

SPECIFICATIONS

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All models are suitable for heat pump type air-conditioners.

RM Series Type				RM-S(I)					RM-S(II)			RM-M(I)					RM-M(II)				
Compressor Model				5460G	5465G	5470G	5475G	5485G	5495G	5510G	5512G	5514G	5515G	5516G	5517G	5518G	6520G	6523G	5524G	5526G	
OUTPUT (approx.)				HP	0.5	0.67	0.75	0.75	0.83	1	1.1	1.2	1.3	1.5	1.6	1.7	1.9	2	2.25	2.4	2.5
				W	450	500	550	600	650	750	800	900	1000	1100	1200	1300	1400	1500	1700	1800	1900
NOMINAL CAPACITY		50Hz	BTU/h	5000	5410	5830	6250	7080	7910	8330	10000	11660	12500	13330	14160	15000	16670	19170	20000	21670	
		60Hz	BTU/h	6000	6500	7000	7500	8500	9500	10000	12000	14000	15000	16000	17000	18000	20000	23000	24000	26000	
COMPRESSOR COOLING SYSTEM				B					L/I or B			B					L/I or B				
DISPLACEMENT				cc/rev.	8.4	9.5	10.2	11.2	12.5	13.6	14.5	16.9	20.0	21.4	22.3	23.9	25.0	28.0	32.9	34.5	37.3
				in/rev.	0.51	0.58	0.63	0.68	0.76	0.83	0.88	1.03	1.22	1.31	1.36	1.46	1.53	1.71	2.00	2.11	2.28
OIL CHARGE				cc	300	300	300	300	300	350	350	350	450	450	450	600	600	700	700	700	700
				fl. oz.	10.2	10.2	10.2	10.2	10.2	11.8	11.8	11.8	15.3	15.3	15.3	20.3	20.3	23.7	23.7	23.7	23.7
WEIGHT				kg	9	9	9	9	9	11.3	11.3	11.3	14.7	14.7	14.7	16.0	16.0	19.0	19.0	19.0	19.0
				lbs	19.8	19.8	19.8	19.8	19.8	24.9	24.9	24.9	32.3	32.3	32.3	35.2	35.2	41.8	41.8	41.8	41.8
HEIGHT				mm	252.5	252.5	252.5	252.5	252.5	291.2	291.2	291.2	318.3	318.3	318.3	318.3	318.3	369.3	369.3	369.3	369.3
				in	9.94	9.94	9.94	9.94	9.94	11.46	11.46	11.46	12.53	12.53	12.53	12.53	12.53	14.54	14.54	14.54	14.54
POWER SOURCE	1-PH	50/60Hz	100V	○	○	○	○	○	○	○	○	○	○								
		50/60Hz	200V				○		○	○	○	○	○	○	○	○	○	○			
		50Hz	220V,220~240V	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
		60Hz	208~230V							○	○	○	○	○		○		○		○	
		60Hz	110~120V	○		○		○		○	○	○		○			○				
	3-PH	50/60Hz	220-240/220-230V																		
		50/60Hz	200V	○			○		○	○		○	○	○	○		○	○	○	○	
		50/60Hz	230/208~240V																		
		50/60Hz	346-415/380-440V																		
For window type air-conditioner	Ref. charge limitation	kg	0.55					0.95			0.95					1.40					
	Accumulator body diameter	mm	φ30					φ50.8			φ50.8					φ60					
For split-type air-conditioner	Ref. charge limitation	kg	0.80					1.20			1.50					1.60					
	Accumulator body diameter	mm	φ60					φ75			φ89.5					φ89.5					

NOTES

● Rated Conditions: ASHRAE-T

Refrigerant	R-22	
Evaporating temp.	45°F	7.2°C
Condensing temp.	130°F	54.4°C
Suction gas temp.	95°F	35.0°C
Liquid temp.	115°F	46.1°C
Ambient temp.	95°F	35.0°C

● Compressor Cooling Method:

B	: Natural air draft (non-fan cooling)
L/I	: Liquid injection

● Motor Type:

2-pole induction motor

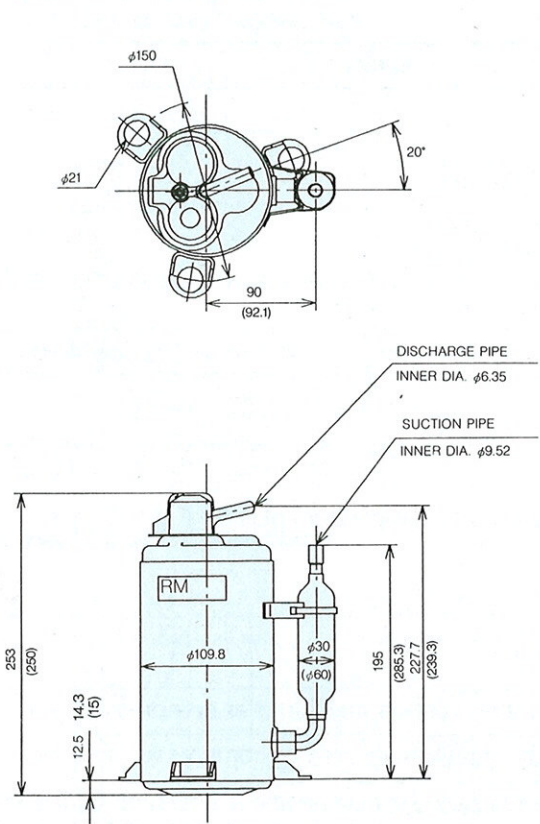
● Voltage Range:

Rated voltage ±10%

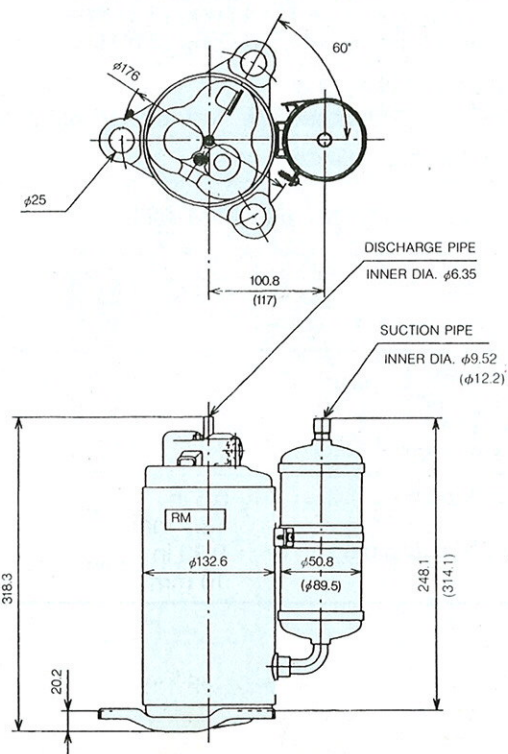
● Other Applications:

Regarding heat-pump applications, high ambient temperature applications or split-type air-conditioner applications, please contact Thai Compressor Manufacturing Company for details.

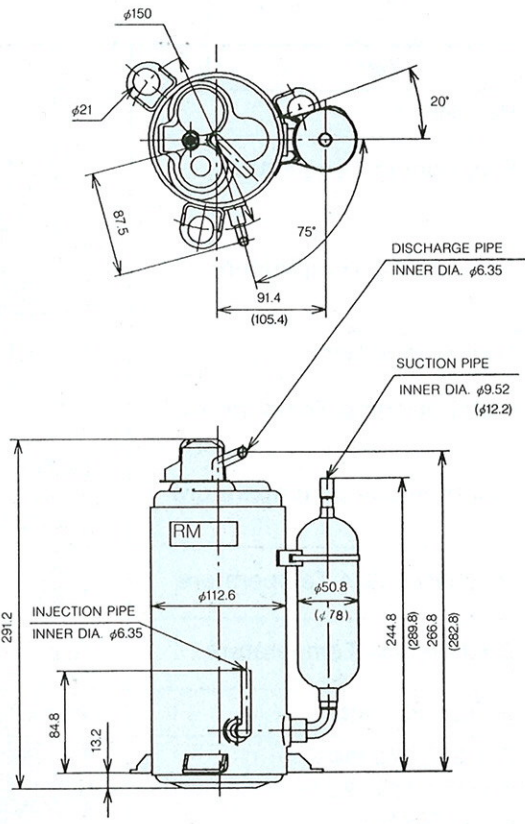
RM-S(I)
RM5460GJ4~RM5485GJ4



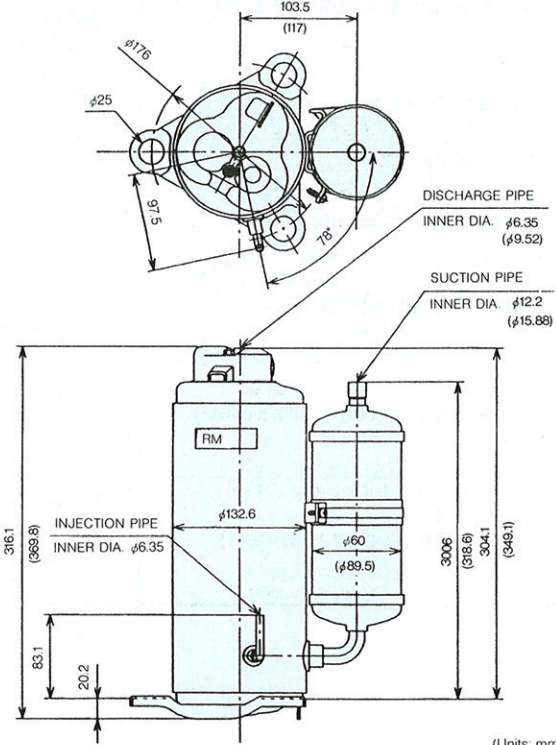
RM-M(I)
RM5514G~RM5518G



RM-S(II)
RM5495G~RM5512G



RM-M(II)
RM6520G~RM5526G



APPLICATION STANDARDS

When installing a compressor, confirm that the following standards are met.

Item		Limits
1	Refrigerant	R22
2	Evaporating Temperature	-4°F~-59°F (21~100 psiG) -20°C~-15°C (1.48~7.02 atG)
3	Condensing Temperature	86°F~149°F (160~377 psiG) 30°C~65°C (11.2~26.5 atG) For very short periods, such as during pull-down, maximum of 400 psiG (28 atG) is allowed.
4	Compression Ratio	Max. of 6 except for very short periods such as during pull-down
5	Motor Winding Temperature	248°F 120°C max.
6	Lower Housing Temperature	230°F 110°C max. Discharge pressure saturation temperature plus 9° F (5° C) min.
7	Discharge Gas Temperature	248°F 120°C max.
8	Suction Gas Temperature	Superheat: +3.6°F +2 °C min.
9	Voltage (running)	Within ±10% of the rating voltage measured at compressor terminals.
10	Start-Up Voltage	Min. 85% of the rated voltage measured at compressor terminals
11	On-Off Period	6 minutes min./cycle. Off period should be about 3 minutes, during which high and low pressures must equalize. Start-up should be carried out only when high and low pressures are balanced.
12	Refrigerant Charge Limitation	RM5460G~5485G (Accumulator size ϕ60) 800g (1.76 lbs) RM5495G~5512G (Accumulator size ϕ78) 1,200g (2.65 lbs) RM5514G~5518G (Accumulator size ϕ89.5) 1,500g (3.31 lbs) RM6520G~5526G (Accumulator size ϕ89.5) 1,600g (3.53 lbs)
13	On-Off Frequency	100,000 cycles when used for cooling only. 200,000 cycles when used for cooling/heating.
14	Oil Level	Oil should be kept at least above cylinder center.
15	Excessive Pressure Rise	600 psig 42 atg max. (in case of condenser fan blockage, etc.)
16	Vibration of Piping	0.03 in max. displacement. 0.9 mm at ± 10% of rated voltage
17	Pipe Stress (recommended)	At start-up and stop: 5688 psi max. 4 kgf/mm² During operation: 1422 psi max. 1 kgf/mm²
18	Distance (recommended)	Between moving parts and piping 0.5 in min. 12.7 mm Between non-moving parts and piping 0.39 in min. 10 mm

PIPING SYSTEM

Fig. 1 Example of refrigerant circuit "Cooling only" application

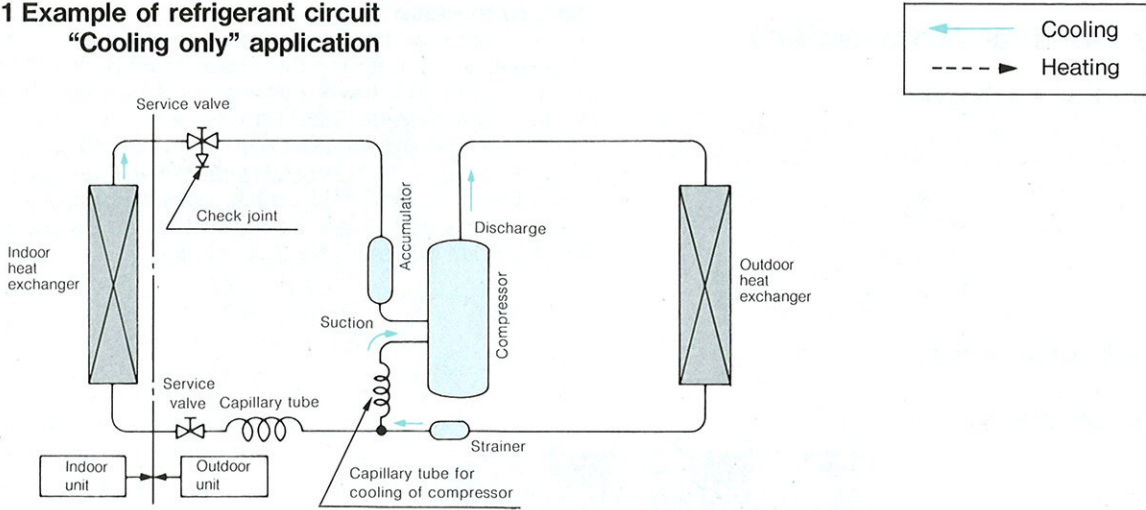


Fig. 2 "Heat pump" application

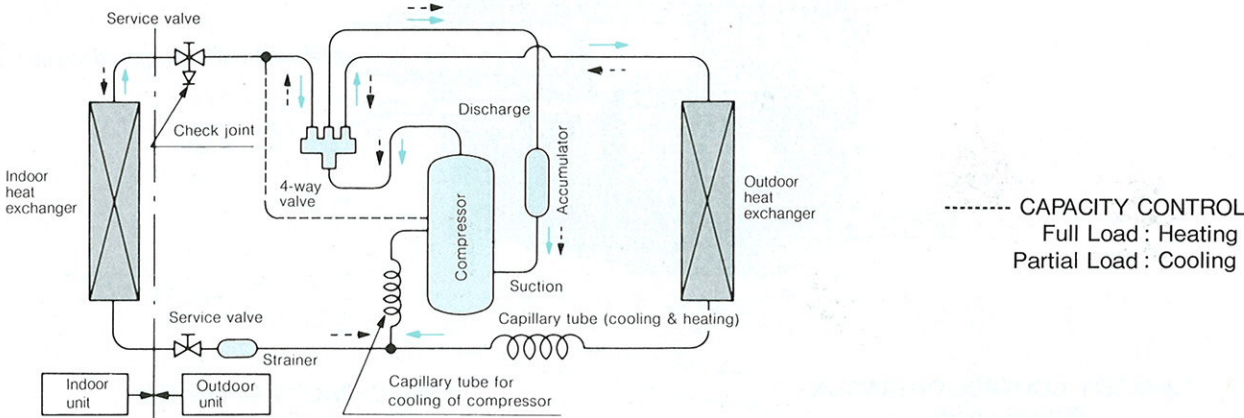
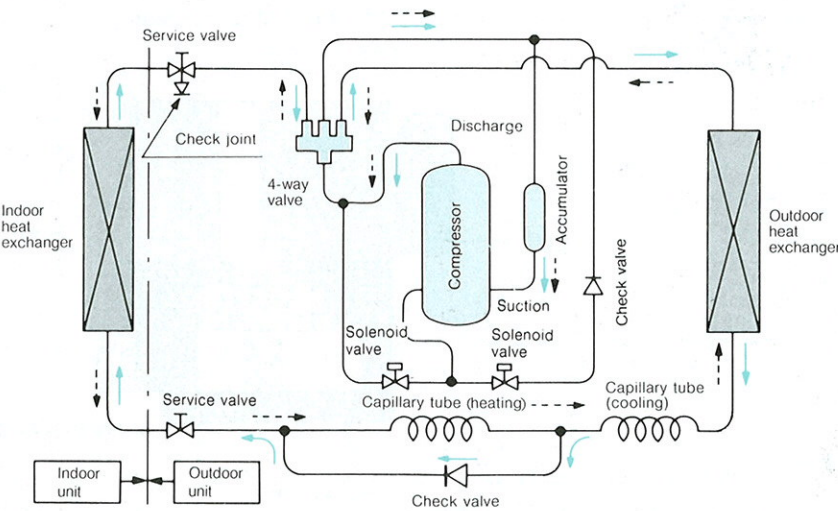


Fig. 3 "Capacity control" application



Notes

- ① Since the relief valve opens and closes due to pressure differences, chattering will occur unless the pressure ratio (HP/LP abs) at full load operation is 2.5 or higher.
- ② Medium pressure refrigerant gas that is by-passed should be discharged into the upper stream side of the accumulator, since some of the compressor oil inside the compression chamber is by-passed along with the by-passed gas.
- ③ The solenoid valve and refrigeration circuitry utilized for opening and closing the relief valve should be designed together with the unit.