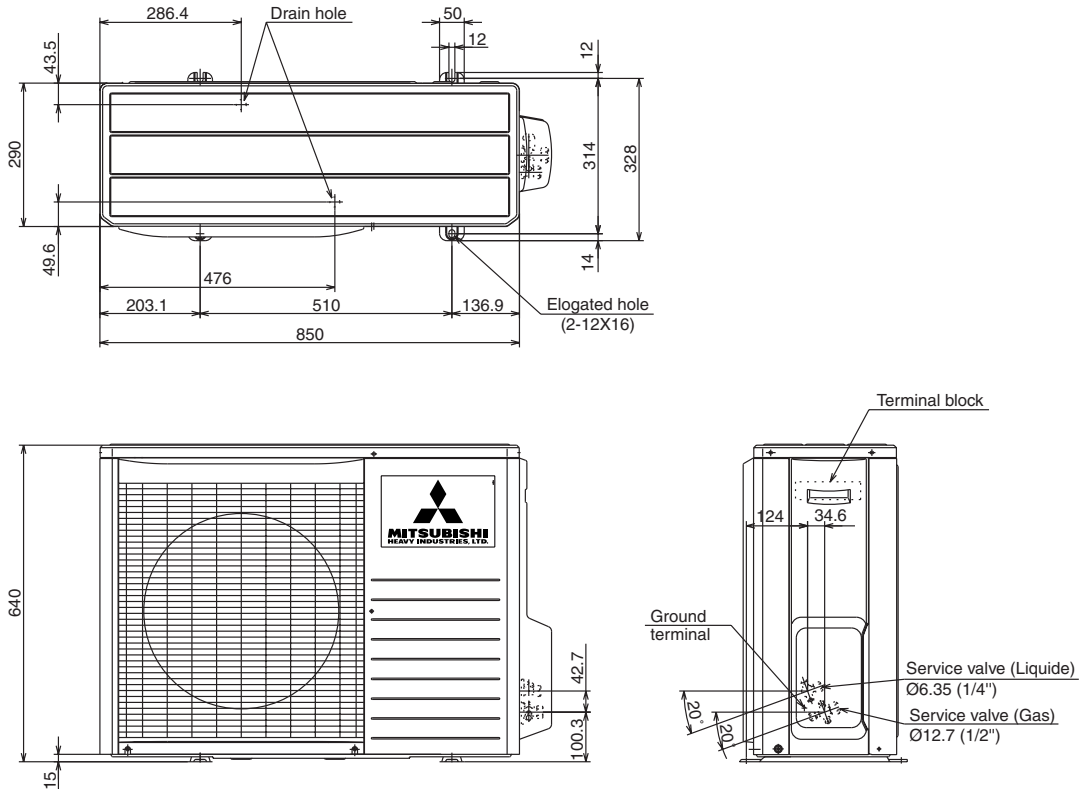
2.2.3 Exterior dimensions

(1) Indoor unit
Models SRK50A, 56A

Unit : mm

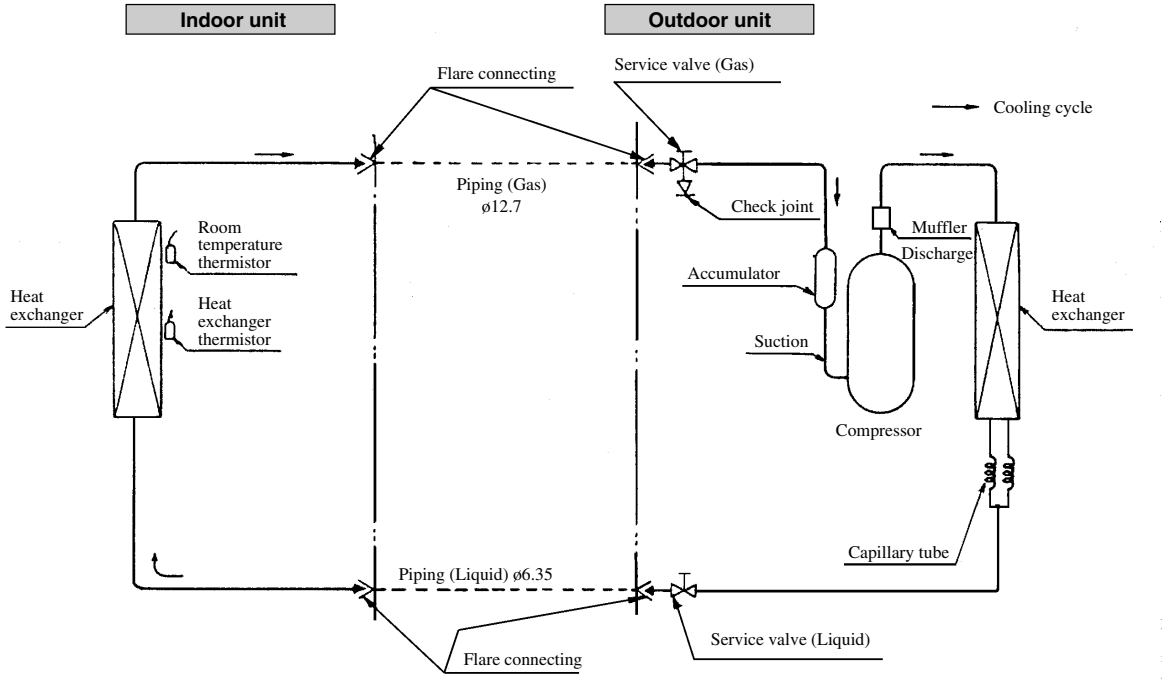


(2) Outdoor unit
Models SRC50CA, 56CA



2.2.4 Piping system

Models SRK50CA, 56CA

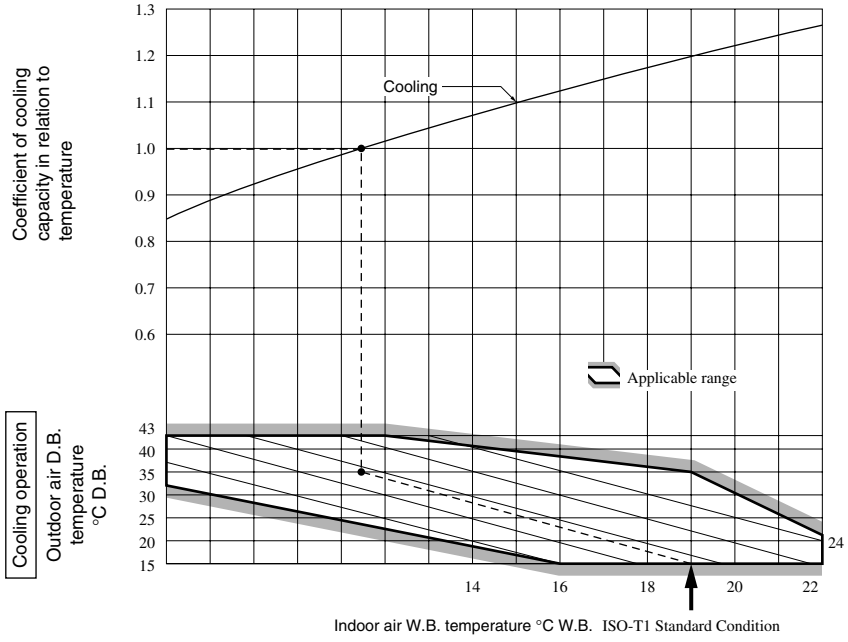


2.2.5 Selection chart

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

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

(1) Coefficient of cooling capacity in relation to temperatures



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

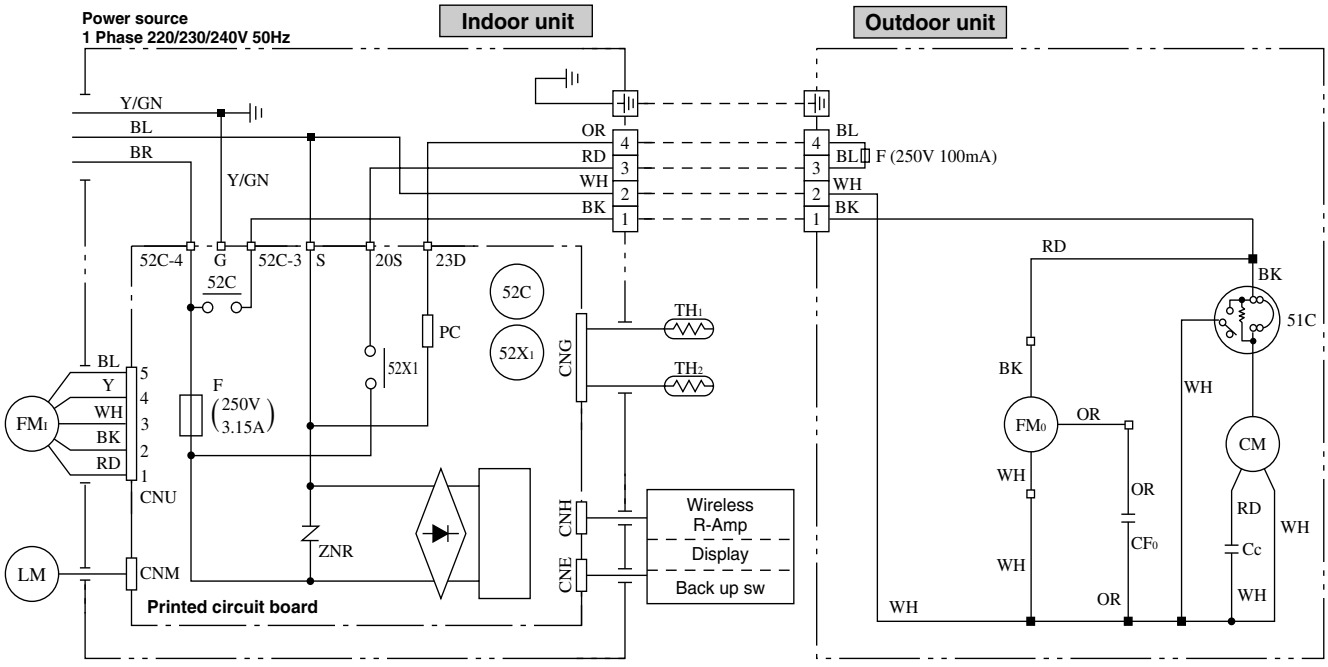
It is necessary to correct the cooling capacity in relation to the one way piping length between the indoor and outdoor units.

Piping length [m]	7	10	15
Cooling	1.0	0.99	0.975

2.3 ELECTRICAL DATA

2.3.1 Electrical wiring

Models SRK50CA, 56CA



Note(1) This figure shows SRK56CA. As for SRK50CA, 51C differs as shown in the figure below.

(2) When an abnormality occurred on the outdoor unit for the cooling only model, check the fuse on the outdoor unit. If the fuse is burnt out, replace it with new one.

Color symbol

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

Meaning of marks

Symbol	Parts name	Symbol	Parts name
C_C	Capacitor for CM	**LM**	Louver motor
CF_O	Capacitor for FM_O	**$Th_{1,2}$**	Thermistor
CM	Compressor motor	**ZNR**	Varistor
F	Fuse	**51C**	Motor protector for CM
FM_I	Fan motor (Indoor unit)	**52C**	Magnetic contactor for CM
FM_O	Fan motor (Outdoor unit)		

Table of relay operations

Relay symbol	Control part	Operation: Cooling
52C	**CM**	○

Notes (1) ○: denotes magentized relay ×: denotes demagnetized relay

(2) Th_1 is room temperature thermistor. Th_2 (the heat exchanger thermistor) is frost prevention thermistor.

(for details refer to page 22)

2.4 OUTLINE OF OPERATION CONTROL BY MICROCOMPUTER

Except for function relating to heating, same at the for SRK heat pump models, See Page 14.

2.5 APPLICATION DATA

The application data for the cooling only models are similar to those for the heat pump models. See Page 25.

2.6 MAINTENANCE DATA

Some at the cooling/heating equipment SRK heat pump models. See Page 33.

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