Technical Sales Guide

GMV5 HEAT RECOVERY VRF UNITS

(GC202003-II)

TECHNICAL SALES GUIDE-50&60Hz

CAPACITY RANGE: 22.4~180kW

SUPER HIGH AMBIENT OPERATION TO 52°C

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

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1 UNIT CHARACTERISTICS

GMV5 Heat Recovery Multi VRF Units: The basic models of the whole series are 8HP, 10HP, 12HP, 14HP, and 16HP, and the combination model is 18HP-64HP.

Refrigeration Capacity/HP	Model	Combination Mode	Appearance
8	GMV-Q224WM/E-X	/	
10	GMV-Q280WM/E-X	/	
12	GMV-Q335WM/E-X	/	
14	GMV-Q400WM/E-X	/	
16	GMV-Q450WM/E-X	/	
18	GMV-Q504WM/E-X	GMV-Q224WM/E-X+ GMV-Q280WM/E-X	
20	GMV-Q560WM/E-X	GMV-Q280WM/E-X+ GMV-Q280WM/E-X	
22	GMV-Q615WM/E-X	GMV-Q280WM/E-X+ GMV-Q335WM/E-X	
24	GMV-Q680WM/E-X	GMV-Q280WM/E-X+ GMV-Q400WM/E-X	
26	GMV-Q730WM/E-X	GMV-Q280WM/E-X+ GMV-Q450WM/E-X	
28	GMV-Q785WM/E-X	GMV-Q335WM/B-X(A)+ GMV-Q450WM/B-X(A)	
30	GMV-Q850WM/E-X	GMV-Q400WM/E-X+ GMV-Q450WM/E-X	
32	GMV-Q900WM/E-X	GMV-Q450WM/E-X+ GMV-Q450WM/E-X	

Refrigeration Capacity/HP	Model	Combination Mode	Appearance
34	GMV-Q960WM/E-X	GMV-Q280WM/E-X+ GMV-Q280WM/E-X+ GMV-Q400WM/E-X	
36	GMV-Q1010WM/E-X	GMV-Q280WM/E-X+ GMV-Q280WM/E-X+ GMV-Q450WM/E-X	
38	GMV-Q1065WM/E-X	GMV-Q280WM/E-X+ GMV-Q335WM/E-X+ GMV-Q450WM/E-X	
40	GMV-Q1130WM/E-X	GMV-Q280WM/E-X+ GMV-Q400WM/E-X+ GMV-Q450WM/E-X	
42	GMV-Q1180WM/E-X	GMV-Q280WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
44	GMV-Q1235WM/E-X	GMV-Q335WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
46	GMV-Q1300WM/E-X	GMV-Q400WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
48	GMV-Q1350WM/E-X	GMV-Q450WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
50	GMV-Q1410WM/E-X	GMV-Q280WM/E-X+ GMV-Q280WM/E-X+ GMV-Q400WM/E-X+ GMV-Q450WM/E-X	
52	GMV-Q1460WM/E-X	GMV-Q280WM/E-X+ GMV-Q280WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
54	GMV-Q1515WM/E-X	GMV-Q280WM/E-X+ GMV-Q335WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
56	GMV-Q1580WM/E-X	GMV-Q280WM/E-X+ GMV-Q400WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
58	GMV-Q1630WM/E-X	GMV-Q280WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
60	GMV-1685WM/E-X	GMV-Q335WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
62	GMV-Q1750WM/E-X	GMV-Q400WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	
64	GMV-Q1800WM/E-X	GMV-Q450WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X+ GMV-Q450WM/E-X	

Energy efficient

The products benefit from the advanced DC inverter technology, optimized air conditioner system design, and accurate intelligent control technology.

➤High efficient DC inverter compressor

The DC inverter compressor is adopted for Gree DC inverter VRF units. The compressor is designed in the high pressure chamber with excellent performance to suck directly, reduce the suction superheat loss and increase the compression efficiency by 3% in comparison to the low pressure chamber compression. The motor part adopts a high efficient permanent magnet synchronous motor, the rotor is a permanent magnet, and the stator implements concentrated winding. Therefore, the efficiency far surpasses that of a common DC inverter compressor.

➤Sensorless DC inverter fan motor

The DC convertor motor with a high back electromotive force is adopted to implement stepless speed regulation in the range of 5 Hz to 65 Hz. In contrast to the common DC convertor motor, both the operating current and motor input power are lower, but the efficiency is greatly improved.

➤Advanced torque control technology

The technology of minimum current and maximum torque control is adopted.

The rotor reluctance torque of DC inverter compressor is effectively used to export the maximum torque at the cost of minimum current, thus reducing the motor winding loss and achieving higher energy efficiency.

The low frequency torque control is implemented.

The motor torque is directly controlled to realize operation of the DC inverter at an ultralow speed. The small torque pulsation not only meets system requirements, but also guarantees the higher degree of comfort.

Comfortable mute

Gree GMV5 HR air conditioning units fully consider the comfort requirement of people, and the humanized technology further perfects the degree of comfort. The wider operation range of the units ensures normal operation in sub-zero weather or hot weather. The better mute effect creates a quiet environment for work and life.

➤Outdoor unit mute mode

◆ Night mute

The system can memorize and judge the outdoor maximum temperature. When the system operates with a low load at night, it can automatically enter the mute mode. Nine mute modes can be set for the units according to requirements of actual application scenarios.

For example, the unit can automatically enters the night operation mode after operation for 8 h, and will restore the normal operation mode in 9 h.

◆ Forced mute

When the unit is installed at a place with the requirement for a lower noise level, it should operate in the mute mode in the daytime and at night. In this case, three forced mute setting modes can be selected to ensure that the unit operates at the low noise mode all the time. The minimum noise value can be 45dB (A).

➤Indoor unit mute mode

The indoor unit also adopts the DC inverter motor to implement stepless speed regulation and greatly reduce the noise level. Moreover, the wired controller can be used to set the automatic mute mode of indoor unit and enable the automatic mute function according to the indoor temperature and movements of persons. The minimum noise value can be 25dB (A).

Advanced technology to ensure stability and reliability

Gree GMV5 HR series units have earned a reputation in the field due to the high technical content.

Thanks to research and experiments for more than one decade, all the technologies of GMV have become more matured. Gree GMV5 HR has been upgraded in an all-round way, including electric elements, machine elements, control technology and communication technology. Continuous revolution in technologies must bring more reliable and efficient service to users.

- Oil return control of new generation

  Gree oil return control technology of new generation integrates the pressure control oil return technology. Pressure control effectively controls oil return of the system and the oil storage status of each compressor, thus substantially increasing the service life of the compressor.

- Proprietary compressor oil storage technology

  Gree DC inverter unit is designed with the proprietary compressor oil storage technology. The relevant parameter is judged to control the lowest oil level required for operating the compressor.

- Refrigerant storage and distribution technology

  GMV5 HR adopts the system loop without any reservoir to greatly reduce the refrigerant filling quantity, improve the refrigerant control precision of the system, and store the surplus refrigerant in the pipeline.

- Inter-compressor oil balance technology

  Refrigerant is sucked into the compression chamber of the compressor through the air suction pipe, discharged to the fully-closed compressor cavity after being compressed, and then flows through the refrigerating system via the vent pipe. According to the principle of moving fluid mechanics and the oil quantity actually required during operation of the compressor, the technology decides the height of the oil balance pipe, controls the oil level in the oil pool, ensures the minimum oil quantity required by each compressor during operation, and implements oil balance between compressors.

- Super-cooling control technology is used for refrigeration to substantially reduce the cooling capacity attenuation.

  The efficient heat exchange loop is used to implement heat exchanger and super-cooling control. The degree of super-cooling reaches 11°C.

  The recooling loop is used to reach a temperature of 9°C and ensure the refrigerating and heating effects.

- Unique comfortability control

  The outdoor unit is regulated using dual electronic expansion valves within the regulation range of 960 stages to accurately realize the flow control between the indoor unit module and outdoor unit module, so the system operates more stably.

- Heating can quickly start within 210s, and 100% heat output is provided at the first time.

Humanized engineering operation

- The unit is characterized by automatic address allocation and non-polarity communication.
- The unit can perform automatic debugging and fault detection.

  GMV5 HR has five automatic debugging functions.
  - Automatically allocating indoor and outdoor unit addresses
  - Automatically checking the quantities of indoor and outdoor units
  - Automatically detecting internal faults of units
  - Automatically starting debugging
  - Judging pipeline exceptions in real time
- The units provide three emergency functions: module, compressor and fan.
- The units can recover refrigerants in two modes.

Intelligent management

- The units are designed in the dual-energy saving operation modes.

  Along with penetration of energy conservation and emission reduction and increasingly strict requirements for power utilization in cities raised by the state, a lot of cities will issue corresponding

power rationing measures in the peak of power consumption, especially in summer. Gree GMV5 HR conditioning units unit provides two energy saving modes for users to select as needed and meets the requirements for off-peak power consumption and power brownout in cities.

- Energy saving mode 1: When the unit is set to the automatic energy saving mode during operation, the system automatically adjusts and controls the target parameter according to the operating status, and greatly reduces power consumption of the whole system. The maximum energy saving ratio is 15%.
- Energy saving mode 2: When the unit is set to the forced energy saving mode during operation, the system forcedly limits power output of the system. The maximum energy saving ratio is 20%.

- The unit is provided with the energy consumption analysis function and corresponding solution.
- The unit supports the emergency shutdown function.
  Without remote monitoring, the outdoor unit can directly intervene in the fire alarm linkage signal, and the whole system can stop immediately in case of an emergency to avoid more risk losses.
- The unit has the management function by area.

Ultra-long piping distance design, with the maximum piping length of 1000m

In comparison to the traditional water chilling unit, the VRF unit shows the strength of simple and convenient engineering piping. Gree GMV5 HR inverter VRF unit more significantly displays the strength of actual engineering piping, and the air conditioning system can be flexibly applied to various buildings more simply and freely, reducing the engineering installation cost for users.

A single refrigerating system, able to connect to a maximum of 80 indoor units

For most VRF units in the market, the single system can connect to a maximum of 64 units. Gree GMV5 HR can implement combination of module units and connect to a maximum of 80 indoor units (the quantity of connected units ranks first in the field). It is more applicable to large-sized commercial office buildings or aparthotels.

Wide operation range

Operating temperature range: -5°C to 52°C for cooling; -20°C to 24°C for heating，-10°C to 20°C for Heat recovery.
Operating range of power supply: 3N~, 380 V to 415 V, 50/60Hz.

Module switching control

The module status automatically switches between modules every eight hours according to the operating status. This avoids long-term “waiting for work” of several modules and greatly improves reliability of the whole system.

High static pressure design of the outdoor unit to realize more flexible selection

The unit is provided with four levels of static pressures (0 Pa, 30 Pa, 50 Pa, and 82 Pa) for regulation. The corresponding static pressure can be selected for the outdoor unit according to the building form, and the maximum static pressure is 82 Pa. The unit especially applies to the scenario where the outdoor unit needs to be placed indoors.

2 NOMENCLATURE

GMV	□	-	□	□	□	□	□	W	□	/	□	□	□	(□)
1	2		3	4	5	6	7	8	9		10	11	12	13

No.	Description	Options
1	Product code	GMV—Gree Multi VRF Units
2	Suitable climate	Blank—T1 condition; T2—Low temperature climate; T3—High temperature climate
3	RAC or CAC	RAC—H CAC—Default
4	Special function	G—High sensible heat V—Low-temperature heat pump Default—Without special function
5	Unit type	DC inverter—Default Y—Solar power
6	Function code	Q—Heat Recovery; S—Water Heater; W—Water-cooled Unit; X—Fresh Air Unit Z—Reheat dehumidifier Default—If above functions are unavailable.
7	Code of cooling capacity	Nominal capacity/100(W)
8	Code for outdoor unit	W—Outdoor unit
9	Unit structure	M—Modular (top discharge); L—Non-modular (side discharge);Default—Non-modular (top discharge)
10	Refrigerant	R410A (omit)
11	Design No.	Named in order of A, B, C, or combined with 1, 2, 3…
12	Power supply	F—208/230V-3ph-60Hz; U—440/460V-3ph-60Hz; T—208/230V-1ph-60Hz; X—380~415V-3ph-50/60Hz
13	Special code	For special area; leave blank if it is not for special area

3 UNIT PARAMETERS

3.1 Outdoor Unit

Model		—	GMV-Q224WM/E-X	GMV-Q280WM/E-X	GMV-Q335WM/E-X	GMV-Q400WM/E-X	GMV-Q450WM/E-X
Cooling capacity		kW	22.40	28.00	33.50	40.00	45.00
Heating capacity		kW	25.00	31.50	37.50	45.00	50.00
IPLV（C）		W/W	/	/	/	/	/
Air volume		m^3/h	11400	11400	14000	14000	14000
Max. external static pressure		Pa	82	82	82	82	82
Noise （sound level）		dB(A)	60	61	63	63	63
Power		—	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz
Input power for cooling		kW	5.48	8.15	8.30	11.90	14.80
Input power for heating		kW	5.26	7.30	7.70	10.00	12.70
Input current for cooling		A	9.80	14.57	14.84	21.27	26.46
Input current for heating		A	9.40	13.05	13.76	17.88	22.70
Max. input power		kW	9.1	11.7	13.8	16.1	18.6
Max. current		A	16.3	20.9	24.7	28.8	33.2
Max. current of fuse		A	20	25	32	40	40
Compressor type		—	Inverter scroll type	Inverter scroll type	Inverter scroll type	Inverter scroll type	Inverter scroll type
Compressor quantity		N	1	1	1	2	2
Refrigeration oil no. of compressor		—	FVC68DorFV68H	FVC68DorFV68H	FVC68DorFV68H	FVC68DorFV68H	FVC68DorFV68H
Oil Charge	Compressor	L	1.1	1.1	0.5	1.1+0.5	1.1+0.5
	Oil separate tank	L	5.0	5.0	4.0	4.0	5.0
	Total	L	6.1	6.1	4.5	5.6	6.6
Ambient temperature range for cooling		℃	-5~52	-5~52	-5~52	-5~52	-5~52
Ambient temperature range of heating		℃	-20~24	-20~24	-20~24	-20~24	-20~24
Ambient temperature range of heat recovery		℃	-10~20	-10~20	-10~20	-10~20	-10~20
Refrigerant type		—	R410A	R410A	R410A	R410A	R410A
Charging volume of refrigerant		kg	6.2	7.1	9.6	11.1	11.6
Max. quantity of connected indoor unit		unit	13	16	19	23	26
Size of high pressure gas pipe		mm	Φ15.9	Φ19.05	Φ19.05	Φ22.2	Φ22.2
Size of low pressure gas pipe		mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6
Size of liquid pipe		mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Size of oil-balanced pipe		mm	/	/	/	/	/
Outline dimension (width)		mm	930	930	1340	1340	1340
Outline dimension (depth)		mm	765	765	765	765	765
Outline dimension (height)		mm	1605	1605	1605	1605	1605
Packing size (width)		mm	1010	1010	1420	1420	1420
Packing size (depth)		mm	840	840	840	840	840
Packing size (height)		mm	1775	1775	1775	1775	1775
Net weight		kg	233	233	302	346	346
Gross weight		kg	243	243	317	361	361

Model	—	GMV-Q504WM/E-X	GMV-Q560WM/E-X	GMV-Q615WM/E-X	GMV-Q680WM/E-X	GMV-Q730WM/E-X
Combined module	kW	GMV-Q224WM/E-X +GMV-Q280WM/E-X	GMV-Q280WM/E-X +GMV-Q280WM/E-X	GMV-Q280WM/E-X +GMV-Q335WM/E-X	GMV-Q280WM/E-X +GMV-Q400WM/E-X	GMV-Q280WM/E-X +GMV-Q450WM/E-X
Cooling capacity	kW	50.40	56.00	61.50	68.00	73.00
Heating capacity	W/W	56.50	62.50	69.00	76.50	81.50
Air volume	m^3/h	11400+11400	11400+11400	11400+14000	11400+14000	11400+14000
Max. external static pressure	Pa	82	82	82	82	82
Noise （sound level）	dB(A)	/	/	/	/	/
Power	—	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz
Input power for cooling	kW	13.63	16.30	16.45	20.05	22.95
Input power for heating	kW	12.56	14.60	15.00	17.30	20.00
Input current for cooling	A	24.36	29.14	29.40	35.84	41.02
Input current for heating	A	22.45	26.10	26.81	30.92	35.75
Max. input power	kW	20.8	23.40	25.50	27.80	30.30
Max. current	A	16.3+20.9	20.9+20.9	20.9+24.7	20.9+28.8	20.9+33.2
Max. current of fuse	A	20+25	25+25	25+32	25+40	25+40
Ambient temperature range for cooling	℃	-5~52	-5~52	-5~52	-5~52	-5~52
Ambient temperature range of heating	℃	-20~24	-20~24	-20~24	-20~24	-20~24
Ambient temperature range of heat recovery	℃	-10~20	-10~20	-10~20	-10~20	-10~20
Refrigerant type	—	R410A	R410A	R410A	R410A	R410A
Charging volume of refrigerant	kg	13.3	14.2	16.7	18.2	18.7
Max. quantity of connected indoor unit	unit	29	33	36	39	43
Size of high pressure gas pipe	mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4	Φ28.6
Size of low pressure gas pipe	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ31.8
Size of liquid pipe	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Size of oil-balanced pipe	mm	/	/	/	/	/

Model	—	GMV-Q785WM/E-X	GMV-Q850WM/E-X	GMV-Q900WM/E-X	GMV-Q960WM/E-X	GMV-Q1010WM/E-X
Combined module	kW	GMV-Q335WM/E-X +GMV-Q450WM/E-X	GMV-Q400WM/E-X +GMV-Q450WM/E-X	GMV-Q450WM/E-X +GMV-Q450WM/E-X	GMV-Q280WM/E-X +GMV-Q280WM/E-X +GMV-Q400WM/E-X	GMV-Q280WM/E-X +GMV-Q280WM/E-X +GMV-Q450WM/E-X
Cooling capacity	kW	78.50	85.00	90.00	96.00	101.00
Heating capacity	W/W	87.50	95.00	100.00	108.00	113.00
Air volume	m^3/h	14000+14000	14000+14000	14000+14000	11400+11400+14000	11400+11400+14000
Max. external static pressure	Pa	82	82	82	82	82
Noise (sound level)	dB(A)	/	/	/	/	/
Power	—	380V-415V 3N~ 50/60Hz	380-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz
Input power for cooling	kW	23.10	26.70	29.60	28.20	31.10
Input power for heating	kW	20.40	22.70	25.40	24.60	27.30
Input current for cooling	A	41.29	47.73	52.91	50.41	55.59
Input current for heating	A	36.47	40.58	45.40	43.97	48.80
Max. input power	kW	32.40	34.70	37.20	39.50	42.00
Max. current	A	24.7+33.2	28.8+33.2	33.2+33.2	20.9+20.9+28.8	20.9+20.9+33.2
Max. current of fuse	A	32+40	40+40	40+40	25+25+40	25+25+40
Ambient temperature range for cooling	℃	-5~52	-5~52	-5~52	-5~52	-5~52
Ambient temperature range of heating	℃	-20~24	-20~24	-20~24	-20~24	-20~24
Ambient temperature range of heat recovery	℃	-10~20	-10~20	-10~20	-10~20	-10~20
Refrigerant type	—	R410A	R410A	R410A	R410A	R410A
Charging volume of refrigerant	kg	21.2	22.7	23.2	25.3	25.8
Max. quantity of connected indoor unit	unit	46	50	53	56	59
Size of high pressure gas pipe	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ31.8
Size of low pressure gas pipe	mm	Φ31.8	Φ31.8	Φ31.8	Φ31.8	Φ38.1
Size of liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05
Size of oil-balanced pipe	mm	/	/	/	/	/

Model	—	GMV-Q1065WM/E-X	GMV-Q1130WM/E-X	GMV-Q1180WM/E-X	GMV-Q1235WM/E-X	GMV-Q1300WM/E-X
Combined module	kW	GMV-Q280WM/E-X +GMV-Q335WM/E-X +GMV-Q450WM/E-X	GMV-Q280WM/E-X +GMV-Q400WM/E-X +GMV-Q450WM/E-X	GMV-Q280WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X	GMV-Q335WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X	GMV-Q400WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X
Cooling capacity	kW	106.50	113.00	118.00	123.50	130.00
Heating capacity	W/W	119.00	126.50	131.50	137.50	145.00
Air volume	m^3/h	11400+14000 +14000	11400+14000 +14000	11400+14000 +14000	14000+14000 +14000	14000+14000 +14000
Max. external static pressure	Pa	82	82	82	82	82
Noise (sound level)	dB(A)	/	/	/	/	/
Power	—	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz
Input power for cooling	kW	31.25	34.85	37.75	37.90	41.50
Input power for heating	kW	27.70	30.00	32.70	33.10	35.40
Input current for cooling	A	55.86	62.29	67.48	67.75	74.18
Input current for heating	A	49.51	53.63	58.45	59.17	63.28
Max. input power	kW	44.10	46.40	48.90	51.00	53.30
Max. current	A	20.9+24.7+33.2	20.9+28.8+33.2	20.9+33.2+33.2	24.7+33.2+33.2	28.8+33.2+33.2
Max. current of fuse	A	25+32+40	25+40+40	25+40+40	32+40+40	40+40+40
Ambient temperature range for cooling	℃	-5~52	-5~52	-5~52	-5~52	-5~52
Ambient temperature range of heating	℃	-20~24	-20~24	-20~24	-20~24	-20~24
Ambient temperature range of heat recovery	℃	-10~20	-10~20	-10~20	-10~20	-10~20
Refrigerant type	—	R410A	R410A	R410A	R410A	R410A
Charging volume of refrigerant	kg	28.3	29.8	30.3	32.8	34.3
Max. quantity of connected indoor unit	unit	63	64	64	64	64
Size of high pressure gas pipe	mm	Φ31.8	Φ31.8	Φ31.8	Φ31.8	Φ31.8
Size of low pressure gas pipe	mm	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1
Size of liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05
Size of oil-balanced pipe	mm	/	/	/	/	/

Model	—	GMV-Q1350WM/ E-X	GMV-Q1410WM/ E-X	GMV-1460WM/ E-X	GMV-1515WM/ E-X	GMV-1580WM/ E-X
Combined module	kW	GMV-Q450WM/E-X +GMV-Q450WM/ E-X +GMV-Q450WM/E-X	GMV-Q280WM/ E-X +GMV-Q280WM/ E-X +GMV-Q400WM/ E-X +GMV-Q450WM/ E-X	GMV-Q280WM/ E-X +GMV-Q280WM/ E-X +GMV-Q450WM/ E-X +GMV-Q450WM/ E-X	GMV-Q280WM/ E-X +GMV-Q335WM/ E-X +GMV-Q450WM/ E-X +GMV-Q450WM/ E-X	GMV-Q280WM/ E-X +GMV-Q400WM/ E-X +GMV-Q450WM/ E-X +GMV-Q450WM/ E-X
Cooling capacity	kW	135.00	141.00	146.00	151.50	158.00
Heating capacity	W/W	150.00	158.00	163.00	169.00	176.50
Air volume	m^3/h	14000+14000 +14000	11400+11400 +14000+14000	11400+11400 +14000+14000	11400+14000 +14000+14000	11400+14000 +14000+14000
Max. external static pressure	Pa	82	82	82	82	82
Noise (sound level)	dB(A)	/	/	/	/	/
Power	—	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz
Input power for cooling	kW	44.40	43.00	45.90	46.05	49.65
Input power for heating	kW	38.10	37.30	40.00	40.40	42.70
Input current for cooling	A	79.37	76.86	82.05	82.32	88.75
Input current for heating	A	68.10	66.67	71.50	72.22	76.33
Max. input power	kW	55.80	58.10	60.60	62.70	65.00
Max. current	A	33.2+33.2 +33.2	20.9+20.9 +28.8+33.2	20.9+20.9 +33.2+33.2	20.9+24.7 +33.2+33.2	20.7+28.8 +33.2+33.2
Max. current of fuse	A	40+40+40	25+25+40+40	25+25+40+40	25+32+40+40	25+40+40+40
Ambient temperature range for cooling	℃	-5~52	-5~52	-5~52	-5~52	-5~52
Ambient temperature range of heating	℃	-20~24	-20~24	-20~24	-20~24	-20~24
Ambient temperature range of heat recovery	℃	-10~20	-10~20	-10~20	-10~20	-10~20
Refrigerant type	—	R410A	R410A	R410A	R410A	R410A
Charging volume of refrigerant	kg	34.8	36.9	37.4	39.9	41.4
Max. quantity of connected indoor unit	unit	64	66	69	71	74
Size of high pressure gas pipe	mm	Φ31.8	Φ38.1	Φ38.1	Φ38.1	Φ38.1
Size of low pressure gas pipe	mm	Φ38.1	Φ41.3	Φ41.3	Φ41.3	Φ41.3
Size of liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05
Size of oil-balanced pipe	mm	/	/	/	/	/

Model	—	GMV-Q1630WM/E-X	GMV-Q1685WM/E-X	GMV-Q1750WM/E-X	GMV-Q1800WM/E-X
Combined module	kW	GMV-Q280WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X	GMV-Q335WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X	GMV-Q400WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X +GMV-Q450WM/E-X	GMV-Q450WM/E-X +GMV-Q450WM/ E-X +GMV-Q450WM/ E-X +GMV-Q450WM/ E-X
Cooling capacity	kW	163.00	168.50	175.00	180.00
Heating capacity	W/W	181.50	187.50	195.00	200.00
Air volume	m3/h	11400+14000 +14000+14000	14000+14000 +14000+14000	14000+14000 +14000+14000	14000+14000 +14000+14000
Max. external static pressure	Pa	82	82	82	82
Noise (sound level)	dB(A)	/	/	/	/
Power	—	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz	380V-415V 3N~ 50/60Hz
Input power for cooling	kW	52.55	52.70	56.30	59.20
Input power for heating	kW	45.40	45.80	48.10	50.80
Input current for cooling	A	93.93	94.20	100.64	105.82
Input current for heating	A	81.15	81.87	85.98	90.81
Max. input power	kW	67.50	69.60	71.90	74.40
Max. current	A	20.9+33.2 +33.2+33.2	24.7+33.2 +33.2+33.2	28.8+33.2 +33.2+33.2	33.2+33.2 +33.2+33.2
Max. current of fuse	A	25+40+40+40	32+40+40+40	40+40+40+40	40+40+40+40
Ambient temperature range for cooling	℃	-5~52	-5~52	-5~52	-5~52
Ambient temperature range of heating	℃	-20~24	-20~24	-20~24	-20~24
Ambient temperature range of heat recovery	℃	-10~20	-10~20	-10~20	-10~20
Refrigerant type	—	R410A	R410A	R410A	R410A
Charging volume of refrigerant	kg	41.9	44.4	45.9	46.4
Max. quantity of connected indoor unit	unit	63	80	80	80
Size of high pressure gas pipe	mm	Φ38.1	Φ38.1	Φ38.1	Φ38.1
Size of low pressure gas pipe	mm	Φ41.3	Φ41.3	Φ41.3	Φ41.3
Size of liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05
Size of oil-balanced pipe	mm	/	/	/	/

NOTES:

a. Rated cooling capacity test conditions: indoor 27°C DB/19°C WB, outdoor 35°C DB; connection pipe length: 5m, without height drop between units.

b. Rated heating capacity test conditions: indoor 20°C DB, outdoor 7°C DB/6 °C WB; connection pipe length: 5m, without height drop between units.

c. The total capacity of connected indoor units must be in the range of 50%~135% of the outdoor unit capacity. The relevant parameters can be corrected by referring to the unit capacity correction table.

d. The above parameters are tested based on the standard connection pipe length. In the actual project, the parameters should be corrected referring to the capacity correction for the long connection pipe of

units.

3.2 Converter Mode of Heat Recovery Mode

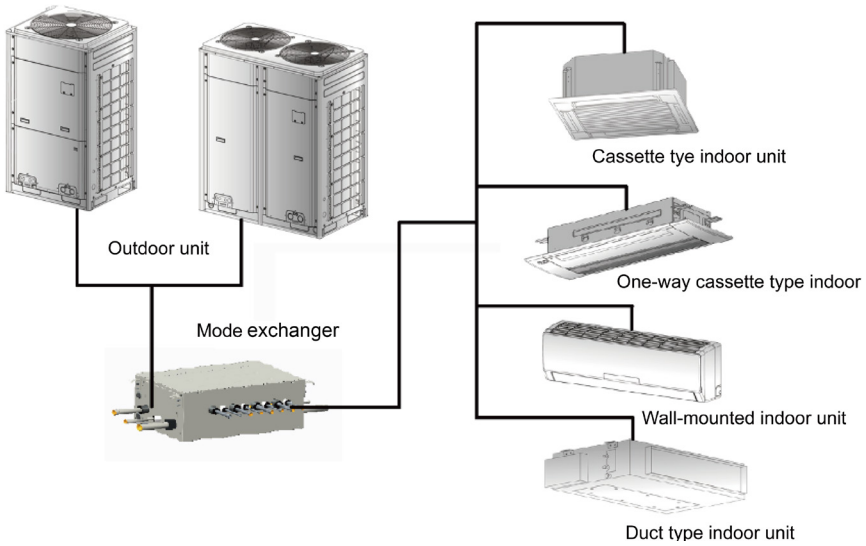
The exchanger of heat recovery heat recovery mode is used for connecting outdoor unit and indoor unit, and providing high pressure, low pressure and medium pressure refrigerant provided by outdoor unit for cooling or heating mode and complete the refrigerant system circulation for the purpose of adjusting indoor temperature.

(1) The mode exchanger of GMV5 HR provides multiple branch combination forms, which can connect different kinds of lower branches. Each branch of the exchanger of heat recovery exchanger can connect 8 indoor units at the most and the total capacity should be no more than 14.2kw.

(2) The mode exchanger of GMV5 HR provides multiple branches used for connection lower indoor units. It's convenient for installation, leakage detection and maintenance.

(3) The mode exchanger of GMV5 HR is supplied power independently, which connects indoor unit and outdoor unit with communication wire. It's convenient and flexible for installation and construction.

Connection sketch map of system:



One-to-one mode exchanger NCHS1C

One-to-two Mode Exchanger NCHS2C

One-to-four mode exchanger NCHS4C

One-to-eight mode converter NCHS8C

Model	Unit	NCHS1C	NCHS2C	NCHS4C	NCHS8C
Power Supply	V,Hz	220-240,50/60	220-240,50/60	220-240,50/60	220-240,50/60
Max. quantity of connecting indoor unit	-	8	16	32	64
Max. branch quantity of connecting indoor unit	-	1	2	4	8
Max. quantity of connecting indoor unit for each branch	-	8	8	8	8
Max. total capacity of connecting indoor unit for each branch	kW	14.2	14.2	14.2	14.2
Total capacity of connecting indoor unit for mode convertor	kW	14.2	28	45	68
Size of high pressure gas pipe (mode convertor connects outdoor unit)	mm	Φ15.9	Φ19.05	Φ22.2	Φ22.2
Size of low pressure gas pipe (mode convertor connects outdoor unit)	mm	Φ22.2	Φ22.2	Φ28.6	Φ28.6
Size of liquid pipe (mode convertor connects outdoor unit)	mm	Φ9.52	Φ9.52	Φ12.7	Φ15.9
Size of liquid pipe (mode convertor connects indoor unit)	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Size of gas pipe (mode convertor connects indoor unit)	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Dimension of Outline(W×D×H)	mm	388×302×225	468×377×225	587×399×225	987×488×225
Dimension of Package(W×D×H)	mm	805×403×305	946×646×365	1123×676×345	1524×861×315
Net Weight	kg	9.0	15.6	18.6	37.0
Gross Weight	kg	12.2	23.4	24.6	46.6

4 COMBINATION MODE

Model	GMV-Q224WM/E-X	GMV-Q280WM/ E-X	GMV-Q335WM/ E-X	GMV-Q400WM/ E-X	GMV-Q450WM/ E-X
GMV-Q224WM/E-X	⬢				
GMV-Q280WM/E-X		⬢			
GMV-Q335WM/E-X			⬢		
GMV-Q400WM/E-X				⬢	
GMV-Q450WM/E-X					⬢
GMV-Q504WM/E-X	⬢	⬢			
GMV-Q560WM/E-X		⬢⬢			
GMV-Q615WM/E-X		⬢	⬢		
GMV-Q680WM/E-X		⬢		⬢	
GMV-Q730WM/E-X		⬢			⬢
GMV-Q785WM/E-X			⬢		⬢
GMV-Q850WM/E-X				⬢	⬢
GMV-Q900WM/E-X					⬢⬢
GMV-Q960WM/E-X		⬢⬢		⬢	
GMV-Q1010WM/E-X		⬢⬢			⬢
GMV-Q1065WM/E-X		⬢	⬢		⬢
GMV-Q1130WM/E-X		⬢		⬢	⬢
GMV-Q1180WM/E-X		⬢			⬢⬢
GMV-Q1235WM/E-X			⬢		⬢⬢

Model	GMV-Q224WM/E-X	GMV-Q280WM/ E-X	GMV-Q335WM/ E-X	GMV-Q400WM/ E-X	GMV-Q450WM/ E-X
GMV-Q1300WM/ E-X					
GMV-Q1350WM/ E-X					
GMV-Q1410WM/ E-X					
GMV-Q1460WM/ E-X					
GMV-Q1515WM/ E-X					
GMV-Q1580WM/ E-X					
GMV-Q1630WM/ E-X					
GMV-Q1685WM/ E-X					
GMV-Q1750WM/ E-X					
GMV-Q1800WM/ E-X					

5 ELECTRICAL SPECIFICATIONS

Circuit Breaker and Wire Diameter Selection of GMV5 HR Series Units

Model	Combination	0Power spec.	Air switch capacity for combined units (A)	Min. sectional area of ground wire (mm^2)	Recommended conducting wire (sectional area mm^2×pc)
GMV-Q224WM/E-X	GMV-Q224WM/E-X	380 ~ 415V 3N ~ 50/60Hz	20	2.5	2.5×5
GMV-Q280WM/E-X	GMV-Q280WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25	4.0	4.0×5
GMV-Q335WM/E-X	GMV-Q335WM/E-X	380 ~ 415V 3N ~ 50/60Hz	32	4.0	4.0×5
GMV-Q400WM/E-X	GMV-Q400WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40	6.0	6.0×5
GMV-Q450WM/E-X	GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40	6.0	6.0×5
GMV-Q504WM/E-X	GMV-Q224WM/E-X + GMV-Q280WM/E-X	380 ~ 415V 3N ~ 50/60Hz	20 + 25	2.5 + 4.0	2.5×5 + 4.0×5
GMV-Q560WM/E-X	GMV-Q280WM/E-X + GMV-Q280WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 25	4.0 + 4.0	4.0×5 + 4.0×5
GMV-Q615WM/E-X	GMV-Q280WM/E-X + GMV-Q335WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 32	4.0 + 4.0	4.0×5 + 4.0×5
GMV-Q680WM/E-X	GMV-Q280WM/E-X + GMV-Q400WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 40	4.0 + 6.0	4.0×5 + 6.0×5
GMV-Q730WM/E-X	GMV-Q280WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 40	4.0 + 6.0	4.0×5 + 6.0×5
GMV-Q785WM/E-X	GMV-Q400WM/E-X + GMV-Q400WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40 + 40	6.0 + 6.0	6.0×5 + 6.0×5
GMV-Q850WM/E-X	GMV-Q400WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40 + 40	6.0 + 6.0	6.0×5 + 6.0×5
GMV-Q900WM/E-X	GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40 + 40	6.0 + 6.0	6.0×5 + 6.0×5
GMV-Q960WM/E-X	GMV-Q280WM/E-X + GMV-Q280WM/E-X + GMV-Q400WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 25 + 40	4.0 + 4.0 + 6.0	4.0×5 + 4.0×5 + 6.0×5
GMV-Q1010WM/E-X	GMV-Q280WM/E-X + GMV-Q280WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 25 + 40	4.0 + 4.0 + 6.0	4.0×5 + 4.0×5 + 6.0×5

Model	Combination	0Power spec.	Air switch capacity for combined units (A)	Min. sectional area of ground wire (mm^2)	Recommended conducting wire (sectional area mm^2×pc)
GMV-Q1065WM/E-X	GMV-Q280WM/E-X + GMV-Q335WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 32 + 40	4.0 + 4.0 + 6.0	4.0×5 + 4.0×5 + 6.0×5
GMV-Q1130WM/E-X	GMV-Q280WM/E-X + GMV-Q400WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 40 + 40	4.0 + 6.0 + 6.0	4.0×5 + 6.0×5 + 6.0×5
GMV-Q1180WM/E-X	GMV-Q280WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 40 + 40	4.0 + 6.0 + 6.0	4.0×5 + 6.0×5 + 6.0×5
GMV-Q1235WM/E-X	GMV-Q335WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	32 + 40 + 40	4.0 + 6.0 + 6.0	4.0×5 + 6.0×5 + 6.0×5
GMV-Q1300WM/E-X	GMV-Q400WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40 + 40 + 40	6.0 + 6.0 + 6.0	6.0×5 + 6.0×5 + 6.0×5
GMV-Q1350WM/E-X	GMV-Q450WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40 + 40 + 40	6.0 + 6.0 + 6.0	6.0×5 + 6.0×5 + 6.0×5
GMV-Q1410WM/E-X	GMV-Q280WM/E-X + GMV-Q280WM/E-X + GMV-Q400WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 25 + 40 + 40	4.0 + 4.0 + 6.0 + 6.0	4.0×5 + 4.0×5 + 6.0×5 + 6.0×5
GMV-Q1460WM/E-X	GMV-Q280WM/E-X + GMV-Q280WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 25 + 40 + 40	4.0 + 4.0 + 6.0 + 6.0	4.0×5 + 4.0×5 + 6.0×5 + 6.0×5
GMV-Q1515WM/E-X	GMV-Q280WM/E-X + GMV-Q335WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 32 + 40 + 40	4.0 + 4.0 + 6.0 + 6.0	4.0×5 + 4.0×5 + 6.0×5 + 6.0×5
GMV-Q1580WM/E-X	GMV-Q280WM/E-X + GMV-Q400WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 40 + 40 + 40	4.0 + 6.0 + 6.0 + 6.0	4.0×5 + 6.0×5 + 6.0×5 + 6.0×5

Model	Combination	0Power spec.	Air switch capacity for combined units (A)	Min. sectional area of ground wire (mm^2)	Recommended conducting wire (sectional area $mm^2 \times pc$)
GMV-Q1630WM/E-X	GMV-Q280WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	25 + 40 + 40 + 40	4.0 + 6.0 + 6.0 + 6.0	4.0×5 + 6.0×5 + 6.0×5 + 6.0×5
GMV-Q1685WM/E-X	GMV-Q335WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	32 + 40 + 40 + 40	4.0 + 6.0 + 6.0 + 6.0	4.0×5 + 6.0×5 + 6.0×5 + 6.0×5
GMV-Q1750WM/E-X	GMV-Q400WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40 + 40 + 40 + 40	6.0 + 6.0 + 6.0 + 6.0	6.0×5 + 6.0×5 + 6.0×5 + 6.0×5
GMV-Q1800WM/E-X	GMV-Q450WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X + GMV-Q450WM/E-X	380 ~ 415V 3N ~ 50/60Hz	40 + 40 + 40 + 40	6.0 + 6.0 + 6.0 + 6.0	6.0×5 + 6.0×5 + 6.0×5 + 6.0×5

NOTES:

a. Specification of circuit breaker and power cord is selected on the basis of unit's maximum power (max. current).

b. Specification of power cord is based on the working condition where ambient temperature is 40℃ and multi-core copper cable (working temperature is 90℃) is lying on the surface of slot (IEC 60245). If working condition changes, please adjust the specification according to standard IEC 60245. Power cord used for outdoor unit should not be below standard 60245 IEC57.

c. Copper-core cable must be used.

d. The above sectional area is suitable for a maximum distance of 15m. If it's over 15m, sectional area must be expanded to prevent overload current from burning the wire or causing fire hazard.

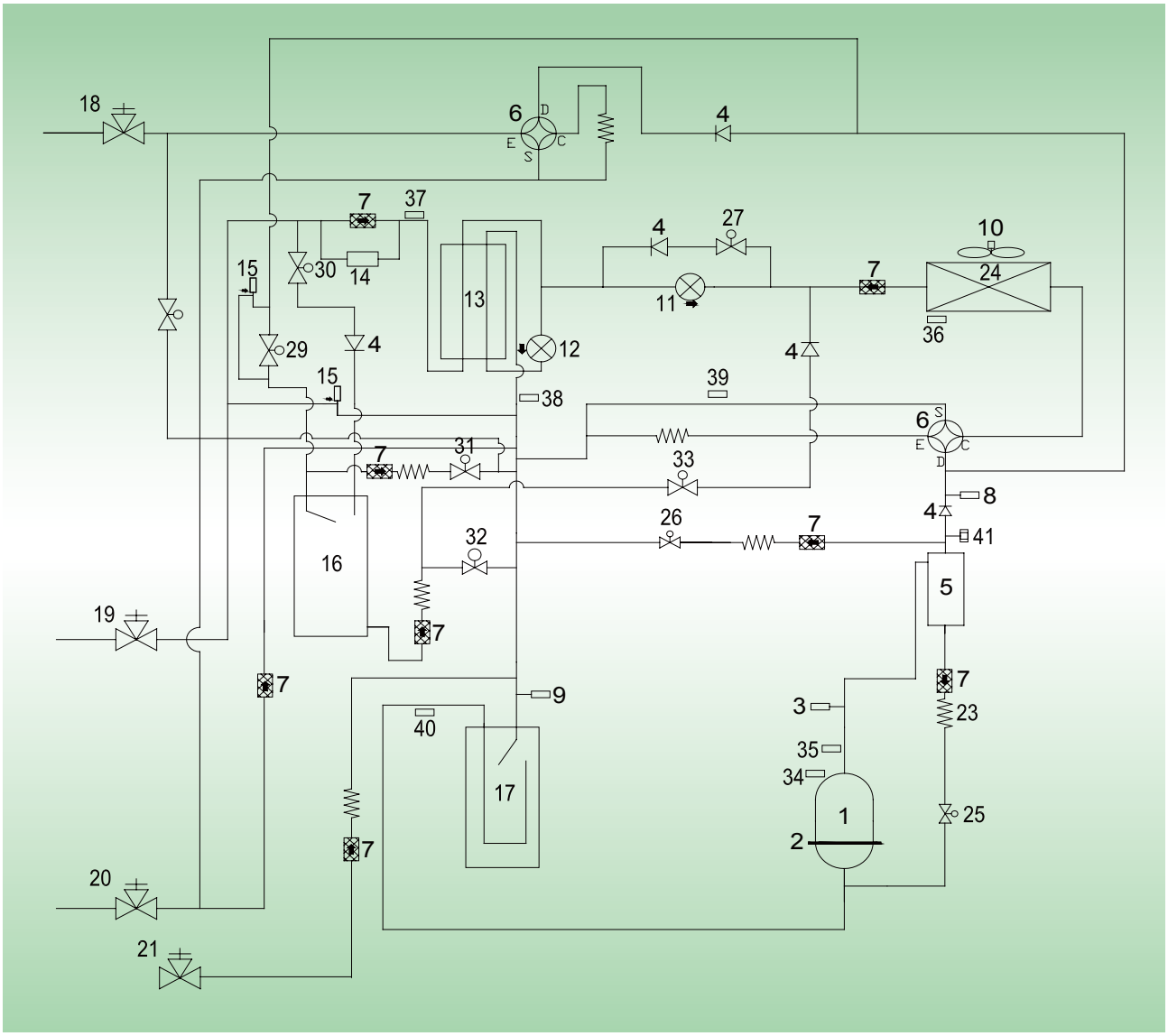
e. Specification of circuit breaker is based on the working condition where the ambient temperature of circuit breaker is 40℃ . If working condition is different, please adjust the specification according to national standard.

f. The circuit breaker should include magnetic trip function and thermal trip function so that system can be protected from short circuit and overload.

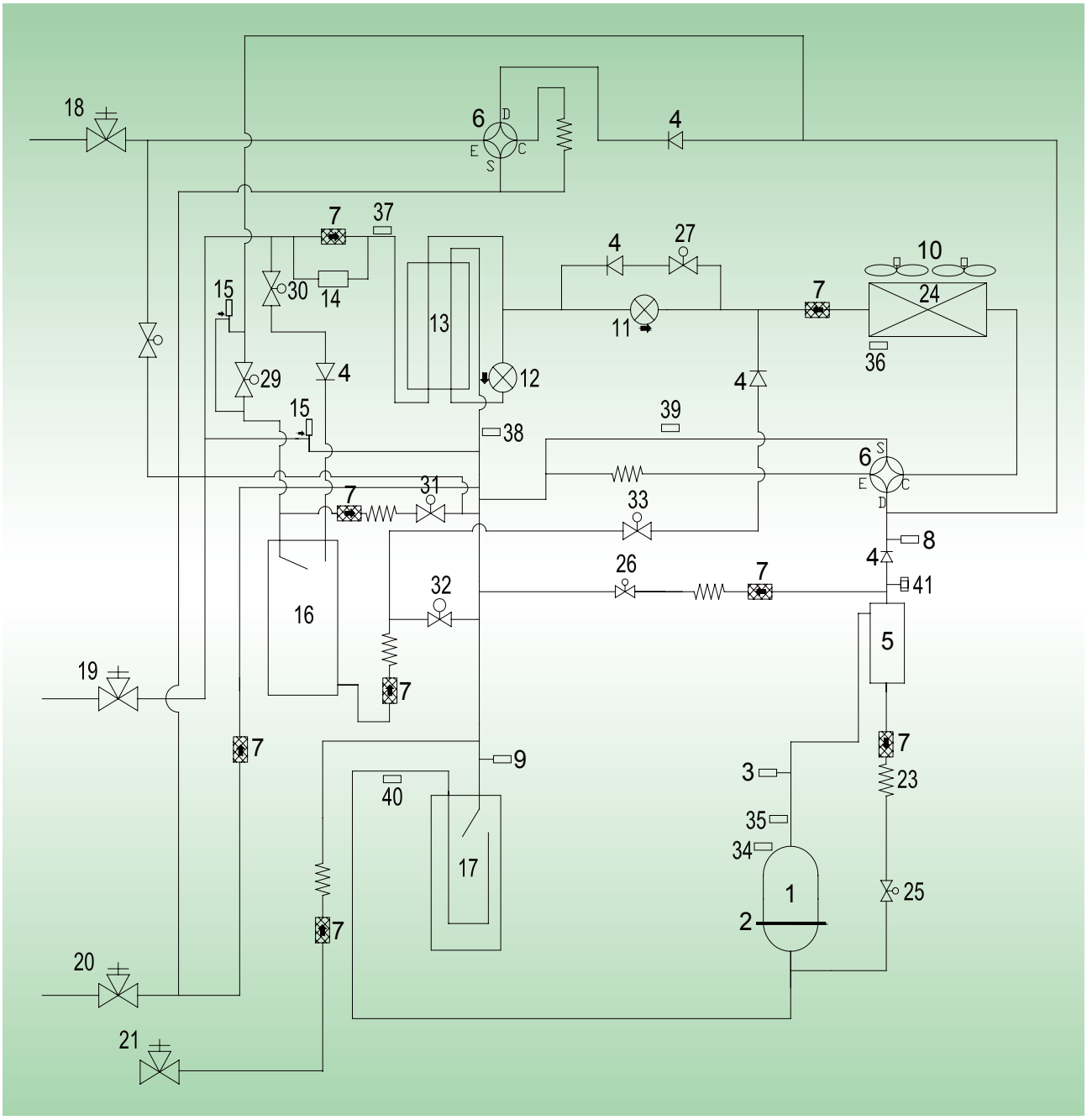
g. An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring

6 INTERNAL PIPING DESIGN OF THE UNITS

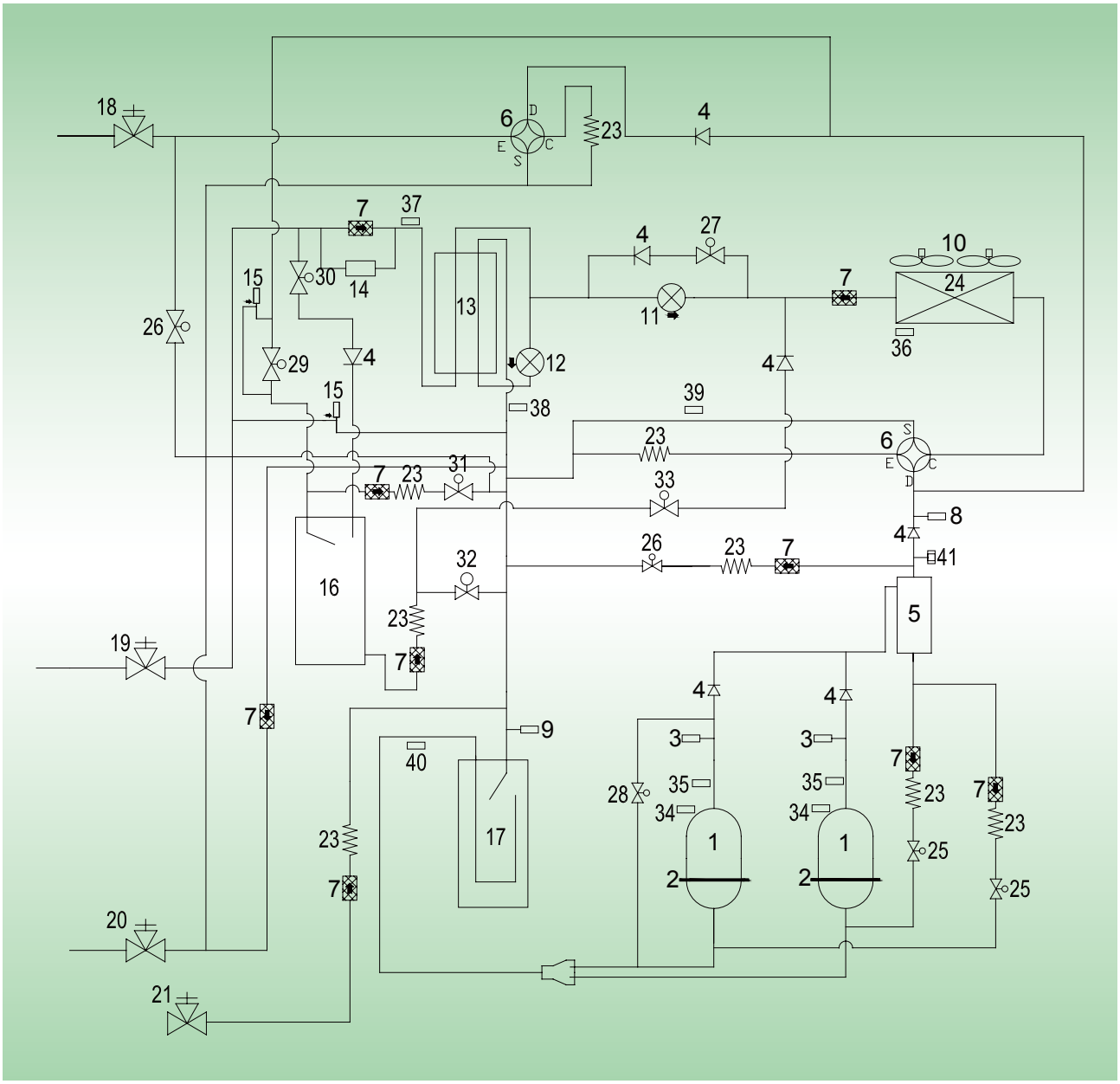
1.Piping diagrams of GMV-Q224WM/E-X and GMV-Q280WM/E-X



2.Piping diagrams of GMV-Q335WM/E-X



3.Piping diagrams of GMV-Q400WM/E-X and GMV-Q450WM/E-X



No.	Name	Main Function
1	Compressor	Adjusts its own rotational speed based on the actual requirement of the system to implement capacity control.
2	Compressor heat tape	Maintains a proper oil temperature in the compressor when the compressor is in standby status, ensuring the reliability during compressor startup.
3	High-pressure circuit breaker	Protects a compressor by sending feedback signal to stop the system when the compressor's discharge temperature exceeds the operating value of high-pressure circuit breaker.
4	One-way valve	Control refrigerant flow direction, preventing its counterflow.
5	Oil extractor	Separates the gas and oil in the system to ensure compressor reliability.
6	Four-way valve	Used for the switching between the cooling and heating functions of system IDU.
7	Filter	Prevents impurities from entering components and parts.
8	High-pressure sensor	Detects the high pressure value in the system in real time mode for compressor protection and other control functions.
9	Low-pressure sensor	Detects system low pressure to avoid extra-low operating pressure.
10	Fan	Strengthens heat exchanging.
11	Electronic expansion valve for heating	Controls refrigerant adjustment in heating mode.
12	Sub cooler electronic expansion valve	Controls the degree of sub cooling of tube refrigerant when the system is running in cooling mode, and reduces the capacity loss on pipes.
13	Sub cooler	Controls the degree of sub cooling of tube.
14	Dry strainer	Avoid impurities getting into the electric parts. Meanwhile, absorb the water inside the liquid status to prevent ice blockage.
15	Unloading valve	Opening if the pressure inside the liquid pipe is too high.
16	Refrigerant adjustment tank	Adjust the system refrigerant circulation volume.
17	Gas-liquid separator	Separate gas and liquid to prevent the system from running when the refrigerant flows back to the compressor.
18	High pressure gas pipe valve	Stop valve, closed when the unit is delivered from the factory and will be opened after installation.
19	Liquid valve	Stop valve, closed when the unit is delivered from the factory and will be opened after installation.
20	Low pressure gas pipe valve	Stop valve, closed when the unit is delivered from the factory and will be opened after installation.
21	Low-pressure measurement valve	Detects the low pressure value or charges refrigerant during system running.
23	Capillary tube	Supports flow regulating and pressure reduction.
24	Heat exchanger	Used for outdoor heat exchange.
25	Oil return solenoid valve	Oil return control for the compressor
26	Gas-bypass valve	Make sure pressure of the system is balanced
27	High height difference valve	It's the pressure-drop device when the height difference between indoor unit and outdoor unit is big.
28	Pressure-balanced valve	Ensures success startup of compressor.
29	Pressure valve	Pressure control valve for refrigerant adjustment tank
30	Liquid intake valve	Liquid intake control valve for refrigerant adjustment tank
31	Pressure balance valve	Press control valve inside the refrigerant adjustment tank
32	Drain valve for cooling	Drainage control valve for cooling of refrigerant adjustment tank
33	Drain valve for heating	Drainage control valve for heating of refrigerant adjustment tank
34	Compressor casing-top temperature sensor	Detects a compressor's exhaust gas temperature for compressor control and protection.
35	Exhaust pipe temperature sensor of compressor	Detects a compressor's exhaust gas temperature for compressor control and protection.
36	Defrosting temperature sensor	Used for defrosting detection.

No.	Name	Main Function
37	Liquid outlet temperature sensor of sub cooler	Detects tube temperature.
38	Gas outlet temperature sensor of sub cooler	Detects gas temperature of sub cooler.
39	Inlet temperature sensor of gas-liquid separator	Detects the inlet temperature of gas-liquid separator to prevent the system from running when the refrigerant flows back to the compressor.
40	Outlet temperature sensor of gas-liquid separator	Detects internal status of gas-liquid separator to further control the compressor suction performance.
41	Nozzle for Adding Freon	Inject refrigeration oil during manufacture period.

7 UNIT CAPACITY CORRECTION

7.1 Correction of Capacity Along with Ambient Temperature and Configuration Ratio

Capacity Correction Table for GMV5 HR Heat Recovery VRF Unit

Cooling Capacity Table for GMV5 HR Heat Recovery VRF Unit

GMV-Q224WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
135%	-5	19.7	2.42	23.4	2.95	27.2	2.99	28.2	3.00	28.8	3.02	29.5	3.06	30.4	3.09
	0	19.7	2.43	23.4	2.96	27.2	2.99	28.2	3.01	28.8	3.03	29.5	3.06	30.4	3.09
	4	19.7	2.44	23.4	2.97	27.2	3.00	28.2	3.02	28.8	3.04	29.5	3.07	30.4	3.10
	7	19.7	2.48	23.4	3.02	27.2	3.06	28.2	3.08	28.8	3.09	29.3	3.13	30.0	3.16
	10	19.7	2.53	23.4	3.09	27.2	3.67	28.2	3.75	28.6	3.68	29.3	3.53	30.0	3.36
	12	19.7	2.57	23.4	3.15	27.2	3.75	27.8	3.73	28.2	3.66	28.9	3.50	29.6	3.44
	14	19.7	2.62	23.4	3.21	27.1	3.79	27.5	3.72	27.8	3.64	28.6	3.61	29.3	3.64
	16	19.7	2.67	23.4	3.27	26.8	3.78	27.1	3.75	27.4	3.76	28.2	3.80	28.9	3.84
	18	19.7	2.72	23.4	3.34	26.4	3.92	26.7	3.94	27.1	3.96	27.8	4.00	28.6	4.03
	20	19.7	2.78	23.4	3.55	26.0	4.11	26.4	4.13	26.7	4.15	27.4	4.19	28.2	4.23
	21	19.7	2.85	23.4	3.68	25.8	4.20	26.2	4.23	26.6	4.25	27.3	4.29	28.0	4.33
	23	19.7	3.06	23.4	3.95	25.5	4.40	25.8	4.42	26.2	4.44	26.9	4.49	27.6	4.53
	25	19.7	3.27	23.4	4.23	25.1	4.59	25.5	4.61	25.8	4.64	26.6	4.69	27.3	4.73
	27	19.7	3.49	23.4	4.52	24.8	4.04	25.1	4.81	25.4	4.83	26.2	4.88	26.9	4.94
	29	19.7	3.72	23.4	4.83	24.4	4.97	24.7	5.00	25.1	5.03	25.8	5.08	26.6	5.14
	31	19.7	3.98	23.4	5.11	24.0	5.17	24.4	5.20	24.7	5.22	25.4	5.28	26.2	5.34
	33	19.7	4.23	23.0	5.31	23.7	5.36	24.0	5.39	24.4	5.42	25.1	5.48	25.8	5.55
	35	19.7	4.52	22.6	5.50	23.3	5.56	23.7	5.59	24.0	5.62	24.7	5.69	25.4	5.75
	37	19.7	4.80	22.2	5.70	23.0	5.76	23.3	5.79	23.7	5.83	24.3	5.90	25.0	5.96
	39	19.7	5.11	21.8	5.89	22.6	5.96	23.0	5.99	23.3	6.03	24.0	6.10	24.7	6.17
	41	18.6	5.69	21.4	6.93	22.1	7.01	22.5	6.49	22.8	6.52	23.5	6.60	24.2	6.67
	44	17.3	6.19	20.3	7.53	21.1	7.79	21.5	7.33	21.9	7.03	22.6	6.94	23.4	7.01
	47	16.3	8.23	19.6	10.02	20.4	8.18	20.8	7.44	21.1	7.48	21.9	7.45	22.6	7.53
	50	15.0	8.08	17.6	9.84	18.2	8.63	18.5	8.06	18.8	7.99	19.5	7.97	20.4	7.88
	52	11.3	6.82	13.1	8.30	13.6	7.35	14.0	7.33	14.4	7.20	15.6	7.11	16.5	6.90

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-5	18.2	2.16	22.4	2.79	26.7	2.97	27.7	2.98	28.3	3.00	28.9	3.03	29.7	3.06
	0	18.2	2.16	22.4	2.80	26.7	2.97	27.7	2.99	28.3	3.01	28.9	3.04	29.7	3.07
	4	18.2	2.17	22.4	2.81	26.7	2.98	27.7	3.00	28.3	3.02	28.9	3.05	29.7	3.08
	7	18.2	2.21	22.4	2.86	26.7	3.04	27.7	3.06	28.3	3.07	28.7	3.11	29.3	3.14
	10	18.2	2.31	21.6	2.82	25.1	3.35	26.9	3.62	28.2	3.78	28.8	3.63	29.4	3.49
	12	18.2	2.35	21.6	2.87	25.1	3.41	26.9	3.69	27.8	3.75	28.4	3.61	29.0	3.47
	14	18.2	2.39	21.6	2.93	25.1	3.48	26.9	3.76	27.4	3.73	28.1	3.59	28.7	3.61
	16	18.2	2.44	21.6	2.99	25.1	3.55	26.7	3.79	27.0	3.74	27.7	3.78	28.3	3.81
	18	18.2	2.48	21.6	3.04	25.1	3.67	26.3	3.92	26.6	3.93	27.3	3.97	28.0	4.01
	20	18.2	2.53	21.6	3.16	25.1	3.95	26.0	4.11	26.3	4.12	27.0	4.16	27.6	4.20
	21	18.2	2.56	21.6	3.27	25.1	4.09	25.8	4.20	26.1	4.22	26.8	4.26	27.4	4.30
	23	18.2	2.73	21.6	3.51	25.1	4.37	25.4	4.39	25.8	4.41	26.4	4.46	27.0	4.49
	25	18.2	2.92	21.6	3.75	24.7	4.57	25.0	4.58	25.4	4.60	26.1	4.65	26.7	4.69
	27	18.2	3.12	21.6	4.01	24.4	4.75	24.7	4.78	25.0	4.80	25.7	4.85	26.3	4.89
	29	18.2	3.33	21.6	4.29	24.0	4.94	24.3	4.97	24.6	5.00	25.3	5.05	26.0	5.09
	31	18.2	3.55	21.6	4.57	23.7	5.14	24.0	5.17	24.3	5.20	25.0	5.25	25.6	5.30
	33	18.2	3.78	21.6	4.88	23.3	5.34	23.6	5.37	23.9	5.39	24.6	5.45	25.2	5.50
	35	18.2	4.02	21.6	5.20	22.9	5.53	23.2	5.56	23.6	5.59	24.2	5.65	24.9	5.71
	37	18.2	4.28	21.6	5.54	22.6	5.73	22.9	5.76	23.2	5.79	23.8	5.85	24.5	5.91
	39	18.2	4.55	21.5	5.85	22.2	5.92	22.5	5.96	22.8	5.99	23.5	6.05	24.2	6.11
	41	17.2	5.07	20.5	6.56	21.7	6.96	22.1	6.45	22.4	6.48	23.1	6.55	23.7	6.62
	44	16.0	5.51	19.4	7.13	20.7	7.74	21.1	7.28	21.5	6.98	22.2	6.89	22.9	6.96
	47	15.1	7.33	18.8	9.48	20.0	8.13	20.4	7.39	20.8	7.43	21.5	7.40	22.1	7.47
	50	13.8	7.20	16.8	9.31	17.9	8.57	18.2	8.00	18.5	7.93	19.1	7.90	19.9	7.82
	52	10.5	6.07	12.5	7.86	13.4	7.30	13.7	7.28	14.2	7.15	15.3	7.06	16.2	6.85
110%	-5	16.6	1.91	20.6	2.46	26.4	2.95	27.2	2.96	27.7	2.98	28.3	3.01	29.1	3.04
	0	16.6	1.91	20.6	2.46	26.4	2.95	27.2	2.97	27.7	2.99	28.3	3.01	29.1	3.04
	4	16.6	1.92	20.6	2.47	26.4	2.97	27.2	2.98	27.7	3.00	28.3	3.02	29.1	3.05
	7	16.6	1.96	20.6	2.52	26.4	3.02	27.2	3.04	27.7	3.05	28.0	3.08	28.7	3.11
	10	16.6	2.09	19.8	2.55	23.0	3.03	24.6	3.27	26.2	3.53	28.2	3.74	28.9	3.61
	12	16.6	2.14	19.8	2.60	23.0	3.09	24.6	3.34	26.2	3.59	27.9	3.72	28.5	3.59
	14	16.6	2.17	19.8	2.65	23.0	3.15	24.6	3.40	26.2	3.66	27.5	3.72	28.2	3.58
	16	16.6	2.21	19.8	2.70	23.0	3.21	24.6	3.47	26.2	3.73	27.2	3.75	27.8	3.78
	18	16.6	2.25	19.8	2.75	23.0	3.27	24.6	3.56	26.2	3.91	26.8	3.94	27.4	3.98
	20	16.6	2.30	19.8	2.81	23.0	3.47	24.6	3.83	25.8	4.10	26.5	4.13	27.0	4.17
	21	16.6	2.32	19.8	2.89	23.0	3.59	24.6	3.97	25.7	4.20	26.2	4.23	26.9	4.26
	23	16.6	2.43	19.8	3.10	23.0	3.85	24.6	4.26	25.3	4.38	25.9	4.43	26.5	4.46
	25	16.6	2.59	19.8	3.31	23.0	4.12	24.6	4.56	25.0	4.57	25.5	4.62	26.2	4.66
	27	16.6	2.76	19.8	3.54	23.0	4.40	24.2	4.75	24.6	4.77	25.2	4.81	25.8	4.86
	29	16.6	2.95	19.8	3.78	23.0	4.71	23.9	4.94	24.2	4.97	24.8	5.01	25.4	5.05
	31	16.6	3.14	19.8	4.03	23.0	5.03	23.5	5.14	23.8	5.16	24.5	5.20	25.0	5.25
	33	16.6	3.34	19.8	4.29	22.9	5.30	23.2	5.33	23.5	5.35	24.1	5.40	24.7	5.45
	35	16.6	3.55	19.8	4.57	22.6	5.49	22.8	5.52	23.1	5.55	23.7	5.60	24.3	5.65
	37	16.6	3.78	19.8	4.87	22.2	5.69	22.5	5.71	22.7	5.74	23.4	5.80	23.9	5.85
	39	16.6	4.02	19.8	5.19	21.8	5.88	22.1	5.91	22.4	5.94	23.0	6.00	23.6	6.06
	41	15.7	4.48	18.8	5.76	21.4	6.92	21.7	6.40	22.0	6.44	22.5	6.50	23.2	6.56
	44	14.6	4.87	17.9	6.27	20.4	7.69	20.7	7.23	21.1	6.94	21.7	6.83	22.4	6.90
	47	13.8	6.48	17.3	8.34	19.7	8.07	20.0	7.34	20.3	7.38	21.0	7.34	21.6	7.41
	50	12.6	6.36	15.5	8.19	17.6	8.51	17.9	7.95	18.1	7.88	18.7	7.84	19.5	7.75
	52	9.6	5.37	11.5	6.91	13.2	7.25	13.5	7.23	13.9	7.10	14.9	7.00	15.8	6.78

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-5	15.1	1.67	18.7	2.14	24.5	2.66	26.7	2.94	27.2	2.96	27.7	2.99	28.4	3.01
	0	15.1	1.67	18.7	2.14	24.5	2.67	26.7	2.95	27.2	2.96	27.7	2.99	28.4	3.02
	4	15.1	1.68	18.7	2.15	24.5	2.68	26.7	2.96	27.2	2.98	27.7	3.00	28.4	3.03
	7	15.1	1.71	18.7	2.19	24.5	2.73	26.7	3.02	27.2	3.03	27.5	3.06	28.0	3.09
	10	15.1	1.89	18.0	2.30	21.0	2.72	22.4	2.94	23.8	3.17	26.8	3.59	28.3	3.73
	12	15.1	1.92	18.0	2.33	21.0	2.75	22.4	2.97	23.8	3.23	26.8	3.65	27.9	3.70
	14	15.1	1.95	18.0	2.37	21.0	2.80	22.4	3.03	23.8	3.29	26.8	3.71	27.6	3.67
	16	15.1	1.99	18.0	2.42	21.0	2.86	22.4	3.10	23.8	3.36	26.7	3.80	27.2	3.75
	18	15.1	2.04	18.0	2.48	21.0	2.92	22.4	3.16	23.8	3.43	26.3	3.87	26.9	3.93
	20	15.1	2.07	18.0	2.51	21.0	3.02	22.4	3.32	23.8	3.65	25.9	4.07	26.5	4.14
	21	15.1	2.09	18.0	2.54	21.0	3.12	22.4	3.44	23.8	3.77	25.8	4.21	26.3	4.25
	23	15.1	2.14	18.0	2.71	21.0	3.35	22.4	3.69	23.8	4.06	25.4	4.46	25.9	4.50
	25	15.1	2.28	18.0	2.89	21.0	3.57	22.4	3.93	23.8	4.34	25.0	4.62	25.6	4.66
	27	15.1	2.44	18.0	3.08	21.0	3.83	22.4	4.22	23.8	4.66	24.6	4.78	25.2	4.82
	29	15.1	2.58	18.0	3.30	21.0	4.10	22.4	4.51	23.8	4.93	24.3	5.01	24.9	5.06
	31	15.1	2.75	18.0	3.51	21.0	4.37	22.4	4.86	23.5	5.13	23.7	5.22	24.5	5.26
	33	15.1	2.92	18.0	3.74	21.0	4.65	22.4	5.14	23.0	5.32	23.6	5.37	24.1	5.41
	35	15.1	3.11	18.0	3.98	21.0	4.96	22.4	5.48	22.6	5.51	23.2	5.56	23.7	5.61
	37	15.1	3.31	18.0	4.24	21.0	5.29	22.0	5.68	22.4	5.71	22.8	5.75	23.4	5.80
	39	15.1	3.53	18.0	4.51	21.0	5.63	21.7	5.87	21.8	5.90	22.6	5.94	22.8	5.99
	41	14.3	3.92	17.1	5.01	19.9	6.25	21.3	6.36	21.5	6.39	22.1	6.45	22.6	6.51
	44	13.3	4.26	16.2	5.45	19.0	6.95	20.4	7.18	20.7	6.89	21.2	6.78	21.8	6.84
	47	12.5	5.67	15.7	7.26	18.3	7.29	19.7	7.29	19.9	7.33	20.5	7.28	21.1	7.35
	50	11.5	5.56	14.0	7.12	16.4	7.69	17.5	7.90	17.8	7.83	18.3	7.78	19.0	7.69
	52	8.7	4.69	10.4	6.01	12.3	6.55	13.2	7.18	13.6	7.05	14.6	6.95	15.4	6.73
90%	-5	13.6	1.46	16.8	1.84	22.0	2.28	24.0	2.51	25.7	2.77	27.1	2.96	27.7	2.99
	0	13.6	1.46	16.8	1.85	22.0	2.28	24.0	2.52	25.7	2.77	27.1	2.97	27.7	2.99
	4	13.6	1.46	16.8	1.85	22.0	2.29	24.0	2.53	25.7	2.78	27.1	2.98	27.7	3.00
	7	13.6	1.49	16.8	1.89	22.0	2.33	24.0	2.58	25.7	2.83	26.9	3.03	27.4	3.06
	10	13.6	1.65	16.2	1.98	18.9	2.32	20.2	2.62	21.5	2.78	24.1	3.19	26.7	3.61
	12	13.6	1.67	16.2	2.01	18.9	2.35	20.2	2.65	21.5	2.84	24.1	3.25	26.7	3.66
	14	13.6	1.70	16.2	2.04	18.9	2.39	20.2	2.69	21.5	2.89	24.1	3.30	26.7	3.72
	16	13.6	1.74	16.2	2.09	18.9	2.45	20.2	2.75	21.5	2.95	24.1	3.38	26.6	3.79
	18	13.6	1.78	16.2	2.14	18.9	2.49	20.2	2.80	21.5	3.01	24.1	3.46	26.4	3.93
	20	13.6	1.81	16.2	2.17	18.9	2.58	20.2	2.86	21.5	3.14	24.1	3.71	25.9	4.10
	21	13.6	1.82	16.2	2.19	18.9	2.66	20.2	2.96	21.5	3.24	24.1	3.84	25.8	4.19
	23	13.6	1.87	16.2	2.34	18.9	2.86	20.2	3.18	21.5	3.47	24.1	4.12	25.4	4.40
	25	13.6	1.99	16.2	2.49	18.9	3.05	20.2	3.39	21.5	3.71	24.1	4.41	25.0	4.58
	27	13.6	2.13	16.2	2.66	18.9	3.27	20.2	3.62	21.5	3.97	24.1	4.71	24.6	4.78
	29	13.6	2.25	16.2	2.84	18.9	3.50	20.2	3.87	21.5	4.24	23.8	4.93	24.3	4.98
	31	13.6	2.40	16.2	3.03	18.9	3.73	20.2	4.13	21.5	4.53	23.4	5.11	23.9	5.18
	33	13.6	2.55	16.2	3.22	18.9	3.98	20.2	4.39	21.5	4.82	23.1	5.32	23.6	5.37
	35	13.6	2.71	16.2	3.43	18.9	4.24	20.2	4.68	21.5	5.15	22.7	5.51	23.2	5.56
	37	13.6	2.89	16.2	3.66	18.9	4.51	19.8	4.85	21.5	5.51	22.3	5.71	22.9	5.69
	39	13.6	3.08	16.2	3.89	18.9	4.81	19.5	5.01	21.5	5.84	22.0	5.92	22.5	5.91
	41	12.9	3.42	15.4	4.33	17.9	5.34	19.2	5.43	20.4	5.98	21.6	6.39	22.1	6.45
	44	12.0	3.72	14.6	4.70	17.1	5.93	18.3	6.13	19.6	6.44	20.8	6.72	21.3	6.78
	47	11.3	4.94	14.1	6.26	16.5	6.23	17.7	6.23	18.9	6.85	20.1	7.22	20.6	7.29
	50	10.3	4.85	12.6	6.14	14.7	6.57	15.8	6.74	16.8	7.31	17.9	7.72	18.6	7.62
	52	7.8	4.09	9.4	5.18	11.0	5.59	11.9	6.13	12.9	6.59	14.3	6.89	15.1	6.67

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-5	12.1	1.26	15.0	1.55	19.6	1.93	21.4	2.12	22.8	2.32	25.6	2.75	27.1	2.95
	0	12.1	1.26	15.0	1.55	19.6	1.93	21.4	2.13	22.8	2.32	25.6	2.76	27.1	2.96
	4	12.1	1.27	15.0	1.56	19.6	1.94	21.4	2.13	22.8	2.33	25.6	2.77	27.1	2.97
	7	12.1	1.29	15.0	1.59	19.6	1.98	21.4	2.17	22.8	2.38	25.4	2.82	26.7	3.02
	10	12.1	1.50	14.4	1.80	16.8	2.11	17.9	2.28	19.1	2.44	21.4	2.78	23.8	3.23
	12	12.1	1.52	14.4	1.83	16.8	2.15	17.9	2.32	19.1	2.48	21.4	2.83	23.8	3.21
	14	12.1	1.55	14.4	1.86	16.8	2.19	17.9	2.36	19.1	2.53	21.4	2.88	23.8	3.28
	16	12.1	1.57	14.4	1.89	16.8	2.23	17.9	2.40	19.1	2.57	21.4	2.95	23.8	3.40
	18	12.1	1.60	14.4	1.93	16.8	2.28	17.9	2.45	19.1	2.62	21.4	3.01	23.8	3.64
	20	12.1	1.63	14.4	1.97	16.8	2.32	17.9	2.50	19.1	2.68	21.4	3.12	23.8	3.77
	21	12.1	1.65	14.4	1.98	16.8	2.34	17.9	2.53	19.1	2.74	21.4	3.24	23.8	4.03
	23	12.1	1.68	14.4	2.02	16.8	2.45	17.9	2.69	19.1	2.93	21.4	3.46	23.8	4.31
	25	12.1	1.73	14.4	2.15	16.8	2.62	17.9	2.87	19.1	3.12	21.4	3.70	23.8	4.60
	27	12.1	1.84	14.4	2.29	16.8	2.79	17.9	3.07	19.1	3.35	21.4	3.95	23.8	4.77
	29	12.1	1.96	14.4	2.44	16.8	2.98	17.9	3.27	19.0	3.57	21.4	4.22	23.8	4.94
	31	12.1	2.08	14.4	2.59	16.8	3.17	17.9	3.48	19.0	3.81	21.4	4.50	23.4	5.12
	33	12.1	2.21	14.4	2.89	16.8	3.38	17.9	3.71	19.0	4.06	21.4	4.81	23.0	5.30
	35	12.1	2.34	14.4	2.89	16.8	3.59	17.9	3.95	19.0	4.32	21.4	5.13	22.6	5.50
	37	12.1	2.48	14.4	3.11	16.8	3.82	17.6	4.21	19.0	4.60	21.4	5.46	22.3	5.70
	39	12.1	2.63	14.4	3.30	16.8	4.06	17.4	4.48	19.0	4.90	21.4	5.82	21.9	5.91
	41	11.4	2.95	13.7	3.64	15.9	4.53	17.0	4.59	18.1	5.01	20.4	5.95	21.6	6.37
	44	10.6	3.21	13.0	3.96	15.2	5.03	16.3	5.18	17.4	5.40	19.6	6.26	20.8	6.70
	47	10.0	4.27	12.5	5.27	14.7	5.28	15.7	5.26	16.7	5.75	19.0	6.72	20.1	7.20
	50	9.2	4.19	11.2	5.17	13.1	5.57	14.0	5.69	14.9	6.14	16.9	7.18	18.1	7.53
	52	7.0	3.54	8.4	4.36	9.8	4.74	10.6	5.18	11.4	5.53	13.5	6.41	14.7	6.59
70%	-5	10.6	1.07	13.1	1.33	17.1	1.61	18.7	1.76	20.0	1.92	22.4	2.26	24.9	2.63
	0	10.6	1.07	13.1	1.33	17.1	1.61	18.7	1.77	20.0	1.92	22.4	2.27	24.9	2.64
	4	10.6	1.08	13.1	1.33	17.1	1.62	18.7	1.77	20.0	1.93	22.4	2.27	24.9	2.65
	7	10.6	1.10	13.1	1.36	17.1	1.65	18.7	1.80	20.0	1.97	22.2	2.32	24.5	2.69
	10	10.6	1.32	12.6	1.57	14.7	1.83	15.7	1.97	16.7	2.11	18.8	2.39	20.8	2.69
	12	10.6	1.34	12.6	1.59	14.7	1.86	15.7	2.00	16.7	2.14	18.8	2.44	20.8	2.74
	14	10.6	1.36	12.6	1.62	14.7	1.89	15.7	2.03	16.7	2.18	18.8	2.48	20.8	2.79
	16	10.6	1.38	12.6	1.65	14.7	1.93	15.7	2.08	16.7	2.22	18.8	2.53	20.8	2.85
	18	10.6	1.40	12.6	1.68	14.7	1.97	15.7	2.11	16.7	2.26	18.8	2.58	20.8	2.90
	20	10.6	1.43	12.6	1.71	14.7	2.00	15.7	2.15	16.7	2.31	18.8	2.63	20.8	2.99
	21	10.6	1.44	12.6	1.72	14.7	2.02	15.7	2.17	16.7	2.33	18.8	2.66	20.8	3.09
	23	10.6	1.46	12.6	1.75	14.7	2.06	15.7	2.25	16.7	2.45	18.8	2.86	20.8	3.31
	25	10.6	1.49	12.6	1.83	14.7	2.19	15.7	2.40	16.7	2.61	18.8	3.06	20.8	3.54
	27	10.6	1.58	12.6	1.94	14.7	2.34	15.7	2.56	16.7	2.79	18.8	3.27	20.8	3.78
	29	10.6	1.68	12.6	2.06	14.7	2.49	15.7	2.73	16.7	2.96	18.8	3.48	20.8	4.04
	31	10.6	1.77	12.6	2.19	14.7	2.65	15.7	2.90	16.7	3.16	18.8	3.71	20.8	4.31
	33	10.6	1.88	12.6	2.33	14.7	2.82	15.7	3.08	16.7	3.36	18.8	3.95	20.8	4.60
	35	10.6	2.00	12.6	2.47	14.7	2.99	15.7	3.28	16.7	3.58	18.8	4.21	20.8	4.90
	37	10.6	2.11	12.6	2.62	14.7	3.19	15.4	3.49	16.7	3.81	18.8	4.49	20.8	5.22
	39	10.6	2.23	12.6	2.77	14.7	3.38	15.2	3.70	16.7	4.04	18.8	4.77	20.8	5.56
	41	10.0	2.51	12.0	3.11	13.9	3.77	14.9	3.81	15.9	4.15	17.9	4.89	19.8	5.68
	44	9.3	2.73	11.3	3.38	13.3	4.19	14.3	4.30	15.2	4.47	17.2	5.14	19.1	5.98
	47	8.8	3.64	11.0	4.50	12.8	4.40	13.8	4.36	14.7	4.76	16.6	5.52	18.5	6.42
	50	8.0	3.57	9.8	4.42	11.5	4.64	12.3	4.72	13.1	5.08	14.8	5.90	16.6	6.71
	52	6.1	3.01	7.3	3.73	8.6	3.95	9.3	4.30	10.0	4.58	11.8	5.27	13.5	5.88

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-5	9.1	0.90	11.2	1.10	14.7	1.32	16.0	1.44	17.2	1.56	19.2	1.82	21.3	2.10
	0	9.1	0.90	11.2	1.10	14.7	1.32	16.0	1.44	17.2	1.56	19.2	1.82	21.3	2.11
	4	9.1	0.91	11.2	1.11	14.7	1.32	16.0	1.44	17.2	1.57	19.2	1.83	21.3	2.12
	7	9.1	0.92	11.2	1.13	14.7	1.35	16.0	1.47	17.2	1.60	19.0	1.87	21.0	2.15
	10	9.1	1.15	10.8	1.34	12.6	1.56	13.4	1.67	14.3	1.78	16.1	2.02	17.8	2.26
	12	9.1	1.17	10.8	1.37	12.6	1.59	13.4	1.70	14.3	1.81	16.1	2.05	17.8	2.30
	14	9.1	1.18	10.8	1.39	12.6	1.61	13.4	1.73	14.3	1.85	16.1	2.09	17.8	2.34
	16	9.1	1.20	10.8	1.41	12.6	1.64	13.4	1.76	14.3	1.88	16.1	2.13	17.8	2.39
	18	9.1	1.22	10.8	1.43	12.6	1.67	13.4	1.79	14.3	1.91	16.1	2.17	17.8	2.43
	20	9.1	1.23	10.8	1.46	12.6	1.70	13.4	1.83	14.3	1.95	16.1	2.21	17.8	2.48
	21	9.1	1.25	10.8	1.47	12.6	1.71	13.4	1.84	14.3	1.97	16.1	2.23	17.8	2.51
	23	9.1	1.26	10.8	1.50	12.6	1.74	13.4	1.88	14.3	2.00	16.1	2.32	17.8	2.67
	25	9.1	1.29	10.8	1.53	12.6	1.81	13.4	1.97	14.3	2.13	16.1	2.48	17.8	2.85
	27	9.1	1.34	10.8	1.62	12.6	1.93	13.4	2.10	14.3	2.27	16.1	2.64	17.8	3.04
	29	9.1	1.41	10.8	1.71	12.6	2.05	13.4	2.23	14.3	2.42	16.1	2.82	17.8	3.24
	31	9.1	1.50	10.8	1.83	12.6	2.18	13.4	2.37	14.3	2.57	16.1	2.99	17.8	3.45
	33	9.1	1.58	10.8	1.93	12.6	2.31	13.4	2.52	14.3	2.73	16.1	3.19	17.8	3.68
	35	9.1	1.68	10.8	2.05	12.6	2.45	13.4	2.68	14.3	2.90	16.1	3.39	17.8	3.92
	37	9.1	1.77	10.8	2.17	12.6	2.60	13.2	2.84	14.3	3.08	16.1	3.61	17.8	4.17
	39	9.1	1.87	10.8	2.29	12.6	2.76	13.0	3.01	14.3	3.27	16.1	3.83	17.8	4.43
	41	8.6	2.11	10.3	2.58	11.9	3.09	12.8	3.10	13.6	3.37	15.3	3.93	17.0	4.54
	44	8.0	2.30	9.7	2.80	11.4	3.43	12.2	3.50	13.1	3.63	14.7	4.14	16.4	4.78
	47	7.5	3.06	9.4	3.73	11.0	3.61	11.8	3.56	12.6	3.86	14.2	4.44	15.9	5.13
	50	6.9	3.00	8.4	3.66	9.8	3.80	10.5	3.85	11.2	4.12	12.7	4.75	14.3	5.37
	52	5.2	2.53	6.3	3.09	7.4	3.24	7.9	3.50	8.6	3.72	10.1	4.24	11.6	4.70
50%	-5	7.6	0.75	9.4	0.89	12.2	1.06	13.4	1.14	14.3	1.23	16.0	1.43	17.8	1.63
	0	7.6	0.75	9.4	0.89	12.2	1.06	13.4	1.15	14.3	1.24	16.0	1.43	17.8	1.64
	4	7.6	0.75	9.4	0.90	12.2	1.06	13.4	1.15	14.3	1.24	16.0	1.44	17.8	1.64
	7	7.6	0.76	9.4	0.91	12.2	1.08	13.4	1.17	14.3	1.26	15.9	1.46	17.5	1.67
	10	7.6	0.99	9.0	1.15	10.5	1.31	11.2	1.40	11.9	1.48	13.4	1.66	14.9	1.85
	12	7.6	1.00	9.0	1.16	10.5	1.33	11.2	1.41	11.9	1.51	13.4	1.69	14.9	1.88
	14	7.6	1.01	9.0	1.18	10.5	1.34	11.2	1.44	11.9	1.53	13.4	1.72	14.9	1.92
	16	7.6	1.03	9.0	1.19	10.5	1.37	11.2	1.46	11.9	1.55	13.4	1.75	14.9	1.95
	18	7.6	1.04	9.0	1.21	10.5	1.39	11.2	1.49	11.9	1.58	13.4	1.78	14.9	1.99
	20	7.6	1.06	9.0	1.23	10.5	1.41	11.2	1.51	11.9	1.61	13.4	1.82	14.9	2.02
	21	7.6	1.06	9.0	1.24	10.5	1.43	11.2	1.52	11.9	1.63	13.4	1.83	14.9	2.05
	23	7.6	1.08	9.0	1.26	10.5	1.45	11.2	1.55	11.9	1.66	13.4	1.86	14.9	2.09
	25	7.6	1.09	9.0	1.28	10.5	1.48	11.2	1.58	11.9	1.71	13.4	1.96	14.9	2.23
	27	7.6	1.12	9.0	1.33	10.5	1.56	11.2	1.68	11.9	1.81	13.4	2.08	14.9	2.38
	29	7.6	1.18	9.0	1.40	10.5	1.66	11.2	1.79	11.9	1.93	13.4	2.22	14.9	2.53
	31	7.6	1.24	9.0	1.49	10.5	1.77	11.2	1.90	11.9	2.05	13.4	2.36	14.9	2.70
	33	7.6	1.32	9.0	1.57	10.5	1.86	11.2	2.01	11.9	2.17	13.4	2.51	14.9	2.87
	35	7.6	1.39	9.0	1.66	10.5	1.97	11.2	2.13	11.9	2.30	13.4	2.66	14.9	3.04
	37	7.6	1.46	9.0	1.76	10.5	2.08	11.0	2.25	11.9	2.44	13.4	2.82	14.9	3.24
	39	7.6	1.54	9.0	1.85	10.5	2.20	10.9	2.39	11.9	2.59	13.4	2.99	14.9	3.44
	41	7.1	1.75	8.5	2.10	10.0	2.48	10.6	2.47	11.3	2.67	12.8	3.09	14.2	3.53
	44	6.7	1.90	8.1	2.28	9.5	2.75	10.2	2.79	10.8	2.87	12.3	3.25	13.7	3.71
	47	6.3	2.53	7.8	3.03	9.2	2.89	9.8	2.83	10.5	3.06	11.9	3.49	13.2	3.99
	50	5.7	2.49	7.0	2.98	8.2	3.05	8.8	3.06	9.3	3.26	10.6	3.72	11.9	4.17
	52	4.4	2.10	5.2	2.51	6.1	2.59	6.6	2.79	7.1	2.94	8.4	3.33	9.7	3.65

GMV-Q280WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
135%	-5	24.6	3.60	29.3	4.39	34.0	4.44	35.3	4.46	36.0	4.49	36.9	4.54	38.0	4.59
	0	24.6	3.61	29.3	4.39	34.0	4.45	35.3	4.47	36.0	4.50	36.9	4.55	38.0	4.60
	4	24.6	3.62	29.3	4.41	34.0	4.46	35.3	4.49	36.0	4.51	36.9	4.57	38.0	4.61
	7	24.6	3.69	29.3	4.49	34.0	4.55	35.3	4.57	36.0	4.60	36.6	4.65	37.5	4.70
	10	24.6	3.76	29.3	4.59	34.0	5.46	35.3	5.58	35.7	5.47	36.6	5.24	37.5	5.00
	12	24.6	3.82	29.3	4.68	34.0	5.57	34.8	5.54	35.3	5.44	36.1	5.19	37.0	5.12
	14	24.6	3.90	29.3	4.77	33.9	5.63	34.4	5.52	34.8	5.40	35.7	5.36	36.6	5.41
	16	24.6	3.96	29.3	4.86	33.5	5.61	33.9	5.57	34.3	5.59	35.2	5.64	36.1	5.70
	18	24.6	4.04	29.3	4.96	33.0	5.82	33.4	5.85	33.9	5.89	34.8	5.94	35.7	6.00
	20	24.6	4.13	29.3	5.28	32.5	6.10	33.0	6.14	33.4	6.17	34.3	6.23	35.2	6.29
	21	24.6	4.24	29.3	5.47	32.3	6.25	32.8	6.28	33.2	6.31	34.1	6.38	35.0	6.43
	23	24.6	4.55	29.3	5.86	31.9	6.53	32.3	6.57	32.7	6.60	33.6	6.66	34.5	6.73
	25	24.6	4.85	29.3	6.28	31.4	6.82	31.9	6.85	32.3	6.90	33.2	6.96	34.1	7.03
	27	24.6	5.18	29.3	6.72	31.0	6.01	31.4	7.15	31.8	7.18	32.7	7.26	33.6	7.33
	29	24.6	5.53	29.3	7.18	30.5	7.39	30.9	7.43	31.4	7.48	32.3	7.55	33.2	7.63
	31	24.6	5.91	29.2	7.60	30.0	7.69	30.5	7.73	30.9	7.76	31.8	7.85	32.7	7.94
	33	24.6	6.29	28.7	7.88	29.6	7.96	30.0	8.02	30.5	8.06	31.4	8.15	32.2	8.25
	35	24.6	6.71	28.2	8.17	29.1	8.27	29.6	8.31	30.0	8.36	30.9	8.45	31.8	8.54
	37	24.6	7.14	27.8	8.47	28.7	8.56	29.1	8.61	29.6	8.66	30.4	8.76	31.3	8.86
	39	24.6	7.60	27.3	8.75	28.2	8.85	28.7	8.90	29.1	8.96	30.0	9.06	30.9	9.17
	41	23.2	8.45	26.8	10.29	27.7	10.42	28.1	9.64	28.5	9.69	29.4	9.81	30.3	9.91
	44	21.6	9.19	25.4	11.19	26.3	11.58	26.9	10.89	27.4	10.44	28.3	10.31	29.3	10.42
	47	20.4	12.23	24.5	14.89	25.5	12.15	26.0	11.05	26.4	11.11	27.3	11.08	28.3	11.19
	50	18.7	12.01	22.0	14.62	22.7	12.82	23.2	11.97	23.6	11.87	24.4	11.84	25.4	11.70
	52	14.2	10.13	16.4	12.34	17.0	10.91	17.5	10.89	18.0	10.70	19.5	10.57	20.7	10.25

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
120%	-5	22.7	3.21	28.1	4.15	33.4	4.41	34.6	4.43	35.4	4.46	36.2	4.50	37.2	4.55
	0	22.7	3.21	28.1	4.16	33.4	4.42	34.6	4.44	35.4	4.47	36.2	4.51	37.2	4.56
	4	22.7	3.23	28.1	4.17	33.4	4.44	34.6	4.46	35.4	4.48	36.2	4.53	37.2	4.58
	7	22.7	3.29	28.1	4.25	33.4	4.52	34.6	4.54	35.4	4.57	35.9	4.61	36.7	4.66
	10	22.7	3.43	27.0	4.18	31.4	4.97	33.6	5.38	35.2	5.61	36.0	5.39	36.8	5.18
	12	22.7	3.49	27.0	4.26	31.4	5.07	33.6	5.48	34.7	5.58	35.5	5.37	36.3	5.15
	14	22.7	3.56	27.0	4.35	31.4	5.17	33.6	5.59	34.2	5.54	35.1	5.34	35.9	5.37
	16	22.7	3.62	27.0	4.44	31.4	5.27	33.4	5.63	33.8	5.56	34.6	5.61	35.4	5.65
	18	22.7	3.69	27.0	4.52	31.4	5.46	32.9	5.82	33.3	5.84	34.1	5.90	35.0	5.95
	20	22.7	3.77	27.0	4.70	31.4	5.86	32.5	6.10	32.9	6.13	33.7	6.18	34.5	6.24
	21	22.7	3.80	27.0	4.86	31.4	6.07	32.2	6.25	32.6	6.27	33.5	6.32	34.3	6.39
	23	22.7	4.06	27.0	5.22	31.4	6.50	31.8	6.52	32.2	6.56	33.0	6.62	33.8	6.68
	25	22.7	4.34	27.0	5.58	30.9	6.79	31.3	6.81	31.7	6.84	32.6	6.91	33.4	6.97
	27	22.7	4.63	27.0	5.96	30.5	7.06	30.9	7.10	31.3	7.14	32.1	7.20	32.9	7.27
	29	22.7	4.94	27.0	6.37	30.0	7.35	30.4	7.39	30.8	7.42	31.6	7.50	32.5	7.57
	31	22.7	5.27	27.0	6.80	29.6	7.64	30.0	7.68	30.4	7.72	31.2	7.80	32.0	7.87
	33	22.7	5.61	27.0	7.26	29.1	7.93	29.5	7.97	29.9	8.00	30.7	8.09	31.5	8.17
	35	22.7	5.97	27.0	7.73	28.6	8.21	29.0	8.26	29.5	8.30	30.3	8.39	31.1	8.48
	37	22.7	6.36	27.0	8.24	28.2	8.51	28.6	8.55	29.0	8.60	29.8	8.69	30.6	8.78
	39	22.7	6.76	26.9	8.70	27.7	8.79	28.1	8.85	28.5	8.89	29.4	8.99	30.2	9.08
	41	21.5	7.53	25.7	9.74	27.2	10.35	27.6	9.58	28.1	9.63	28.8	9.73	29.6	9.83
	44	20.0	8.18	24.3	10.59	25.9	11.50	26.4	10.82	26.9	10.38	27.8	10.23	28.6	10.34
	47	18.8	10.89	23.5	14.09	25.0	12.07	25.5	10.98	26.0	11.04	26.8	10.99	27.7	11.10
	50	17.3	10.69	21.1	13.84	22.3	12.73	22.7	11.89	23.2	11.79	23.9	11.74	24.9	11.61
	52	13.1	9.02	15.7	11.67	16.7	10.84	17.1	10.82	17.7	10.63	19.1	10.49	20.2	10.17
110%	-5	20.8	2.84	25.8	3.65	32.9	4.38	34.0	4.40	34.7	4.43	35.3	4.47	36.3	4.51
	0	20.8	2.84	25.8	3.66	32.9	4.39	34.0	4.41	34.7	4.44	35.3	4.48	36.3	4.52
	4	20.8	2.85	25.8	3.67	32.9	4.41	34.0	4.43	34.7	4.45	35.3	4.49	36.3	4.54
	7	20.8	2.90	25.8	3.74	32.9	4.49	34.0	4.51	34.7	4.54	35.1	4.58	35.8	4.62
	10	20.8	3.11	24.8	3.79	28.8	4.50	30.8	4.86	32.8	5.24	35.3	5.56	36.1	5.37
	12	20.8	3.17	24.8	3.86	28.8	4.59	30.8	4.96	32.8	5.34	34.9	5.53	35.6	5.34
	14	20.8	3.23	24.8	3.93	28.8	4.68	30.8	5.05	32.8	5.44	34.4	5.53	35.2	5.33
	16	20.8	3.28	24.8	4.01	28.8	4.77	30.8	5.15	32.8	5.54	34.0	5.57	34.7	5.62
	18	20.8	3.35	24.8	4.08	28.8	4.86	30.8	5.29	32.8	5.81	33.5	5.85	34.3	5.91
	20	20.8	3.41	24.8	4.17	28.8	5.15	30.8	5.69	32.3	6.09	33.1	6.14	33.8	6.19
	21	20.8	3.45	24.8	4.29	28.8	5.34	30.8	5.90	32.1	6.24	32.8	6.28	33.6	6.34
	23	20.8	3.61	24.8	4.60	28.8	5.72	30.8	6.32	31.6	6.51	32.4	6.58	33.1	6.63
	25	20.8	3.84	24.8	4.92	28.8	6.12	30.8	6.77	31.2	6.80	31.9	6.86	32.7	6.92
	27	20.8	4.11	24.8	5.26	28.8	6.54	30.3	7.06	30.7	7.08	31.5	7.15	32.2	7.21
	29	20.8	4.38	24.8	5.61	28.8	6.99	29.9	7.35	30.3	7.38	31.0	7.44	31.8	7.51
	31	20.8	4.67	24.8	5.98	28.8	7.47	29.4	7.63	29.8	7.66	30.6	7.73	31.3	7.81
	33	20.8	4.96	24.8	6.38	28.6	7.87	29.0	7.92	29.4	7.95	30.1	8.03	30.9	8.10
	35	20.8	5.28	24.8	6.80	28.2	8.16	28.5	8.20	28.9	8.25	29.6	8.32	30.4	8.40
	37	20.8	5.62	24.8	7.24	27.7	8.45	28.1	8.49	28.4	8.53	29.2	8.62	29.9	8.70
	39	20.8	5.97	24.8	7.71	27.2	8.74	27.6	8.78	28.0	8.83	28.7	8.92	29.5	9.00
	41	19.7	6.65	23.6	8.56	26.8	10.28	27.1	9.51	27.5	9.57	28.2	9.65	29.0	9.74
	44	18.3	7.24	22.3	9.31	25.5	11.42	25.9	10.74	26.4	10.31	27.1	10.15	28.0	10.25
	47	17.3	9.63	21.6	12.39	24.7	11.99	25.0	10.91	25.4	10.97	26.2	10.90	27.1	11.00
	50	15.8	9.45	19.3	12.17	22.0	12.65	22.3	11.81	22.7	11.71	23.4	11.65	24.3	11.51
	52	12.0	7.97	14.4	10.26	16.5	10.77	16.8	10.74	17.3	10.55	18.6	10.40	19.8	10.08

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
100%	-5	18.9	2.48	23.4	3.18	30.6	3.96	33.4	4.38	34.0	4.40	34.6	4.44	35.5	4.48
	0	18.9	2.48	23.4	3.18	30.6	3.97	33.4	4.38	34.0	4.41	34.6	4.44	35.5	4.48
	4	18.9	2.49	23.4	3.19	30.6	3.98	33.4	4.40	34.0	4.42	34.6	4.46	35.5	4.50
	7	18.9	2.54	23.4	3.25	30.6	4.06	33.4	4.48	34.0	4.50	34.3	4.54	35.0	4.58
	10	18.9	2.81	22.5	3.42	26.2	4.04	28.0	4.36	29.8	4.71	33.5	5.33	35.4	5.54
	12	18.9	2.85	22.5	3.46	26.2	4.09	28.0	4.42	29.8	4.80	33.5	5.42	34.9	5.50
	14	18.9	2.90	22.5	3.52	26.2	4.16	28.0	4.50	29.8	4.89	33.5	5.52	34.5	5.45
	16	18.9	2.96	22.5	3.60	26.2	4.26	28.0	4.60	29.8	5.00	33.4	5.64	34.0	5.57
	18	18.9	3.03	22.5	3.68	26.2	4.34	28.0	4.69	29.8	5.10	32.9	5.75	33.6	5.84
	20	18.9	3.08	22.5	3.74	26.2	4.48	28.0	4.94	29.8	5.42	32.4	6.05	33.1	6.14
	21	18.9	3.11	22.5	3.77	26.2	4.64	28.0	5.11	29.8	5.61	32.2	6.26	32.9	6.31
	23	18.9	3.19	22.5	4.03	26.2	4.98	28.0	5.49	29.8	6.03	31.8	6.62	32.4	6.68
	25	18.9	3.39	22.5	4.29	26.2	5.30	28.0	5.84	29.8	6.45	31.3	6.86	32.0	6.92
	27	18.9	3.62	22.5	4.58	26.2	5.69	28.0	6.27	29.8	6.92	30.8	7.10	31.5	7.17
	29	18.9	3.84	22.5	4.90	26.2	6.09	28.0	6.70	29.7	7.33	30.4	7.45	31.1	7.51
	31	18.9	4.08	22.5	5.21	26.2	6.49	28.0	7.22	29.3	7.62	29.7	7.75	30.6	7.82
	33	18.9	4.34	22.5	5.55	26.2	6.92	28.0	7.64	28.8	7.90	29.5	7.97	30.2	8.04
	35	18.9	4.62	22.5	5.91	26.2	7.37	28.0	8.15	28.3	8.19	29.0	8.26	29.7	8.34
	37	18.9	4.92	22.5	6.30	26.2	7.85	27.5	8.44	27.9	8.48	28.6	8.54	29.3	8.62
	39	18.9	5.24	22.5	6.71	26.2	8.36	27.1	8.72	27.3	8.76	28.2	8.82	28.6	8.90
	41	17.9	5.82	21.4	7.45	24.9	9.29	26.6	9.45	26.9	9.50	27.6	9.58	28.3	9.67
	44	16.6	6.33	20.2	8.10	23.7	10.32	25.5	10.67	25.8	10.23	26.5	10.08	27.3	10.17
	47	15.7	8.42	19.6	10.78	22.9	10.84	24.6	10.84	24.9	10.89	25.6	10.82	26.4	10.92
	50	14.4	8.27	17.5	10.58	20.5	11.43	21.9	11.73	22.2	11.63	22.9	11.57	23.7	11.42
	52	10.9	6.97	13.0	8.93	15.3	9.73	16.5	10.67	17.0	10.48	18.3	10.33	19.3	10.00
90%	-5	17.0	2.16	21.0	2.74	27.5	3.38	30.1	3.74	32.2	4.11	33.9	4.40	34.7	4.44
	0	17.0	2.17	21.0	2.74	27.5	3.39	30.1	3.74	32.2	4.12	33.9	4.41	34.7	4.45
	4	17.0	2.18	21.0	2.75	27.5	3.40	30.1	3.76	32.2	4.13	33.9	4.42	34.7	4.46
	7	17.0	2.22	21.0	2.81	27.5	3.46	30.1	3.83	32.2	4.21	33.6	4.50	34.2	4.54
	10	17.0	2.45	20.2	2.95	23.6	3.45	25.2	3.89	26.8	4.14	30.1	4.74	33.4	5.37
	12	17.0	2.48	20.2	2.98	23.6	3.49	25.2	3.94	26.8	4.22	30.1	4.82	33.4	5.44
	14	17.0	2.53	20.2	3.04	23.6	3.56	25.2	4.00	26.8	4.29	30.1	4.91	33.4	5.53
	16	17.0	2.58	20.2	3.10	23.6	3.64	25.2	4.09	26.8	4.39	30.1	5.02	33.3	5.64
	18	17.0	2.64	20.2	3.17	23.6	3.71	25.2	4.17	26.8	4.47	30.1	5.13	33.0	5.84
	20	17.0	2.68	20.2	3.22	23.6	3.83	25.2	4.25	26.8	4.66	30.1	5.51	32.4	6.08
	21	17.0	2.71	20.2	3.25	23.6	3.96	25.2	4.39	26.8	4.82	30.1	5.70	32.2	6.22
	23	17.0	2.78	20.2	3.48	23.6	4.26	25.2	4.72	26.8	5.16	30.1	6.13	31.7	6.54
	25	17.0	2.96	20.2	3.70	23.6	4.53	25.2	5.04	26.8	5.52	30.1	6.55	31.3	6.81
	27	17.0	3.16	20.2	3.95	23.6	4.86	25.2	5.38	26.8	5.91	30.1	6.99	30.8	7.11
	29	17.0	3.35	20.2	4.22	23.6	5.20	25.2	5.75	26.8	6.30	29.8	7.33	30.4	7.39
	31	17.0	3.56	20.2	4.50	23.6	5.54	25.2	6.13	26.8	6.73	29.3	7.59	29.9	7.69
	33	17.0	3.79	20.2	4.79	23.6	5.91	25.2	6.53	26.8	7.16	28.9	7.90	29.5	7.97
	35	17.0	4.03	20.2	5.10	23.6	6.30	25.2	6.96	26.8	7.65	28.4	8.19	29.0	8.26
	37	17.0	4.29	20.2	5.43	23.6	6.71	24.7	7.21	26.8	8.19	27.9	8.48	28.6	8.46
	39	17.0	4.57	20.2	5.78	23.6	7.14	24.4	7.45	26.8	8.68	27.5	8.80	28.1	8.77
	41	16.1	5.08	19.2	6.43	22.4	7.93	24.0	8.07	25.5	8.88	27.0	9.50	27.6	9.58
	44	15.0	5.52	18.2	6.99	21.3	8.82	22.9	9.11	24.5	9.57	26.0	9.99	26.7	10.08
	47	14.1	7.35	17.6	9.30	20.6	9.26	22.1	9.25	23.6	10.18	25.1	10.73	25.8	10.82
	50	12.9	7.21	15.8	9.13	18.4	9.76	19.7	10.02	21.1	10.87	22.4	11.46	23.2	11.32
	52	9.8	6.08	11.7	7.70	13.8	8.31	14.9	9.11	16.1	9.80	17.9	10.24	18.9	9.92

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
80%	-5	15.1	1.87	18.7	2.31	24.5	2.87	26.7	3.15	28.5	3.45	32.0	4.09	33.8	4.38
	0	15.1	1.87	18.7	2.31	24.5	2.87	26.7	3.16	28.5	3.45	32.0	4.10	33.8	4.39
	4	15.1	1.88	18.7	2.32	24.5	2.88	26.7	3.17	28.5	3.47	32.0	4.12	33.8	4.41
	7	15.1	1.91	18.7	2.36	24.5	2.93	26.7	3.23	28.5	3.53	31.7	4.19	33.4	4.49
	10	15.1	2.23	18.0	2.67	21.0	3.14	22.4	3.38	23.8	3.62	26.8	4.14	29.7	4.80
	12	15.1	2.26	18.0	2.71	21.0	3.20	22.4	3.45	23.8	3.69	26.8	4.21	29.7	4.77
	14	15.1	2.31	18.0	2.77	21.0	3.25	22.4	3.50	23.8	3.76	26.8	4.28	29.7	4.87
	16	15.1	2.34	18.0	2.81	21.0	3.32	22.4	3.57	23.8	3.82	26.8	4.38	29.7	5.05
	18	15.1	2.38	18.0	2.87	21.0	3.39	22.4	3.65	23.8	3.89	26.8	4.48	29.7	5.40
	20	15.1	2.43	18.0	2.92	21.0	3.45	22.4	3.71	23.8	3.98	26.8	4.64	29.7	5.60
	21	15.1	2.45	18.0	2.94	21.0	3.48	22.4	3.76	23.8	4.07	26.8	4.81	29.7	5.99
	23	15.1	2.49	18.0	3.01	21.0	3.65	22.4	4.00	23.8	4.35	26.8	5.14	29.7	6.41
	25	15.1	2.57	18.0	3.20	21.0	3.90	22.4	4.27	23.8	4.64	26.8	5.50	29.7	6.84
	27	15.1	2.73	18.0	3.40	21.0	4.15	22.4	4.56	23.8	4.98	26.8	5.87	29.7	7.08
	29	15.1	2.91	18.0	3.62	21.0	4.42	22.4	4.85	23.8	5.31	26.8	6.27	29.7	7.34
	31	15.1	3.09	18.0	3.85	21.0	4.71	22.4	5.17	23.8	5.66	26.8	6.69	29.2	7.60
	33	15.1	3.28	18.0	4.29	21.0	5.02	22.4	5.51	23.8	6.03	26.8	7.14	28.8	7.88
	35	15.1	3.48	18.0	4.29	21.0	5.34	22.4	5.87	23.8	6.42	26.8	7.62	28.3	8.17
	37	15.1	3.69	18.0	4.62	21.0	5.68	22.0	6.26	23.8	6.84	26.8	8.12	27.9	8.47
	39	15.1	3.91	18.0	4.91	21.0	6.04	21.7	6.66	23.8	7.28	26.8	8.64	27.4	8.78
	41	14.3	4.39	17.1	5.41	19.9	6.72	21.3	6.81	22.6	7.45	25.5	8.84	27.0	9.47
	44	13.3	4.77	16.2	5.88	19.0	7.47	20.4	7.70	21.7	8.03	24.5	9.30	26.0	9.96
	47	12.5	6.35	15.7	7.83	18.3	7.84	19.7	7.81	20.9	8.54	23.7	9.98	25.2	10.70
	50	11.5	6.23	14.0	7.68	16.4	8.27	17.5	8.46	18.7	9.12	21.2	10.67	22.6	11.19
	52	8.7	5.26	10.4	6.48	12.3	7.04	13.2	7.70	14.3	8.22	16.9	9.53	18.4	9.80
70%	-5	13.2	1.59	16.4	1.97	21.4	2.39	23.4	2.62	25.0	2.85	28.0	3.36	31.1	3.91
	0	13.2	1.59	16.4	1.97	21.4	2.39	23.4	2.62	25.0	2.86	28.0	3.37	31.1	3.92
	4	13.2	1.60	16.4	1.98	21.4	2.40	23.4	2.63	25.0	2.87	28.0	3.38	31.1	3.93
	7	13.2	1.63	16.4	2.02	21.4	2.45	23.4	2.68	25.0	2.92	27.8	3.44	30.7	4.00
	10	13.2	1.97	15.7	2.33	18.3	2.71	19.6	2.92	20.9	3.13	23.4	3.56	26.0	4.00
	12	13.2	1.99	15.7	2.36	18.3	2.77	19.6	2.98	20.9	3.18	23.4	3.62	26.0	4.07
	14	13.2	2.02	15.7	2.40	18.3	2.81	19.6	3.02	20.9	3.24	23.4	3.69	26.0	4.15
	16	13.2	2.05	15.7	2.45	18.3	2.87	19.6	3.09	20.9	3.30	23.4	3.76	26.0	4.23
	18	13.2	2.09	15.7	2.49	18.3	2.92	19.6	3.14	20.9	3.36	23.4	3.83	26.0	4.32
	20	13.2	2.12	15.7	2.54	18.3	2.98	19.6	3.20	20.9	3.43	23.4	3.91	26.0	4.44
	21	13.2	2.14	15.7	2.56	18.3	3.00	19.6	3.23	20.9	3.46	23.4	3.95	26.0	4.59
	23	13.2	2.17	15.7	2.60	18.3	3.06	19.6	3.34	20.9	3.63	23.4	4.25	26.0	4.92
	25	13.2	2.22	15.7	2.71	18.3	3.26	19.6	3.57	20.9	3.88	23.4	4.55	26.0	5.26
	27	13.2	2.35	15.7	2.89	18.3	3.48	19.6	3.80	20.9	4.14	23.4	4.85	26.0	5.62
	29	13.2	2.49	15.7	3.06	18.3	3.70	19.6	4.05	20.9	4.40	23.4	5.17	26.0	6.01
	31	13.2	2.64	15.7	3.25	18.3	3.94	19.6	4.30	20.9	4.69	23.4	5.51	26.0	6.40
	33	13.2	2.80	15.7	3.46	18.3	4.19	19.6	4.58	20.9	5.00	23.4	5.87	26.0	6.83
	35	13.2	2.96	15.7	3.67	18.3	4.45	19.6	4.88	20.9	5.31	23.4	6.26	26.0	7.28
	37	13.2	3.13	15.7	3.89	18.3	4.73	19.2	5.18	20.9	5.65	23.4	6.66	26.0	7.75
	39	13.2	3.32	15.7	4.12	18.3	5.02	19.0	5.50	20.9	6.01	23.4	7.08	26.0	8.26
	41	12.5	3.74	15.0	4.62	17.4	5.60	18.6	5.66	19.8	6.16	22.3	7.26	24.8	8.44
	44	11.6	4.06	14.2	5.02	16.6	6.23	17.8	6.39	19.0	6.64	21.5	7.64	23.9	8.88
	47	11.0	5.40	13.7	6.69	16.0	6.54	17.2	6.48	18.4	7.07	20.7	8.20	23.1	9.54
	50	10.1	5.31	12.3	6.56	14.3	6.89	15.3	7.02	16.4	7.55	18.5	8.76	20.8	9.97
	52	7.6	4.48	9.1	5.54	10.7	5.87	11.6	6.39	12.5	6.80	14.8	7.82	16.9	8.74

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
60%	-5	11.3	1.34	14.0	1.63	18.4	1.96	20.0	2.13	21.5	2.32	24.0	2.71	26.6	3.13
	0	11.3	1.34	14.0	1.64	18.4	1.96	20.0	2.14	21.5	2.32	24.0	2.71	26.6	3.13
	4	11.3	1.35	14.0	1.64	18.4	1.97	20.0	2.15	21.5	2.33	24.0	2.72	26.6	3.14
	7	11.3	1.37	14.0	1.67	18.4	2.00	20.0	2.19	21.5	2.37	23.8	2.77	26.3	3.20
	10	11.3	1.70	13.5	2.00	15.7	2.32	16.8	2.48	17.9	2.65	20.1	3.00	22.3	3.36
	12	11.3	1.73	13.5	2.03	15.7	2.36	16.8	2.53	17.9	2.69	20.1	3.05	22.3	3.41
	14	11.3	1.76	13.5	2.06	15.7	2.39	16.8	2.57	17.9	2.75	20.1	3.11	22.3	3.48
	16	11.3	1.78	13.5	2.10	15.7	2.44	16.8	2.61	17.9	2.79	20.1	3.16	22.3	3.55
	18	11.3	1.81	13.5	2.13	15.7	2.48	16.8	2.66	17.9	2.84	20.1	3.22	22.3	3.61
	20	11.3	1.83	13.5	2.17	15.7	2.53	16.8	2.71	17.9	2.90	20.1	3.28	22.3	3.69
	21	11.3	1.86	13.5	2.19	15.7	2.55	16.8	2.73	17.9	2.92	20.1	3.32	22.3	3.72
	23	11.3	1.88	13.5	2.23	15.7	2.59	16.8	2.79	17.9	2.98	20.1	3.45	22.3	3.96
	25	11.3	1.91	13.5	2.27	15.7	2.69	16.8	2.92	17.9	3.16	20.1	3.68	22.3	4.23
	27	11.3	1.99	13.5	2.40	15.7	2.87	16.8	3.12	17.9	3.37	20.1	3.92	22.3	4.51
	29	11.3	2.10	13.5	2.55	15.7	3.05	16.8	3.32	17.9	3.59	20.1	4.18	22.3	4.82
	31	11.3	2.23	13.5	2.71	15.7	3.24	16.8	3.52	17.9	3.82	20.1	4.45	22.3	5.13
	33	11.3	2.35	13.5	2.87	15.7	3.44	16.8	3.74	17.9	4.06	20.1	4.73	22.3	5.47
	35	11.3	2.49	13.5	3.04	15.7	3.65	16.8	3.97	17.9	4.32	20.1	5.04	22.3	5.82
	37	11.3	2.64	13.5	3.22	15.7	3.86	16.5	4.22	17.9	4.58	20.1	5.36	22.3	6.19
	39	11.3	2.78	13.5	3.40	15.7	4.10	16.3	4.47	17.9	4.86	20.1	5.69	22.3	6.59
	41	10.7	3.14	12.8	3.83	14.9	4.59	16.0	4.61	17.0	5.01	19.1	5.85	21.3	6.75
	44	10.0	3.41	12.1	4.17	14.2	5.10	15.3	5.21	16.3	5.39	18.4	6.15	20.5	7.10
	47	9.4	4.54	11.7	5.54	13.8	5.36	14.8	5.29	15.7	5.74	17.8	6.60	19.8	7.62
	50	8.6	4.46	10.5	5.44	12.3	5.65	13.2	5.72	14.0	6.13	15.9	7.06	17.8	7.97
	52	6.5	3.76	7.8	4.59	9.2	4.81	9.9	5.21	10.7	5.52	12.7	6.30	14.5	6.98
50%	-5	9.5	1.11	11.7	1.33	15.3	1.57	16.7	1.70	17.8	1.83	20.0	2.12	22.2	2.43
	0	9.5	1.11	11.7	1.33	15.3	1.57	16.7	1.70	17.8	1.84	20.0	2.13	22.2	2.43
	4	9.5	1.11	11.7	1.33	15.3	1.58	16.7	1.71	17.8	1.84	20.0	2.13	22.2	2.44
	7	9.5	1.14	11.7	1.36	15.3	1.61	16.7	1.74	17.8	1.88	19.8	2.17	21.9	2.49
	10	9.5	1.47	11.2	1.70	13.1	1.94	14.0	2.08	14.9	2.20	16.7	2.47	18.6	2.76
	12	9.5	1.48	11.2	1.72	13.1	1.98	14.0	2.10	14.9	2.24	16.7	2.51	18.6	2.80
	14	9.5	1.50	11.2	1.75	13.1	2.00	14.0	2.14	14.9	2.27	16.7	2.56	18.6	2.85
	16	9.5	1.53	11.2	1.77	13.1	2.03	14.0	2.17	14.9	2.31	16.7	2.60	18.6	2.90
	18	9.5	1.55	11.2	1.80	13.1	2.06	14.0	2.21	14.9	2.35	16.7	2.65	18.6	2.95
	20	9.5	1.57	11.2	1.82	13.1	2.10	14.0	2.25	14.9	2.39	16.7	2.70	18.6	3.01
	21	9.5	1.58	11.2	1.84	13.1	2.12	14.0	2.26	14.9	2.42	16.7	2.72	18.6	3.04
	23	9.5	1.60	11.2	1.87	13.1	2.15	14.0	2.31	14.9	2.46	16.7	2.77	18.6	3.11
	25	9.5	1.63	11.2	1.90	13.1	2.20	14.0	2.35	14.9	2.54	16.7	2.91	18.6	3.32
	27	9.5	1.66	11.2	1.98	13.1	2.32	14.0	2.50	14.9	2.69	16.7	3.10	18.6	3.54
	29	9.5	1.75	11.2	2.09	13.1	2.46	14.0	2.66	14.8	2.87	16.7	3.29	18.6	3.77
	31	9.5	1.84	11.2	2.21	13.1	2.62	14.0	2.82	14.8	3.04	16.7	3.50	18.6	4.01
	33	9.5	1.95	11.2	2.34	13.1	2.77	14.0	2.99	14.8	3.23	16.7	3.72	18.6	4.26
	35	9.5	2.06	11.2	2.47	13.1	2.92	14.0	3.16	14.8	3.41	16.7	3.95	18.6	4.52
	37	9.5	2.17	11.2	2.61	13.1	3.10	13.7	3.35	14.8	3.62	16.7	4.19	18.6	4.81
	39	9.5	2.29	11.2	2.76	13.1	3.27	13.6	3.55	14.8	3.84	16.7	4.45	18.6	5.11
	41	8.9	2.60	10.7	3.11	12.4	3.68	13.3	3.67	14.1	3.96	15.9	4.59	17.7	5.25
	44	8.3	2.83	10.1	3.38	11.9	4.09	12.7	4.14	13.6	4.27	15.3	4.82	17.1	5.52
	47	7.8	3.76	9.8	4.50	11.5	4.29	12.3	4.21	13.1	4.54	14.8	5.18	16.6	5.93
	50	7.2	3.69	8.8	4.42	10.2	4.53	11.0	4.55	11.7	4.85	13.2	5.53	14.9	6.20
	52	5.4	3.12	6.5	3.73	7.7	3.86	8.3	4.14	8.9	4.37	10.5	4.94	12.1	5.43

GMV-Q335WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
135%	-5	29.4	3.67	35.1	4.47	40.7	4.52	42.2	4.55	43.1	4.57	44.1	4.63	45.5	4.68
	0	29.4	3.68	35.1	4.48	40.7	4.53	42.2	4.56	43.1	4.58	44.1	4.64	45.5	4.68
	4	29.4	3.69	35.1	4.50	40.7	4.55	42.2	4.57	43.1	4.60	44.1	4.65	45.5	4.70
	7	29.4	3.76	35.1	4.58	40.7	4.63	42.2	4.66	43.1	4.68	43.8	4.74	44.9	4.79
	10	29.4	3.83	35.1	4.68	40.7	5.56	42.2	5.68	42.7	5.57	43.8	5.34	44.9	5.09
	12	29.4	3.89	35.1	4.77	40.7	5.67	41.6	5.65	42.2	5.54	43.2	5.29	44.3	5.21
	14	29.4	3.97	35.1	4.86	40.6	5.74	41.2	5.63	41.6	5.51	42.7	5.46	43.8	5.52
	16	29.4	4.04	35.1	4.96	40.1	5.72	40.6	5.67	41.0	5.70	42.1	5.75	43.2	5.81
	18	29.4	4.12	35.1	5.06	39.5	5.93	40.0	5.96	40.6	6.00	41.6	6.05	42.7	6.11
	20	29.4	4.21	35.1	5.38	38.9	6.22	39.5	6.26	40.0	6.29	41.0	6.34	42.1	6.41
	21	29.4	4.32	35.1	5.57	38.6	6.37	39.2	6.40	39.7	6.43	40.8	6.50	41.9	6.56
	23	29.4	4.63	35.1	5.98	38.2	6.66	38.6	6.69	39.1	6.73	40.2	6.79	41.3	6.86
	25	29.4	4.95	35.1	6.40	37.6	6.95	38.2	6.98	38.6	7.03	39.7	7.09	40.8	7.16
	27	29.4	5.28	35.1	6.85	37.1	6.12	37.6	7.28	38.0	7.32	39.1	7.40	40.2	7.47
	29	29.4	5.64	35.1	7.32	36.5	7.53	37.0	7.58	37.6	7.62	38.6	7.70	39.7	7.78
	31	29.4	6.02	34.9	7.74	35.9	7.83	36.5	7.88	37.0	7.91	38.0	8.00	39.1	8.09
	33	29.4	6.41	34.3	8.03	35.4	8.11	35.9	8.17	36.5	8.21	37.6	8.30	38.5	8.40
	35	29.4	6.84	33.7	8.33	34.8	8.43	35.4	8.47	35.9	8.52	37.0	8.62	38.0	8.71
	37	29.4	7.27	33.3	8.63	34.3	8.73	34.8	8.77	35.4	8.83	36.4	8.93	37.4	9.03
	39	29.4	7.74	32.7	8.92	33.7	9.02	34.3	9.08	34.8	9.13	35.9	9.23	37.0	9.34
	41	27.8	8.61	32.1	10.49	33.1	10.62	33.7	9.83	34.1	9.88	35.2	9.99	36.3	10.10
	44	25.9	9.37	30.4	11.41	31.5	11.80	32.2	11.10	32.8	10.64	33.9	10.51	35.0	10.62
	47	24.4	12.46	29.4	15.18	30.5	12.39	31.1	11.27	31.6	11.33	32.7	11.29	33.9	11.40
	50	22.4	12.24	26.3	14.90	27.2	13.06	27.7	12.20	28.2	12.09	29.2	12.06	30.4	11.93
	52	17.0	10.32	19.6	12.57	20.4	11.12	20.9	11.10	21.5	10.90	23.3	10.77	24.7	10.45

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
120%	-5	27.2	3.27	33.6	4.23	40.0	4.49	41.4	4.52	42.4	4.54	43.3	4.59	44.5	4.64
	0	27.2	3.27	33.6	4.24	40.0	4.50	41.4	4.53	42.4	4.55	43.3	4.60	44.5	4.65
	4	27.2	3.29	33.6	4.25	40.0	4.52	41.4	4.54	42.4	4.57	43.3	4.62	44.5	4.66
	7	27.2	3.35	33.6	4.33	40.0	4.60	41.4	4.63	42.4	4.65	42.9	4.70	43.9	4.75
	10	27.2	3.49	32.3	4.26	37.6	5.07	40.2	5.48	42.1	5.72	43.1	5.49	44.0	5.28
	12	27.2	3.56	32.3	4.34	37.6	5.17	40.2	5.58	41.5	5.68	42.5	5.47	43.4	5.25
	14	27.2	3.63	32.3	4.43	37.6	5.27	40.2	5.70	40.9	5.65	42.0	5.44	43.0	5.47
	16	27.2	3.69	32.3	4.52	37.6	5.37	40.0	5.74	40.4	5.66	41.4	5.72	42.4	5.76
	18	27.2	3.76	32.3	4.61	37.6	5.56	39.4	5.93	39.8	5.95	40.8	6.01	41.9	6.06
	20	27.2	3.84	32.3	4.79	37.6	5.98	38.9	6.22	39.4	6.24	40.3	6.30	41.3	6.36
	21	27.2	3.87	32.3	4.96	37.6	6.19	38.5	6.37	39.0	6.39	40.1	6.45	41.0	6.51
	23	27.2	4.14	32.3	5.32	37.6	6.62	38.0	6.65	38.5	6.68	39.5	6.75	40.4	6.80
	25	27.2	4.42	32.3	5.68	37.0	6.92	37.4	6.94	37.9	6.97	39.0	7.04	40.0	7.11
	27	27.2	4.72	32.3	6.08	36.5	7.20	37.0	7.24	37.4	7.27	38.4	7.34	39.4	7.41
	29	27.2	5.04	32.3	6.49	35.9	7.49	36.4	7.53	36.8	7.56	37.8	7.64	38.9	7.71
	31	27.2	5.37	32.3	6.93	35.4	7.79	35.9	7.82	36.4	7.87	37.3	7.94	38.3	8.02
	33	27.2	5.72	32.3	7.40	34.8	8.08	35.3	8.12	35.8	8.16	36.7	8.25	37.7	8.33
	35	27.2	6.09	32.3	7.88	34.2	8.37	34.7	8.41	35.3	8.46	36.3	8.55	37.2	8.64
	37	27.2	6.48	32.3	8.39	33.7	8.67	34.2	8.72	34.7	8.76	35.7	8.85	36.6	8.95
	39	27.2	6.89	32.2	8.86	33.1	8.96	33.6	9.02	34.1	9.06	35.2	9.16	36.1	9.25
	41	25.7	7.67	30.7	9.93	32.5	10.55	33.0	9.76	33.6	9.81	34.5	9.92	35.5	10.02
	44	23.9	8.34	29.1	10.79	31.0	11.72	31.6	11.02	32.2	10.57	33.2	10.43	34.2	10.54
	47	22.5	11.10	28.1	14.36	29.9	12.30	30.5	11.19	31.1	11.25	32.1	11.20	33.1	11.32
	50	20.6	10.90	25.2	14.10	26.7	12.97	27.2	12.12	27.7	12.01	28.6	11.97	29.8	11.83
	52	15.6	9.19	18.7	11.90	20.0	11.05	20.5	11.02	21.2	10.83	22.8	10.69	24.2	10.37
110%	-5	24.9	2.89	30.8	3.72	39.4	4.46	40.7	4.49	41.5	4.51	42.3	4.55	43.5	4.60
	0	24.9	2.90	30.8	3.73	39.4	4.47	40.7	4.50	41.5	4.52	42.3	4.56	43.5	4.61
	4	24.9	2.91	30.8	3.74	39.4	4.49	40.7	4.51	41.5	4.54	42.3	4.58	43.5	4.62
	7	24.9	2.96	30.8	3.81	39.4	4.57	40.7	4.60	41.5	4.62	41.9	4.67	42.9	4.71
	10	24.9	3.17	29.7	3.86	34.5	4.59	36.8	4.96	39.2	5.34	42.2	5.66	43.2	5.47
	12	24.9	3.23	29.7	3.94	34.5	4.68	36.8	5.06	39.2	5.44	41.8	5.64	42.6	5.44
	14	24.9	3.29	29.7	4.01	34.5	4.77	36.8	5.15	39.2	5.54	41.2	5.64	42.1	5.43
	16	24.9	3.35	29.7	4.08	34.5	4.86	36.8	5.25	39.2	5.65	40.7	5.67	41.5	5.73
	18	24.9	3.41	29.7	4.16	34.5	4.96	36.8	5.39	39.2	5.92	40.1	5.96	41.0	6.02
	20	24.9	3.48	29.7	4.25	34.5	5.25	36.8	5.80	38.6	6.21	39.6	6.26	40.4	6.31
	21	24.9	3.51	29.7	4.38	34.5	5.44	36.8	6.01	38.4	6.36	39.2	6.40	40.2	6.46
	23	24.9	3.68	29.7	4.69	34.5	5.83	36.8	6.45	37.8	6.64	38.8	6.70	39.6	6.76
	25	24.9	3.92	29.7	5.01	34.5	6.23	36.8	6.90	37.3	6.93	38.2	6.99	39.1	7.05
	27	24.9	4.19	29.7	5.36	34.5	6.67	36.3	7.20	36.7	7.22	37.7	7.28	38.5	7.35
	29	24.9	4.46	29.7	5.72	34.5	7.13	35.8	7.49	36.3	7.52	37.1	7.59	38.0	7.65
	31	24.9	4.76	29.7	6.10	34.5	7.61	35.2	7.78	35.7	7.81	36.6	7.88	37.4	7.96
	33	24.9	5.06	29.7	6.50	34.2	8.02	34.7	8.07	35.2	8.10	36.0	8.18	37.0	8.26
	35	24.9	5.38	29.7	6.93	33.7	8.31	34.1	8.36	34.6	8.40	35.4	8.48	36.4	8.56
	37	24.9	5.73	29.7	7.37	33.1	8.62	33.6	8.65	34.0	8.69	34.9	8.78	35.8	8.86
	39	24.9	6.09	29.7	7.86	32.5	8.91	33.0	8.95	33.5	9.00	34.3	9.09	35.3	9.18
	41	23.5	6.78	28.2	8.73	32.1	10.48	32.4	9.70	32.9	9.75	33.7	9.84	34.7	9.93
	44	21.9	7.37	26.7	9.49	30.5	11.64	31.0	10.95	31.6	10.50	32.4	10.35	33.5	10.44
	47	20.7	9.81	25.8	12.63	29.5	12.22	29.9	11.12	30.4	11.18	31.3	11.11	32.4	11.21
	50	18.9	9.63	23.1	12.40	26.3	12.89	26.7	12.04	27.1	11.93	28.0	11.87	29.1	11.73
	52	14.3	8.13	17.2	10.46	19.7	10.97	20.1	10.95	20.7	10.76	22.3	10.60	23.6	10.27

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
100%	-5	22.6	2.53	28.0	3.24	36.6	4.04	39.9	4.46	40.6	4.48	41.4	4.52	42.4	4.56
	0	22.6	2.53	28.0	3.24	36.6	4.04	39.9	4.47	40.6	4.49	41.4	4.53	42.4	4.57
	4	22.6	2.54	28.0	3.25	36.6	4.06	39.9	4.48	40.6	4.51	41.4	4.55	42.4	4.59
	7	22.6	2.59	28.0	3.31	36.6	4.13	39.9	4.57	40.6	4.59	41.1	4.63	41.9	4.67
	10	22.6	2.86	26.9	3.48	31.3	4.12	33.5	4.44	35.6	4.80	40.1	5.43	42.3	5.65
	12	22.6	2.90	26.9	3.53	31.3	4.17	33.5	4.50	35.6	4.89	40.1	5.53	41.7	5.60
	14	22.6	2.95	26.9	3.59	31.3	4.24	33.5	4.59	35.6	4.98	40.1	5.62	41.3	5.56
	16	22.6	3.02	26.9	3.67	31.3	4.34	33.5	4.69	35.6	5.09	39.9	5.75	40.7	5.68
	18	22.6	3.09	26.9	3.75	31.3	4.42	33.5	4.78	35.6	5.19	39.4	5.86	40.2	5.95
	20	22.6	3.13	26.9	3.81	31.3	4.57	33.5	5.03	35.6	5.52	38.8	6.17	39.6	6.26
	21	22.6	3.17	26.9	3.85	31.3	4.72	33.5	5.20	35.6	5.71	38.5	6.38	39.4	6.44
	23	22.6	3.25	26.9	4.11	31.3	5.08	33.5	5.59	35.6	6.14	38.1	6.75	38.8	6.81
	25	22.6	3.45	26.9	4.37	31.3	5.40	33.5	5.95	35.6	6.57	37.4	6.99	38.3	7.06
	27	22.6	3.69	26.9	4.67	31.3	5.80	33.5	6.39	35.6	7.05	36.8	7.24	37.7	7.31
	29	22.6	3.91	26.9	4.99	31.3	6.20	33.5	6.83	35.5	7.47	36.3	7.59	37.2	7.66
	31	22.6	4.16	26.9	5.31	31.3	6.61	33.5	7.36	35.1	7.77	35.5	7.90	36.6	7.97
	33	22.6	4.42	26.9	5.66	31.3	7.05	33.5	7.79	34.5	8.05	35.3	8.12	36.1	8.20
	35	22.6	4.71	26.9	6.03	31.3	7.51	33.5	8.30	33.9	8.34	34.7	8.42	35.5	8.50
	37	22.6	5.01	26.9	6.42	31.3	8.00	32.9	8.60	33.4	8.64	34.2	8.71	35.0	8.78
	39	22.6	5.34	26.9	6.84	31.3	8.52	32.5	8.89	32.6	8.93	33.7	8.99	34.2	9.07
	41	21.4	5.93	25.6	7.59	29.8	9.47	31.8	9.63	32.2	9.68	33.0	9.77	33.8	9.85
	44	19.9	6.45	24.2	8.26	28.4	10.52	30.5	10.88	30.9	10.43	31.8	10.27	32.7	10.36
	47	18.8	8.58	23.4	10.99	27.4	11.05	29.4	11.04	29.8	11.10	30.7	11.03	31.6	11.13
	50	17.2	8.42	21.0	10.79	24.5	11.65	26.2	11.96	26.6	11.85	27.4	11.79	28.4	11.64
	52	13.0	7.11	15.6	9.10	18.3	9.92	19.8	10.88	20.3	10.68	21.8	10.52	23.1	10.19
90%	-5	20.4	2.21	25.2	2.79	33.0	3.45	36.0	3.81	38.5	4.19	40.6	4.48	41.5	4.52
	0	20.4	2.21	25.2	2.80	33.0	3.45	36.0	3.81	38.5	4.20	40.6	4.49	41.5	4.53
	4	20.4	2.22	25.2	2.81	33.0	3.47	36.0	3.83	38.5	4.21	40.6	4.51	41.5	4.55
	7	20.4	2.26	25.2	2.86	33.0	3.53	36.0	3.90	38.5	4.29	40.2	4.59	40.9	4.63
	10	20.4	2.50	24.2	3.00	28.2	3.52	30.1	3.96	32.1	4.22	36.1	4.83	39.9	5.47
	12	20.4	2.53	24.2	3.04	28.2	3.56	30.1	4.01	32.1	4.30	36.1	4.91	39.9	5.55
	14	20.4	2.58	24.2	3.09	28.2	3.62	30.1	4.07	32.1	4.37	36.1	5.00	39.9	5.64
	16	20.4	2.63	24.2	3.16	28.2	3.70	30.1	4.17	32.1	4.47	36.1	5.11	39.8	5.74
	18	20.4	2.69	24.2	3.23	28.2	3.78	30.1	4.25	32.1	4.56	36.1	5.23	39.5	5.95
	20	20.4	2.73	24.2	3.28	28.2	3.90	30.1	4.33	32.1	4.75	36.1	5.62	38.8	6.20
	21	20.4	2.76	24.2	3.32	28.2	4.03	30.1	4.48	32.1	4.91	36.1	5.81	38.5	6.34
	23	20.4	2.83	24.2	3.54	28.2	4.34	30.1	4.81	32.1	5.26	36.1	6.24	37.9	6.67
	25	20.4	3.01	24.2	3.77	28.2	4.62	30.1	5.14	32.1	5.62	36.1	6.68	37.4	6.94
	27	20.4	3.22	24.2	4.03	28.2	4.95	30.1	5.48	32.1	6.02	36.1	7.13	36.8	7.24
	29	20.4	3.41	24.2	4.30	28.2	5.30	30.1	5.86	32.1	6.42	35.7	7.47	36.4	7.54
	31	20.4	3.63	24.2	4.58	28.2	5.65	30.1	6.25	32.1	6.86	35.1	7.74	35.8	7.84
	33	20.4	3.86	24.2	4.88	28.2	6.02	30.1	6.65	32.1	7.29	34.6	8.05	35.3	8.13
	35	20.4	4.11	24.2	5.20	28.2	6.42	30.1	7.09	32.1	7.80	34.0	8.35	34.7	8.42
	37	20.4	4.37	24.2	5.54	28.2	6.83	29.6	7.35	32.1	8.35	33.4	8.65	34.2	8.62
	39	20.4	4.66	24.2	5.90	28.2	7.28	29.2	7.59	32.1	8.85	32.9	8.97	33.6	8.94
	41	19.2	5.17	23.0	6.55	26.8	8.09	28.7	8.23	30.5	9.05	32.3	9.68	33.1	9.77
	44	17.9	5.63	21.8	7.12	25.5	8.98	27.4	9.29	29.3	9.75	31.1	10.18	31.9	10.27
	47	16.9	7.49	21.1	9.48	24.7	9.43	26.5	9.43	28.2	10.37	30.1	10.93	30.9	11.03
	50	15.5	7.35	18.9	9.30	22.0	9.95	23.6	10.21	25.2	11.08	26.8	11.68	27.8	11.54
	52	11.7	6.20	14.1	7.85	16.5	8.47	17.8	9.29	19.3	9.98	21.4	10.43	22.6	10.11

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
80%	-5	18.1	1.90	22.4	2.35	29.3	2.92	32.0	3.21	34.1	3.51	38.3	4.17	40.5	4.47
	0	18.1	1.91	22.4	2.35	29.3	2.93	32.0	3.22	34.1	3.52	38.3	4.18	40.5	4.48
	4	18.1	1.92	22.4	2.36	29.3	2.94	32.0	3.23	34.1	3.53	38.3	4.19	40.5	4.49
	7	18.1	1.95	22.4	2.41	29.3	2.99	32.0	3.29	34.1	3.60	38.0	4.27	39.9	4.58
	10	18.1	2.27	21.5	2.72	25.1	3.20	26.8	3.45	28.5	3.69	32.1	4.22	35.5	4.90
	12	18.1	2.31	21.5	2.76	25.1	3.26	26.8	3.51	28.5	3.76	32.1	4.29	35.5	4.86
	14	18.1	2.35	21.5	2.82	25.1	3.31	26.8	3.57	28.5	3.83	32.1	4.36	35.5	4.97
	16	18.1	2.38	21.5	2.86	25.1	3.38	26.8	3.64	28.5	3.89	32.1	4.46	35.5	5.15
	18	18.1	2.43	21.5	2.92	25.1	3.46	26.8	3.72	28.5	3.96	32.1	4.56	35.5	5.50
	20	18.1	2.47	21.5	2.98	25.1	3.51	26.8	3.78	28.5	4.05	32.1	4.73	35.5	5.70
	21	18.1	2.50	21.5	3.00	25.1	3.55	26.8	3.83	28.5	4.14	32.1	4.90	35.5	6.11
	23	18.1	2.54	21.5	3.07	25.1	3.72	26.8	4.07	28.5	4.43	32.1	5.24	35.5	6.53
	25	18.1	2.62	21.5	3.26	25.1	3.97	26.8	4.35	28.5	4.73	32.1	5.61	35.5	6.97
	27	18.1	2.79	21.5	3.47	25.1	4.23	26.8	4.64	28.5	5.08	32.1	5.99	35.5	7.22
	29	18.1	2.97	21.5	3.69	25.1	4.51	26.8	4.95	28.4	5.41	32.1	6.39	35.5	7.48
	31	18.1	3.14	21.5	3.93	25.1	4.80	26.8	5.27	28.4	5.77	32.1	6.82	34.9	7.75
	33	18.1	3.35	21.5	4.38	25.1	5.11	26.8	5.62	28.4	6.14	32.1	7.28	34.5	8.03
	35	18.1	3.55	21.5	4.38	25.1	5.44	26.8	5.99	28.4	6.54	32.1	7.77	33.9	8.32
	37	18.1	3.76	21.5	4.71	25.1	5.79	26.3	6.38	28.4	6.97	32.1	8.27	33.4	8.63
	39	18.1	3.98	21.5	5.00	25.1	6.15	26.0	6.79	28.4	7.42	32.1	8.81	32.8	8.95
	41	17.1	4.47	20.5	5.51	23.8	6.85	25.5	6.94	27.0	7.59	30.5	9.01	32.3	9.65
	44	15.9	4.86	19.4	5.99	22.7	7.61	24.4	7.84	26.0	8.18	29.4	9.48	31.1	10.15
	47	15.0	6.47	18.7	7.98	21.9	7.99	23.5	7.96	25.0	8.70	28.4	10.17	30.1	10.90
	50	13.7	6.35	16.8	7.83	19.6	8.43	21.0	8.62	22.3	9.29	25.3	10.87	27.1	11.40
	52	10.4	5.36	12.5	6.61	14.7	7.18	15.8	7.84	17.1	8.38	20.2	9.71	22.0	9.99
70%	-5	15.8	1.62	19.6	2.01	25.6	2.43	28.0	2.67	29.9	2.91	33.5	3.43	37.2	3.98
	0	15.8	1.63	19.6	2.01	25.6	2.44	28.0	2.67	29.9	2.91	33.5	3.43	37.2	3.99
	4	15.8	1.63	19.6	2.02	25.6	2.45	28.0	2.68	29.9	2.92	33.5	3.44	37.2	4.01
	7	15.8	1.66	19.6	2.06	25.6	2.49	28.0	2.73	29.9	2.98	33.2	3.51	36.7	4.08
	10	15.8	2.00	18.8	2.37	21.9	2.76	23.4	2.98	25.0	3.19	28.0	3.63	31.1	4.07
	12	15.8	2.03	18.8	2.41	21.9	2.82	23.4	3.03	25.0	3.25	28.0	3.69	31.1	4.15
	14	15.8	2.06	18.8	2.45	21.9	2.86	23.4	3.08	25.0	3.30	28.0	3.76	31.1	4.23
	16	15.8	2.09	18.8	2.50	21.9	2.92	23.4	3.14	25.0	3.37	28.0	3.83	31.1	4.31
	18	15.8	2.13	18.8	2.54	21.9	2.98	23.4	3.20	25.0	3.42	28.0	3.91	31.1	4.40
	20	15.8	2.16	18.8	2.58	21.9	3.03	23.4	3.26	25.0	3.49	28.0	3.98	31.1	4.52
	21	15.8	2.18	18.8	2.61	21.9	3.05	23.4	3.29	25.0	3.52	28.0	4.03	31.1	4.68
	23	15.8	2.22	18.8	2.65	21.9	3.12	23.4	3.40	25.0	3.70	28.0	4.33	31.1	5.01
	25	15.8	2.26	18.8	2.76	21.9	3.32	23.4	3.64	25.0	3.95	28.0	4.63	31.1	5.36
	27	15.8	2.39	18.8	2.94	21.9	3.55	23.4	3.87	25.0	4.22	28.0	4.95	31.1	5.73
	29	15.8	2.54	18.8	3.12	21.9	3.77	23.4	4.13	25.0	4.49	28.0	5.27	31.1	6.12
	31	15.8	2.69	18.8	3.31	21.9	4.02	23.4	4.39	25.0	4.78	28.0	5.62	31.1	6.52
	33	15.8	2.85	18.8	3.52	21.9	4.27	23.4	4.67	25.0	5.09	28.0	5.99	31.1	6.96
	35	15.8	3.02	18.8	3.74	21.9	4.53	23.4	4.97	25.0	5.42	28.0	6.38	31.1	7.42
	37	15.8	3.19	18.8	3.96	21.9	4.82	23.0	5.28	25.0	5.76	28.0	6.79	31.1	7.90
	39	15.8	3.38	18.8	4.20	21.9	5.11	22.7	5.61	25.0	6.12	28.0	7.22	31.1	8.41
	41	15.0	3.81	17.9	4.71	20.8	5.71	22.3	5.76	23.7	6.28	26.7	7.40	29.6	8.61
	44	13.9	4.14	17.0	5.12	19.9	6.34	21.3	6.51	22.8	6.77	25.7	7.78	28.6	9.05
	47	13.1	5.51	16.4	6.81	19.2	6.66	20.6	6.61	22.0	7.20	24.8	8.36	27.7	9.72
	50	12.0	5.41	14.7	6.69	17.1	7.02	18.4	7.15	19.6	7.69	22.2	8.93	24.9	10.16
	52	9.1	4.56	10.9	5.64	12.8	5.98	13.8	6.51	15.0	6.93	17.7	7.97	20.2	8.90

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
60%	-5	13.6	1.36	16.8	1.66	22.0	1.99	24.0	2.18	25.7	2.36	28.7	2.76	31.9	3.18
	0	13.6	1.37	16.8	1.67	22.0	2.00	24.0	2.18	25.7	2.37	28.7	2.76	31.9	3.19
	4	13.6	1.37	16.8	1.67	22.0	2.01	24.0	2.19	25.7	2.37	28.7	2.77	31.9	3.20
	7	13.6	1.40	16.8	1.70	22.0	2.04	24.0	2.23	25.7	2.42	28.5	2.82	31.5	3.26
	10	13.6	1.73	16.2	2.04	18.8	2.36	20.1	2.53	21.4	2.70	24.0	3.05	26.7	3.42
	12	13.6	1.77	16.2	2.07	18.8	2.41	20.1	2.57	21.4	2.74	24.0	3.11	26.7	3.48
	14	13.6	1.79	16.2	2.10	18.8	2.44	20.1	2.62	21.4	2.80	24.0	3.17	26.7	3.55
	16	13.6	1.81	16.2	2.14	18.8	2.48	20.1	2.66	21.4	2.84	24.0	3.22	26.7	3.61
	18	13.6	1.85	16.2	2.17	18.8	2.53	20.1	2.71	21.4	2.90	24.0	3.28	26.7	3.68
	20	13.6	1.87	16.2	2.22	18.8	2.57	20.1	2.76	21.4	2.95	24.0	3.35	26.7	3.76
	21	13.6	1.89	16.2	2.23	18.8	2.60	20.1	2.79	21.4	2.98	24.0	3.38	26.7	3.79
	23	13.6	1.91	16.2	2.27	18.8	2.64	20.1	2.84	21.4	3.03	24.0	3.51	26.7	4.04
	25	13.6	1.95	16.2	2.32	18.8	2.74	20.1	2.98	21.4	3.22	24.0	3.75	26.7	4.31
	27	13.6	2.03	16.2	2.45	18.8	2.92	20.1	3.18	21.4	3.44	24.0	3.99	26.7	4.60
	29	13.6	2.14	16.2	2.60	18.8	3.11	20.1	3.38	21.4	3.66	24.0	4.26	26.7	4.91
	31	13.6	2.27	16.2	2.76	18.8	3.30	20.1	3.59	21.4	3.89	24.0	4.53	26.7	5.23
	33	13.6	2.39	16.2	2.92	18.8	3.50	20.1	3.82	21.4	4.14	24.0	4.82	26.7	5.57
	35	13.6	2.54	16.2	3.10	18.8	3.72	20.1	4.05	21.4	4.40	24.0	5.14	26.7	5.93
	37	13.6	2.69	16.2	3.28	18.8	3.94	19.7	4.30	21.4	4.67	24.0	5.46	26.7	6.31
	39	13.6	2.83	16.2	3.47	18.8	4.17	19.5	4.55	21.4	4.96	24.0	5.80	26.7	6.71
	41	12.8	3.20	15.3	3.91	17.9	4.68	19.1	4.70	20.3	5.10	22.9	5.96	25.4	6.88
	44	11.9	3.48	14.5	4.25	17.0	5.20	18.3	5.31	19.5	5.50	22.0	6.27	24.5	7.24
	47	11.3	4.63	14.1	5.65	16.5	5.46	17.6	5.39	18.8	5.85	21.3	6.73	23.7	7.77
	50	10.3	4.55	12.6	5.55	14.7	5.76	15.7	5.83	16.8	6.24	19.0	7.19	21.3	8.13
	52	7.8	3.84	9.4	4.68	11.0	4.90	11.9	5.31	12.8	5.63	15.1	6.42	17.3	7.12
50%	-5	11.3	1.13	14.0	1.35	18.3	1.60	20.0	1.73	21.3	1.87	23.9	2.16	26.6	2.48
	0	11.3	1.13	14.0	1.35	18.3	1.60	20.0	1.73	21.3	1.87	23.9	2.17	26.6	2.48
	4	11.3	1.14	14.0	1.36	18.3	1.61	20.0	1.74	21.3	1.88	23.9	2.18	26.6	2.49
	7	11.3	1.16	14.0	1.38	18.3	1.64	20.0	1.77	21.3	1.91	23.7	2.22	26.2	2.54
	10	11.3	1.50	13.5	1.73	15.7	1.98	16.7	2.11	17.8	2.24	20.0	2.52	22.3	2.81
	12	11.3	1.51	13.5	1.76	15.7	2.01	16.7	2.14	17.8	2.28	20.0	2.56	22.3	2.85
	14	11.3	1.53	13.5	1.78	15.7	2.04	16.7	2.18	17.8	2.32	20.0	2.61	22.3	2.91
	16	11.3	1.56	13.5	1.80	15.7	2.07	16.7	2.22	17.8	2.35	20.0	2.65	22.3	2.95
	18	11.3	1.58	13.5	1.84	15.7	2.10	16.7	2.25	17.8	2.39	20.0	2.70	22.3	3.01
	20	11.3	1.60	13.5	1.86	15.7	2.14	16.7	2.29	17.8	2.44	20.0	2.75	22.3	3.07
	21	11.3	1.61	13.5	1.88	15.7	2.16	16.7	2.31	17.8	2.46	20.0	2.78	22.3	3.10
	23	11.3	1.63	13.5	1.90	15.7	2.19	16.7	2.35	17.8	2.51	20.0	2.82	22.3	3.17
	25	11.3	1.66	13.5	1.94	15.7	2.24	16.7	2.39	17.8	2.58	20.0	2.97	22.3	3.38
	27	11.3	1.69	13.5	2.01	15.7	2.36	16.7	2.55	17.8	2.74	20.0	3.16	22.3	3.60
	29	11.3	1.78	13.5	2.13	15.7	2.51	16.7	2.71	17.8	2.92	20.0	3.36	22.3	3.84
	31	11.3	1.88	13.5	2.25	15.7	2.67	16.7	2.88	17.8	3.10	20.0	3.57	22.3	4.08
	33	11.3	1.99	13.5	2.38	15.7	2.82	16.7	3.04	17.8	3.29	20.0	3.79	22.3	4.34
	35	11.3	2.10	13.5	2.52	15.7	2.98	16.7	3.22	17.8	3.48	20.0	4.03	22.3	4.61
	37	11.3	2.22	13.5	2.66	15.7	3.16	16.5	3.41	17.8	3.69	20.0	4.27	22.3	4.90
	39	11.3	2.34	13.5	2.81	15.7	3.33	16.2	3.61	17.8	3.92	20.0	4.53	22.3	5.20
	41	10.7	2.65	12.8	3.17	14.9	3.75	15.9	3.74	16.9	4.04	19.1	4.67	21.2	5.35
	44	9.9	2.88	12.1	3.45	14.2	4.17	15.2	4.22	16.2	4.35	18.3	4.91	20.5	5.62
	47	9.4	3.84	11.7	4.59	13.7	4.38	14.7	4.29	15.6	4.63	17.7	5.28	19.8	6.04
	50	8.6	3.77	10.5	4.51	12.2	4.61	13.1	4.64	13.9	4.94	15.8	5.64	17.8	6.32
	52	6.5	3.18	7.8	3.80	9.2	3.93	9.9	4.22	10.7	4.45	12.6	5.04	14.5	5.53

GMV-Q400WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
135%	-5	35.1	5.26	41.9	6.41	48.6	6.49	50.4	6.52	51.4	6.55	52.7	6.63	54.3	6.70
	0	35.1	5.27	41.9	6.42	48.6	6.50	50.4	6.53	51.4	6.57	52.7	6.64	54.3	6.71
	4	35.1	5.29	41.9	6.44	48.6	6.52	50.4	6.56	51.4	6.59	52.7	6.67	54.3	6.74
	7	35.1	5.39	41.9	6.56	48.6	6.64	50.4	6.68	51.4	6.71	52.3	6.79	53.6	6.86
	10	35.1	5.49	41.9	6.70	48.6	7.97	50.4	8.15	51.0	7.99	52.3	7.65	53.6	7.30
	12	35.1	5.58	41.9	6.83	48.6	8.13	49.7	8.10	50.4	7.94	51.6	7.59	52.9	7.47
	14	35.1	5.69	41.9	6.96	48.4	8.23	49.1	8.07	49.7	7.89	51.0	7.83	52.3	7.91
	16	35.1	5.79	41.9	7.11	47.9	8.20	48.4	8.13	49.0	8.16	50.3	8.24	51.6	8.32
	18	35.1	5.90	41.9	7.25	47.1	8.50	47.7	8.55	48.4	8.60	49.7	8.68	51.0	8.76
	20	35.1	6.03	41.9	7.72	46.4	8.92	47.1	8.97	47.7	9.01	49.0	9.09	50.3	9.19
	21	35.1	6.19	41.9	7.99	46.1	9.13	46.9	9.17	47.4	9.22	48.7	9.32	50.0	9.40
	23	35.1	6.64	41.9	8.57	45.6	9.54	46.1	9.59	46.7	9.64	48.0	9.74	49.3	9.83
	25	35.1	7.09	41.9	9.17	44.9	9.96	45.6	10.01	46.1	10.07	47.4	10.17	48.7	10.27
	27	35.1	7.57	41.9	9.82	44.3	8.77	44.9	10.44	45.4	10.49	46.7	10.60	48.0	10.71
	29	35.1	8.08	41.9	10.49	43.6	10.79	44.1	10.86	44.9	10.92	46.1	11.04	47.4	11.15
	31	35.1	8.63	41.7	11.10	42.9	11.23	43.6	11.29	44.1	11.34	45.4	11.47	46.7	11.60
	33	35.1	9.19	41.0	11.52	42.3	11.63	42.9	11.71	43.6	11.77	44.9	11.90	46.0	12.05
	35	35.1	9.80	40.3	11.93	41.6	12.08	42.3	12.14	42.9	12.21	44.1	12.35	45.4	12.48
	37	35.1	10.43	39.7	12.37	41.0	12.51	41.6	12.58	42.3	12.66	43.4	12.80	44.7	12.94
	39	35.1	11.10	39.0	12.78	40.3	12.93	41.0	13.01	41.6	13.09	42.9	13.23	44.1	13.39
	41	33.2	12.35	38.3	15.04	39.5	15.22	40.2	14.09	40.8	14.16	42.0	14.33	43.3	14.48
	44	30.9	13.43	36.3	16.35	37.6	16.91	38.5	15.91	39.1	15.26	40.4	15.07	41.8	15.22
	47	29.2	17.87	35.0	21.76	36.4	17.75	37.1	16.15	37.7	16.23	39.1	16.18	40.4	16.35
	50	26.7	17.54	31.4	21.36	32.5	18.72	33.1	17.48	33.6	17.33	34.9	17.29	36.3	17.10
	52	20.2	14.80	23.4	18.02	24.3	15.94	24.9	15.91	25.7	15.62	27.8	15.44	29.5	14.97

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
120%	-5	32.4	4.69	40.1	6.06	47.7	6.44	49.4	6.48	50.6	6.51	51.7	6.58	53.1	6.65
	0	32.4	4.69	40.1	6.08	47.7	6.45	49.4	6.49	50.6	6.52	51.7	6.59	53.1	6.66
	4	32.4	4.71	40.1	6.10	47.7	6.48	49.4	6.51	50.6	6.55	51.7	6.62	53.1	6.69
	7	32.4	4.80	40.1	6.21	47.7	6.60	49.4	6.63	50.6	6.67	51.3	6.74	52.4	6.81
	10	32.4	5.00	38.6	6.11	44.9	7.27	48.0	7.86	50.3	8.20	51.4	7.88	52.6	7.57
	12	32.4	5.10	38.6	6.22	44.9	7.41	48.0	8.00	49.6	8.15	50.7	7.84	51.9	7.52
	14	32.4	5.20	38.6	6.35	44.9	7.55	48.0	8.16	48.9	8.10	50.1	7.80	51.3	7.84
	16	32.4	5.29	38.6	6.48	44.9	7.70	47.7	8.23	48.3	8.12	49.4	8.20	50.6	8.26
	18	32.4	5.39	38.6	6.61	44.9	7.97	47.0	8.50	47.6	8.53	48.7	8.61	50.0	8.69
	20	32.4	5.50	38.6	6.87	44.9	8.57	46.4	8.92	47.0	8.95	48.1	9.03	49.3	9.11
	21	32.4	5.55	38.6	7.11	44.9	8.87	46.0	9.13	46.6	9.16	47.9	9.24	49.0	9.34
	23	32.4	5.93	38.6	7.62	44.9	9.50	45.4	9.53	46.0	9.58	47.1	9.67	48.3	9.75
	25	32.4	6.34	38.6	8.15	44.1	9.91	44.7	9.94	45.3	9.99	46.6	10.09	47.7	10.19
	27	32.4	6.77	38.6	8.71	43.6	10.31	44.1	10.38	44.7	10.43	45.9	10.52	47.0	10.62
	29	32.4	7.22	38.6	9.30	42.9	10.73	43.4	10.79	44.0	10.84	45.1	10.96	46.4	11.05
	31	32.4	7.70	38.6	9.93	42.3	11.16	42.9	11.21	43.4	11.28	44.6	11.39	45.7	11.50
	33	32.4	8.20	38.6	10.60	41.6	11.58	42.1	11.65	42.7	11.69	43.9	11.82	45.0	11.93
	35	32.4	8.73	38.6	11.29	40.9	12.00	41.4	12.06	42.1	12.13	43.3	12.25	44.4	12.38
	37	32.4	9.29	38.6	12.03	40.3	12.43	40.9	12.50	41.4	12.56	42.6	12.69	43.7	12.83
	39	32.4	9.88	38.4	12.70	39.6	12.85	40.1	12.93	40.7	12.99	42.0	13.14	43.1	13.27
	41	30.6	10.99	36.6	14.23	38.8	15.12	39.4	13.99	40.1	14.07	41.2	14.22	42.3	14.36
	44	28.5	11.95	34.7	15.47	37.0	16.80	37.7	15.80	38.5	15.16	39.7	14.95	40.9	15.11
	47	26.9	15.91	33.6	20.59	35.8	17.64	36.4	16.04	37.1	16.13	38.3	16.05	39.5	16.22
	50	24.6	15.62	30.1	20.21	31.9	18.60	32.4	17.37	33.1	17.22	34.2	17.16	35.5	16.96
	52	18.7	13.18	22.4	17.05	23.9	15.84	24.4	15.80	25.3	15.52	27.3	15.32	28.9	14.86
110%	-5	29.7	4.14	36.8	5.33	47.1	6.40	48.6	6.43	49.5	6.47	50.5	6.53	51.9	6.59
	0	29.7	4.15	36.8	5.34	47.1	6.41	48.6	6.45	49.5	6.48	50.5	6.54	51.9	6.60
	4	29.7	4.17	36.8	5.36	47.1	6.44	48.6	6.47	49.5	6.50	50.5	6.57	51.9	6.63
	7	29.7	4.24	36.8	5.46	47.1	6.55	48.6	6.59	49.5	6.63	50.1	6.69	51.2	6.75
	10	29.7	4.54	35.4	5.53	41.1	6.58	44.0	7.11	46.9	7.65	50.4	8.12	51.6	7.84
	12	29.7	4.64	35.4	5.65	41.1	6.70	44.0	7.25	46.9	7.80	49.9	8.08	50.9	7.80
	14	29.7	4.72	35.4	5.74	41.1	6.83	44.0	7.38	46.9	7.94	49.1	8.08	50.3	7.78
	16	29.7	4.80	35.4	5.85	41.1	6.96	44.0	7.52	46.9	8.10	48.6	8.13	49.6	8.21
	18	29.7	4.89	35.4	5.97	41.1	7.11	44.0	7.73	46.9	8.49	47.9	8.55	49.0	8.63
	20	29.7	4.99	35.4	6.10	41.1	7.52	44.0	8.31	46.1	8.90	47.3	8.97	48.3	9.05
	21	29.7	5.04	35.4	6.27	41.1	7.80	44.0	8.61	45.9	9.11	46.9	9.17	48.0	9.26
	23	29.7	5.28	35.4	6.72	41.1	8.36	44.0	9.24	45.1	9.51	46.3	9.61	47.3	9.69
	25	29.7	5.61	35.4	7.19	41.1	8.93	44.0	9.90	44.6	9.93	45.6	10.03	46.7	10.11
	27	29.7	6.00	35.4	7.68	41.1	9.56	43.3	10.31	43.9	10.35	45.0	10.44	46.0	10.54
	29	29.7	6.40	35.4	8.20	41.1	10.22	42.7	10.73	43.3	10.78	44.3	10.88	45.4	10.97
	31	29.7	6.82	35.4	8.74	41.1	10.91	42.0	11.15	42.6	11.20	43.7	11.29	44.7	11.40
	33	29.7	7.25	35.4	9.32	40.9	11.50	41.4	11.56	42.0	11.61	43.0	11.73	44.1	11.84
	35	29.7	7.72	35.4	9.93	40.3	11.92	40.7	11.98	41.3	12.05	42.3	12.16	43.4	12.27
	37	29.7	8.21	35.4	10.57	39.6	12.35	40.1	12.40	40.6	12.46	41.7	12.59	42.7	12.70
	39	29.7	8.73	35.4	11.26	38.9	12.77	39.4	12.83	40.0	12.90	41.0	13.02	42.1	13.15
	41	28.1	9.72	33.7	12.51	38.3	15.02	38.7	13.90	39.3	13.97	40.3	14.10	41.4	14.23
	44	26.1	10.57	31.9	13.60	36.5	16.68	37.1	15.70	37.7	15.06	38.7	14.83	40.0	14.97
	47	24.7	14.06	30.8	18.10	35.3	17.52	35.7	15.94	36.3	16.02	37.4	15.93	38.7	16.07
	50	22.6	13.81	27.6	17.77	31.5	18.47	31.9	17.25	32.4	17.11	33.4	17.02	34.7	16.81
	52	17.1	11.65	20.5	14.99	23.6	15.73	24.0	15.70	24.8	15.42	26.6	15.20	28.2	14.72

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
100%	-5	27.0	3.62	33.4	4.64	43.7	5.78	47.7	6.39	48.5	6.42	49.4	6.48	50.7	6.54
	0	27.0	3.63	33.4	4.65	43.7	5.79	47.7	6.40	48.5	6.44	49.4	6.49	50.7	6.55
	4	27.0	3.64	33.4	4.66	43.7	5.82	47.7	6.43	48.5	6.46	49.4	6.52	50.7	6.58
	7	27.0	3.71	33.4	4.75	43.7	5.92	47.7	6.55	48.5	6.58	49.0	6.64	50.0	6.70
	10	27.0	4.11	32.1	4.99	37.4	5.90	40.0	6.37	42.6	6.88	47.8	7.79	50.6	8.09
	12	27.0	4.16	32.1	5.05	37.4	5.98	40.0	6.46	42.6	7.01	47.8	7.92	49.8	8.03
	14	27.0	4.23	32.1	5.14	37.4	6.08	40.0	6.57	42.6	7.14	47.8	8.06	49.3	7.96
	16	27.0	4.33	32.1	5.26	37.4	6.22	40.0	6.72	42.6	7.30	47.7	8.24	48.6	8.14
	18	27.0	4.43	32.1	5.38	37.4	6.34	40.0	6.85	42.6	7.44	47.0	8.40	48.0	8.53
	20	27.0	4.49	32.1	5.46	37.4	6.55	40.0	7.21	42.6	7.92	46.3	8.84	47.3	8.98
	21	27.0	4.54	32.1	5.51	37.4	6.77	40.0	7.46	42.6	8.19	46.0	9.14	47.0	9.22
	23	27.0	4.65	32.1	5.89	37.4	7.28	40.0	8.02	42.6	8.81	45.4	9.67	46.3	9.76
	25	27.0	4.95	32.1	6.27	37.4	7.75	40.0	8.53	42.6	9.42	44.7	10.03	45.7	10.12
	27	27.0	5.29	32.1	6.69	37.4	8.31	40.0	9.15	42.6	10.10	44.0	10.38	45.0	10.47
	29	27.0	5.60	32.1	7.15	37.4	8.89	40.0	9.79	42.4	10.70	43.4	10.88	44.4	10.98
	31	27.0	5.96	32.1	7.62	37.4	9.48	40.0	10.55	41.9	11.14	42.4	11.32	43.7	11.42
	33	27.0	6.34	32.1	8.11	37.4	10.10	40.0	11.16	41.1	11.54	42.2	11.65	43.1	11.75
	35	27.0	6.75	32.1	8.64	37.4	10.77	40.0	11.90	40.4	11.96	41.4	12.07	42.4	12.18
	37	27.0	7.19	32.1	9.20	37.4	11.47	39.3	12.33	39.9	12.39	40.8	12.48	41.8	12.59
	39	27.0	7.65	32.1	9.80	37.4	12.22	38.8	12.74	39.0	12.80	40.3	12.89	40.8	13.01
	41	25.5	8.50	30.5	10.88	35.6	13.57	38.0	13.81	38.4	13.87	39.4	14.00	40.4	14.13
	44	23.8	9.24	28.9	11.83	33.9	15.08	36.4	15.59	36.9	14.95	37.9	14.72	39.0	14.86
	47	22.4	12.30	28.0	15.75	32.8	15.83	35.1	15.83	35.6	15.91	36.6	15.81	37.7	15.95
	50	20.5	12.08	25.1	15.46	29.2	16.70	31.3	17.14	31.7	16.98	32.7	16.90	33.9	16.68
	52	15.6	10.19	18.6	13.04	21.9	14.22	23.6	15.59	24.3	15.31	26.1	15.09	27.6	14.61
90%	-5	24.3	3.16	30.1	4.00	39.4	4.94	42.9	5.46	46.0	6.00	48.5	6.42	49.5	6.48
	0	24.3	3.17	30.1	4.01	39.4	4.95	42.9	5.47	46.0	6.02	48.5	6.44	49.5	6.49
	4	24.3	3.18	30.1	4.02	39.4	4.97	42.9	5.49	46.0	6.04	48.5	6.46	49.5	6.52
	7	24.3	3.24	30.1	4.10	39.4	5.06	42.9	5.59	46.0	6.15	48.1	6.58	48.9	6.64
	10	24.3	3.58	28.9	4.30	33.7	5.04	36.0	5.68	38.3	6.04	43.1	6.92	47.7	7.85
	12	24.3	3.63	28.9	4.36	33.7	5.11	36.0	5.75	38.3	6.16	43.1	7.04	47.7	7.95
	14	24.3	3.69	28.9	4.44	33.7	5.19	36.0	5.84	38.3	6.27	43.1	7.17	47.7	8.08
	16	24.3	3.78	28.9	4.53	33.7	5.31	36.0	5.97	38.3	6.41	43.1	7.33	47.6	8.23
	18	24.3	3.86	28.9	4.64	33.7	5.41	36.0	6.09	38.3	6.53	43.1	7.50	47.1	8.53
	20	24.3	3.92	28.9	4.71	33.7	5.59	36.0	6.21	38.3	6.80	43.1	8.06	46.3	8.89
	21	24.3	3.96	28.9	4.76	33.7	5.78	36.0	6.42	38.3	7.04	43.1	8.33	46.0	9.09
	23	24.3	4.06	28.9	5.08	33.7	6.22	36.0	6.90	38.3	7.53	43.1	8.95	45.3	9.56
	25	24.3	4.32	28.9	5.40	33.7	6.62	36.0	7.36	38.3	8.06	43.1	9.57	44.7	9.94
	27	24.3	4.62	28.9	5.77	33.7	7.10	36.0	7.86	38.3	8.63	43.1	10.21	44.0	10.38
	29	24.3	4.89	28.9	6.17	33.7	7.59	36.0	8.40	38.3	9.21	42.6	10.71	43.4	10.80
	31	24.3	5.20	28.9	6.57	33.7	8.09	36.0	8.96	38.3	9.83	41.9	11.09	42.7	11.24
	33	24.3	5.53	28.9	7.00	33.7	8.63	36.0	9.53	38.3	10.45	41.3	11.54	42.1	11.65
	35	24.3	5.89	28.9	7.45	33.7	9.20	36.0	10.16	38.3	11.18	40.6	11.96	41.4	12.07
	37	24.3	6.27	28.9	7.94	33.7	9.80	35.4	10.53	38.3	11.96	39.9	12.39	40.9	12.36
	39	24.3	6.68	28.9	8.45	33.7	10.43	34.9	10.88	38.3	12.68	39.3	12.85	40.1	12.82
	41	23.0	7.42	27.5	9.39	32.0	11.59	34.2	11.79	36.4	12.97	38.6	13.88	39.5	14.00
	44	21.4	8.06	26.0	10.21	30.5	12.88	32.8	13.31	35.0	13.98	37.2	14.59	38.1	14.73
	47	20.2	10.73	25.2	13.58	29.5	13.52	31.6	13.52	33.7	14.87	35.9	15.67	36.9	15.81
	50	18.5	10.54	22.6	13.34	26.3	14.26	28.2	14.64	30.1	15.88	32.1	16.75	33.1	16.54
	52	14.0	8.89	16.8	11.25	19.7	12.14	21.2	13.31	23.0	14.31	25.6	14.95	26.9	14.48

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
80%	-5	21.6	2.73	26.7	3.37	35.0	4.19	38.2	4.61	40.7	5.04	45.7	5.98	48.3	6.41
	0	21.6	2.74	26.7	3.37	35.0	4.19	38.2	4.62	40.7	5.05	45.7	5.99	48.3	6.42
	4	21.6	2.75	26.7	3.39	35.0	4.21	38.2	4.63	40.7	5.06	45.7	6.01	48.3	6.44
	7	21.6	2.80	26.7	3.45	35.0	4.29	38.2	4.72	40.7	5.16	45.3	6.12	47.7	6.56
	10	21.6	3.26	25.7	3.90	29.9	4.59	32.0	4.94	34.1	5.29	38.3	6.04	42.4	7.02
	12	21.6	3.30	25.7	3.96	29.9	4.67	32.0	5.04	34.1	5.39	38.3	6.15	42.4	6.96
	14	21.6	3.37	25.7	4.04	29.9	4.75	32.0	5.12	34.1	5.49	38.3	6.25	42.4	7.12
	16	21.6	3.42	25.7	4.11	29.9	4.84	32.0	5.21	34.1	5.57	38.3	6.40	42.4	7.38
	18	21.6	3.48	25.7	4.19	29.9	4.95	32.0	5.33	34.1	5.68	38.3	6.54	42.4	7.89
	20	21.6	3.54	25.7	4.27	29.9	5.04	32.0	5.42	34.1	5.81	38.3	6.78	42.4	8.18
	21	21.6	3.58	25.7	4.30	29.9	5.08	32.0	5.49	34.1	5.94	38.3	7.02	42.4	8.75
	23	21.6	3.64	25.7	4.39	29.9	5.33	32.0	5.84	34.1	6.35	38.3	7.51	42.4	9.36
	25	21.6	3.75	25.7	4.67	29.9	5.69	32.0	6.24	34.1	6.78	38.3	8.04	42.4	9.99
	27	21.6	3.99	25.7	4.97	29.9	6.06	32.0	6.66	34.1	7.28	38.3	8.58	42.4	10.34
	29	21.6	4.25	25.7	5.29	29.9	6.46	32.0	7.09	33.9	7.76	38.3	9.16	42.4	10.72
	31	21.6	4.51	25.7	5.63	29.9	6.88	32.0	7.55	33.9	8.27	38.3	9.77	41.7	11.11
	33	21.6	4.80	25.7	6.27	29.9	7.33	32.0	8.05	33.9	8.81	38.3	10.43	41.1	11.51
	35	21.6	5.08	25.7	6.27	29.9	7.80	32.0	8.58	33.9	9.38	38.3	11.13	40.4	11.93
	37	21.6	5.39	25.7	6.75	29.9	8.29	31.4	9.14	33.9	9.99	38.3	11.86	39.9	12.37
	39	21.6	5.71	25.7	7.17	29.9	8.82	31.0	9.73	33.9	10.64	38.3	12.63	39.1	12.83
	41	20.4	6.41	24.4	7.90	28.5	9.82	30.4	9.95	32.3	10.88	36.4	12.91	38.5	13.84
	44	19.0	6.97	23.1	8.59	27.1	10.91	29.1	11.24	31.0	11.72	35.1	13.58	37.2	14.55
	47	17.9	9.27	22.4	11.43	26.2	11.46	28.1	11.41	29.9	12.47	33.9	14.58	36.0	15.63
	50	16.4	9.10	20.1	11.23	23.4	12.08	25.1	12.36	26.6	13.32	30.2	15.59	32.3	16.34
	52	12.4	7.68	14.9	9.47	17.5	10.29	18.9	11.24	20.4	12.01	24.1	13.92	26.3	14.31
70%	-5	18.9	2.33	23.4	2.88	30.6	3.49	33.4	3.82	35.8	4.17	40.0	4.91	44.4	5.71
	0	18.9	2.33	23.4	2.88	30.6	3.49	33.4	3.83	35.8	4.18	40.0	4.92	44.4	5.72
	4	18.9	2.34	23.4	2.89	30.6	3.51	33.4	3.85	35.8	4.19	40.0	4.94	44.4	5.74
	7	18.9	2.38	23.4	2.95	30.6	3.57	33.4	3.92	35.8	4.27	39.7	5.03	43.8	5.85
	10	18.9	2.87	22.5	3.40	26.2	3.96	28.0	4.27	29.8	4.57	33.5	5.20	37.1	5.84
	12	18.9	2.90	22.5	3.45	26.2	4.04	28.0	4.35	29.8	4.65	33.5	5.29	37.1	5.95
	14	18.9	2.95	22.5	3.51	26.2	4.11	28.0	4.41	29.8	4.73	33.5	5.39	37.1	6.06
	16	18.9	3.00	22.5	3.58	26.2	4.19	28.0	4.51	29.8	4.83	33.5	5.49	37.1	6.18
	18	18.9	3.05	22.5	3.64	26.2	4.27	28.0	4.59	29.8	4.91	33.5	5.60	37.1	6.30
	20	18.9	3.10	22.5	3.71	26.2	4.35	28.0	4.67	29.8	5.00	33.5	5.71	37.1	6.48
	21	18.9	3.13	22.5	3.74	26.2	4.38	28.0	4.72	29.8	5.05	33.5	5.77	37.1	6.70
	23	18.9	3.18	22.5	3.80	26.2	4.48	28.0	4.88	29.8	5.31	33.5	6.21	37.1	7.19
	25	18.9	3.24	22.5	3.96	26.2	4.76	28.0	5.21	29.8	5.66	33.5	6.64	37.1	7.68
	27	18.9	3.43	22.5	4.22	26.2	5.08	28.0	5.55	29.8	6.05	33.5	7.09	37.1	8.21
	29	18.9	3.64	22.5	4.48	26.2	5.41	28.0	5.92	29.8	6.43	33.5	7.55	37.1	8.77
	31	18.9	3.85	22.5	4.75	26.2	5.76	28.0	6.29	29.8	6.85	33.5	8.05	37.1	9.35
	33	18.9	4.09	22.5	5.05	26.2	6.13	28.0	6.69	29.8	7.30	33.5	8.58	37.1	9.98
	35	18.9	4.33	22.5	5.36	26.2	6.50	28.0	7.12	29.8	7.76	33.5	9.14	37.1	10.63
	37	18.9	4.57	22.5	5.68	26.2	6.91	27.5	7.57	29.8	8.26	33.5	9.74	37.1	11.32
	39	18.9	4.84	22.5	6.02	26.2	7.33	27.1	8.04	29.8	8.77	33.5	10.35	37.1	12.06
	41	17.9	5.46	21.4	6.75	24.9	8.19	26.6	8.26	28.3	9.01	31.9	10.61	35.4	12.34
	44	16.6	5.93	20.3	7.34	23.7	9.09	25.5	9.33	27.2	9.70	30.7	11.15	34.2	12.97
	47	15.7	7.90	19.6	9.77	22.9	9.55	24.6	9.47	26.2	10.33	29.6	11.98	33.1	13.93
	50	14.4	7.75	17.6	9.59	20.5	10.07	21.9	10.26	23.4	11.02	26.5	12.80	29.7	14.57
	52	10.9	6.54	13.1	8.09	15.3	8.57	16.5	9.33	17.9	9.94	21.1	11.43	24.1	12.76

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
60%	-5	16.2	1.96	20.0	2.39	26.2	2.86	28.6	3.12	30.6	3.39	34.3	3.95	38.1	4.57
	0	16.2	1.96	20.0	2.39	26.2	2.87	28.6	3.12	30.6	3.39	34.3	3.96	38.1	4.57
	4	16.2	1.97	20.0	2.40	26.2	2.88	28.6	3.14	30.6	3.40	34.3	3.98	38.1	4.59
	7	16.2	2.00	20.0	2.44	26.2	2.93	28.6	3.19	30.6	3.47	34.0	4.05	37.6	4.68
	10	16.2	2.49	19.3	2.92	22.5	3.38	24.0	3.63	25.5	3.87	28.7	4.38	31.9	4.91
	12	16.2	2.53	19.3	2.97	22.5	3.45	24.0	3.69	25.5	3.93	28.7	4.46	31.9	4.99
	14	16.2	2.57	19.3	3.02	22.5	3.50	24.0	3.75	25.5	4.01	28.7	4.54	31.9	5.08
	16	16.2	2.60	19.3	3.06	22.5	3.56	24.0	3.82	25.5	4.07	28.7	4.62	31.9	5.18
	18	16.2	2.65	19.3	3.11	22.5	3.63	24.0	3.88	25.5	4.15	28.7	4.70	31.9	5.28
	20	16.2	2.68	19.3	3.18	22.5	3.69	24.0	3.96	25.5	4.23	28.7	4.80	31.9	5.39
	21	16.2	2.71	19.3	3.19	22.5	3.72	24.0	3.99	25.5	4.27	28.7	4.84	31.9	5.44
	23	16.2	2.74	19.3	3.26	22.5	3.79	24.0	4.07	25.5	4.35	28.7	5.04	31.9	5.79
	25	16.2	2.79	19.3	3.32	22.5	3.93	24.0	4.27	25.5	4.62	28.7	5.37	31.9	6.18
	27	16.2	2.90	19.3	3.51	22.5	4.19	24.0	4.56	25.5	4.92	28.7	5.73	31.9	6.59
	29	16.2	3.06	19.3	3.72	22.5	4.46	24.0	4.84	25.5	5.25	28.7	6.11	31.9	7.04
	31	16.2	3.26	19.3	3.96	22.5	4.73	24.0	5.15	25.5	5.58	28.7	6.50	31.9	7.49
	33	16.2	3.43	19.3	4.19	22.5	5.02	24.0	5.47	25.5	5.93	28.7	6.91	31.9	7.99
	35	16.2	3.64	19.3	4.44	22.5	5.33	24.0	5.81	25.5	6.30	28.7	7.36	31.9	8.50
	37	16.2	3.85	19.3	4.70	22.5	5.65	23.6	6.16	25.5	6.69	28.7	7.83	31.9	9.05
	39	16.2	4.06	19.3	4.97	22.5	5.98	23.3	6.53	25.5	7.11	28.7	8.31	31.9	9.62
	41	15.3	4.59	18.3	5.60	21.3	6.71	22.8	6.74	24.3	7.31	27.3	8.54	30.4	9.86
	44	14.3	4.99	17.4	6.09	20.3	7.46	21.8	7.61	23.3	7.88	26.3	8.98	29.3	10.37
	47	13.4	6.64	16.8	8.10	19.7	7.83	21.1	7.72	22.5	8.38	25.4	9.64	28.4	11.14
	50	12.3	6.52	15.0	7.95	17.5	8.25	18.8	8.36	20.0	8.95	22.7	10.31	25.5	11.65
	52	9.3	5.50	11.2	6.71	13.1	7.03	14.2	7.61	15.3	8.07	18.1	9.20	20.7	10.20
50%	-5	13.5	1.62	16.7	1.94	21.9	2.29	23.9	2.48	25.5	2.68	28.6	3.10	31.8	3.55
	0	13.5	1.62	16.7	1.94	21.9	2.30	23.9	2.49	25.5	2.68	28.6	3.11	31.8	3.56
	4	13.5	1.63	16.7	1.95	21.9	2.30	23.9	2.49	25.5	2.69	28.6	3.12	31.8	3.57
	7	13.5	1.66	16.7	1.98	21.9	2.35	23.9	2.54	25.5	2.74	28.3	3.18	31.3	3.63
	10	13.5	2.15	16.1	2.49	18.7	2.84	20.0	3.03	21.3	3.21	23.9	3.61	26.6	4.03
	12	13.5	2.17	16.1	2.52	18.7	2.89	20.0	3.06	21.3	3.27	23.9	3.67	26.6	4.09
	14	13.5	2.20	16.1	2.55	18.7	2.92	20.0	3.13	21.3	3.32	23.9	3.74	26.6	4.17
	16	13.5	2.23	16.1	2.58	18.7	2.97	20.0	3.18	21.3	3.37	23.9	3.80	26.6	4.23
	18	13.5	2.26	16.1	2.63	18.7	3.02	20.0	3.22	21.3	3.43	23.9	3.87	26.6	4.31
	20	13.5	2.29	16.1	2.66	18.7	3.06	20.0	3.29	21.3	3.50	23.9	3.95	26.6	4.39
	21	13.5	2.31	16.1	2.69	18.7	3.10	20.0	3.30	21.3	3.53	23.9	3.98	26.6	4.44
	23	13.5	2.34	16.1	2.73	18.7	3.14	20.0	3.37	21.3	3.59	23.9	4.04	26.6	4.54
	25	13.5	2.37	16.1	2.77	18.7	3.21	20.0	3.43	21.3	3.71	23.9	4.25	26.6	4.84
	27	13.5	2.42	16.1	2.89	18.7	3.38	20.0	3.66	21.3	3.93	23.9	4.52	26.6	5.16
	29	13.5	2.55	16.1	3.05	18.7	3.59	20.0	3.88	21.2	4.19	23.9	4.81	26.6	5.50
	31	13.5	2.69	16.1	3.22	18.7	3.83	20.0	4.12	21.2	4.44	23.9	5.12	26.6	5.85
	33	13.5	2.86	16.1	3.42	18.7	4.04	20.0	4.36	21.2	4.72	23.9	5.44	26.6	6.22
	35	13.5	3.02	16.1	3.61	18.7	4.27	20.0	4.62	21.2	4.99	23.9	5.77	26.6	6.61
	37	13.5	3.18	16.1	3.82	18.7	4.52	19.6	4.89	21.2	5.29	23.9	6.13	26.6	7.03
	39	13.5	3.35	16.1	4.03	18.7	4.78	19.4	5.18	21.2	5.61	23.9	6.50	26.6	7.46
	41	12.8	3.80	15.3	4.55	17.8	5.38	19.0	5.36	20.2	5.79	22.8	6.70	25.3	7.67
	44	11.9	4.13	14.5	4.94	16.9	5.97	18.2	6.05	19.4	6.24	21.9	7.04	24.4	8.06
	47	11.2	5.50	14.0	6.58	16.4	6.27	17.6	6.14	18.7	6.63	21.2	7.56	23.6	8.66
	50	10.3	5.40	12.5	6.46	14.6	6.61	15.7	6.65	16.7	7.08	18.9	8.08	21.3	9.05
	52	7.8	4.55	9.3	5.45	10.9	5.63	11.8	6.05	12.7	6.39	15.1	7.22	17.3	7.93

GMV-Q450WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
135%	-5	39.5	6.55	47.1	7.97	54.6	8.07	56.7	8.11	57.9	8.15	59.3	8.25	61.1	8.33
	0	39.5	6.56	47.1	7.99	54.6	8.08	56.7	8.12	57.9	8.17	59.3	8.26	61.1	8.35
	4	39.5	6.58	47.1	8.02	54.6	8.11	56.7	8.16	57.9	8.20	59.3	8.30	61.1	8.38
	7	39.5	6.70	47.1	8.16	54.6	8.26	56.7	8.31	57.9	8.35	58.8	8.45	60.3	8.54
	10	39.5	6.82	47.1	8.34	54.6	9.92	56.7	10.13	57.4	9.94	58.8	9.52	60.3	9.08
	12	39.5	6.94	47.1	8.50	54.6	10.11	55.9	10.07	56.7	9.88	58.0	9.44	59.5	9.30
	14	39.5	7.08	47.1	8.66	54.5	10.23	55.3	10.03	55.9	9.82	57.4	9.74	58.8	9.84
	16	39.5	7.20	47.1	8.84	53.8	10.19	54.5	10.11	55.1	10.15	56.6	10.25	58.0	10.35
	18	39.5	7.34	47.1	9.02	53.0	10.57	53.7	10.63	54.5	10.69	55.9	10.79	57.4	10.89
	20	39.5	7.50	47.1	9.60	52.2	11.09	53.0	11.15	53.7	11.21	55.1	11.31	56.6	11.43
	21	39.5	7.70	47.1	9.94	51.9	11.35	52.7	11.41	53.4	11.47	54.8	11.59	56.2	11.69
	23	39.5	8.26	47.1	10.65	51.3	11.87	51.9	11.93	52.6	11.99	54.0	12.11	55.4	12.23
	25	39.5	8.82	47.1	11.41	50.5	12.39	51.3	12.45	51.9	12.53	53.4	12.65	54.8	12.77
	27	39.5	9.42	47.1	12.21	49.8	10.91	50.5	12.99	51.1	13.05	52.6	13.19	54.0	13.33
	29	39.5	10.05	47.1	13.05	49.0	13.43	49.7	13.51	50.5	13.59	51.9	13.73	53.4	13.87
	31	39.5	10.73	46.9	13.81	48.2	13.97	49.0	14.04	49.7	14.10	51.1	14.26	52.6	14.42
	33	39.5	11.43	46.1	14.32	47.6	14.46	48.2	14.56	49.0	14.64	50.5	14.80	51.7	14.98
	35	39.5	12.19	45.3	14.84	46.8	15.02	47.6	15.10	48.2	15.18	49.7	15.36	51.1	15.52
	37	39.5	12.97	44.7	15.38	46.1	15.56	46.8	15.64	47.6	15.74	48.9	15.92	50.3	16.10
	39	39.5	13.81	43.9	15.90	45.3	16.08	46.1	16.18	46.8	16.28	48.2	16.46	49.7	16.66
	41	37.4	15.36	43.1	18.70	44.4	18.93	45.2	17.52	45.9	17.61	47.3	17.82	48.7	18.00
	44	34.8	16.70	40.8	20.33	42.3	21.03	43.3	19.78	44.0	18.98	45.5	18.74	47.0	18.94
	47	32.8	22.22	39.4	27.06	40.9	22.08	41.8	20.09	42.4	20.19	43.9	20.12	45.5	20.33
	50	30.0	21.82	35.3	26.57	36.5	23.28	37.2	21.75	37.8	21.56	39.2	21.51	40.9	21.26
	52	22.8	18.41	26.3	22.41	27.4	19.83	28.1	19.78	28.9	19.43	31.3	19.20	33.2	18.63

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
120%	-5	36.5	5.83	45.1	7.54	53.7	8.01	55.6	8.06	56.9	8.10	58.2	8.18	59.7	8.27
	0	36.5	5.84	45.1	7.56	53.7	8.03	55.6	8.07	56.9	8.11	58.2	8.20	59.7	8.29
	4	36.5	5.86	45.1	7.58	53.7	8.06	55.6	8.10	56.9	8.14	58.2	8.23	59.7	8.32
	7	36.5	5.97	45.1	7.72	53.7	8.21	55.6	8.25	56.9	8.30	57.7	8.38	58.9	8.47
	10	36.5	6.22	43.4	7.60	50.5	9.04	54.0	9.78	56.6	10.19	57.9	9.80	59.1	9.42
	12	36.5	6.34	43.4	7.74	50.5	9.22	54.0	9.96	55.8	10.13	57.1	9.76	58.3	9.36
	14	36.5	6.46	43.4	7.90	50.5	9.40	54.0	10.15	55.0	10.07	56.4	9.70	57.7	9.76
	16	36.5	6.58	43.4	8.06	50.5	9.58	53.7	10.23	54.3	10.09	55.6	10.19	56.9	10.27
	18	36.5	6.70	43.4	8.22	50.5	9.92	52.9	10.57	53.5	10.61	54.8	10.71	56.2	10.81
	20	36.5	6.84	43.4	8.54	50.5	10.65	52.2	11.09	52.9	11.13	54.2	11.23	55.4	11.33
	21	36.5	6.90	43.4	8.84	50.5	11.03	51.7	11.35	52.4	11.39	53.8	11.49	55.1	11.61
	23	36.5	7.38	43.4	9.48	50.5	11.81	51.1	11.85	51.7	11.91	53.0	12.03	54.3	12.13
	25	36.5	7.88	43.4	10.13	49.7	12.33	50.3	12.37	50.9	12.43	52.4	12.55	53.7	12.67
	27	36.5	8.42	43.4	10.83	49.0	12.83	49.7	12.91	50.3	12.97	51.6	13.09	52.9	13.21
	29	36.5	8.98	43.4	11.57	48.2	13.35	48.9	13.43	49.5	13.49	50.8	13.63	52.2	13.75
	31	36.5	9.58	43.4	12.35	47.6	13.89	48.2	13.95	48.9	14.02	50.1	14.16	51.4	14.30
	33	36.5	10.19	43.4	13.19	46.8	14.40	47.4	14.48	48.1	14.54	49.3	14.70	50.6	14.84
	35	36.5	10.85	43.4	14.04	46.0	14.92	46.6	15.00	47.4	15.08	48.7	15.24	50.0	15.40
	37	36.5	11.55	43.4	14.96	45.3	15.46	46.0	15.54	46.6	15.62	47.9	15.78	49.2	15.96
	39	36.5	12.29	43.2	15.80	44.5	15.98	45.2	16.08	45.8	16.16	47.2	16.34	48.5	16.50
	41	34.5	13.67	41.2	17.70	43.7	18.80	44.3	17.40	45.1	17.50	46.4	17.68	47.6	17.87
	44	32.1	14.87	39.1	19.24	41.6	20.89	42.4	19.65	43.3	18.85	44.6	18.59	46.0	18.79
	47	30.3	19.78	37.8	25.60	40.2	21.94	40.9	19.95	41.7	20.06	43.1	19.97	44.5	20.18
	50	27.7	19.43	33.8	25.14	35.9	23.13	36.5	21.60	37.2	21.42	38.5	21.34	40.0	21.10
	52	21.0	16.39	25.2	21.21	26.9	19.70	27.5	19.65	28.4	19.31	30.7	19.05	32.5	18.48
110%	-5	33.4	5.15	41.4	6.63	53.0	7.96	54.6	8.00	55.7	8.05	56.8	8.12	58.4	8.20
	0	33.4	5.16	41.4	6.64	53.0	7.97	54.6	8.02	55.7	8.06	56.8	8.14	58.4	8.21
	4	33.4	5.18	41.4	6.67	53.0	8.00	54.6	8.05	55.7	8.09	56.8	8.17	58.4	8.24
	7	33.4	5.28	41.4	6.79	53.0	8.15	54.6	8.20	55.7	8.24	56.3	8.32	57.6	8.39
	10	33.4	5.65	39.9	6.88	46.3	8.18	49.5	8.84	52.7	9.52	56.7	10.09	58.0	9.76
	12	33.4	5.77	39.9	7.02	46.3	8.34	49.5	9.02	52.7	9.70	56.1	10.05	57.2	9.70
	14	33.4	5.87	39.9	7.14	46.3	8.50	49.5	9.18	52.7	9.88	55.3	10.05	56.6	9.68
	16	33.4	5.97	39.9	7.28	46.3	8.66	49.5	9.36	52.7	10.07	54.6	10.11	55.8	10.21
	18	33.4	6.08	39.9	7.42	46.3	8.84	49.5	9.62	52.7	10.55	53.8	10.63	55.1	10.73
	20	33.4	6.20	39.9	7.58	46.3	9.36	49.5	10.33	51.9	11.07	53.2	11.15	54.3	11.25
	21	33.4	6.26	39.9	7.80	46.3	9.70	49.5	10.71	51.6	11.33	52.7	11.41	54.0	11.51
	23	33.4	6.56	39.9	8.36	46.3	10.39	49.5	11.49	50.8	11.83	52.1	11.95	53.2	12.05
	25	33.4	6.98	39.9	8.94	46.3	11.11	49.5	12.31	50.1	12.35	51.3	12.47	52.6	12.57
	27	33.4	7.46	39.9	9.56	46.3	11.89	48.7	12.83	49.3	12.87	50.6	12.99	51.7	13.11
	29	33.4	7.96	39.9	10.19	46.3	12.71	48.1	13.35	48.7	13.41	49.8	13.53	51.1	13.65
	31	33.4	8.48	39.9	10.87	46.3	13.57	47.2	13.87	47.9	13.93	49.2	14.04	50.3	14.18
	33	33.4	9.02	39.9	11.59	46.0	14.30	46.6	14.38	47.2	14.44	48.4	14.58	49.7	14.72
	35	33.4	9.60	39.9	12.35	45.3	14.82	45.8	14.90	46.4	14.98	47.6	15.12	48.9	15.26
	37	33.4	10.21	39.9	13.15	44.5	15.36	45.2	15.42	45.6	15.50	46.9	15.66	48.1	15.80
	39	33.4	10.85	39.9	14.00	43.7	15.88	44.4	15.96	45.0	16.04	46.1	16.20	47.4	16.36
	41	31.6	12.09	37.9	15.56	43.1	18.68	43.5	17.29	44.2	17.38	45.3	17.54	46.6	17.70
	44	29.4	13.15	35.9	16.92	41.0	20.75	41.7	19.52	42.4	18.73	43.6	18.45	44.9	18.62
	47	27.7	17.49	34.7	22.51	39.7	21.79	40.2	19.82	40.9	19.93	42.1	19.81	43.5	19.99
	50	25.4	17.18	31.1	22.10	35.4	22.98	35.9	21.46	36.5	21.28	37.6	21.17	39.1	20.91
	52	19.3	14.49	23.1	18.65	26.5	19.57	27.0	19.52	27.9	19.18	30.0	18.90	31.8	18.31

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
100%	-5	30.4	4.51	37.6	5.77	49.2	7.19	53.7	7.95	54.6	7.99	55.6	8.06	57.0	8.13
	0	30.4	4.51	37.6	5.78	49.2	7.21	53.7	7.96	54.6	8.00	55.6	8.08	57.0	8.15
	4	30.4	4.53	37.6	5.80	49.2	7.23	53.7	7.99	54.6	8.03	55.6	8.11	57.0	8.18
	7	30.4	4.62	37.6	5.91	49.2	7.37	53.7	8.14	54.6	8.18	55.2	8.26	56.2	8.33
	10	30.4	5.11	36.2	6.20	42.1	7.34	45.0	7.92	47.9	8.56	53.8	9.68	56.9	10.06
	12	30.4	5.17	36.2	6.29	42.1	7.44	45.0	8.03	47.9	8.72	53.8	9.85	56.1	9.98
	14	30.4	5.26	36.2	6.40	42.1	7.56	45.0	8.18	47.9	8.88	53.8	10.02	55.4	9.91
	16	30.4	5.38	36.2	6.54	42.1	7.73	45.0	8.36	47.9	9.08	53.6	10.25	54.6	10.13
	18	30.4	5.50	36.2	6.69	42.1	7.88	45.0	8.52	47.9	9.26	52.9	10.45	54.0	10.61
	20	30.4	5.59	36.2	6.79	42.1	8.14	45.0	8.97	47.9	9.85	52.1	11.00	53.2	11.16
	21	30.4	5.64	36.2	6.86	42.1	8.42	45.0	9.28	47.9	10.19	51.7	11.37	52.9	11.47
	23	30.4	5.79	36.2	7.33	42.1	9.06	45.0	9.97	47.9	10.95	51.1	12.03	52.1	12.14
	25	30.4	6.16	36.2	7.79	42.1	9.63	45.0	10.61	47.9	11.71	50.3	12.47	51.4	12.58
	27	30.4	6.58	36.2	8.33	42.1	10.34	45.0	11.39	47.9	12.57	49.5	12.91	50.6	13.02
	29	30.4	6.97	36.2	8.90	42.1	11.06	45.0	12.18	47.7	13.31	48.8	13.53	49.9	13.65
	31	30.4	7.41	36.2	9.47	42.1	11.79	45.0	13.12	47.1	13.85	47.7	14.08	49.2	14.21
	33	30.4	7.89	36.2	10.09	42.1	12.57	45.0	13.89	46.3	14.36	47.5	14.49	48.5	14.62
	35	30.4	8.39	36.2	10.74	42.1	13.40	45.0	14.80	45.5	14.88	46.6	15.01	47.7	15.15
	37	30.4	8.94	36.2	11.44	42.1	14.27	44.2	15.34	44.9	15.41	45.9	15.52	47.0	15.66
	39	30.4	9.52	36.2	12.19	42.1	15.19	43.6	15.84	43.8	15.92	45.3	16.03	45.9	16.18
	41	28.7	10.57	34.4	13.54	40.0	16.88	42.8	17.17	43.3	17.26	44.3	17.41	45.5	17.57
	44	26.7	11.50	32.5	14.72	38.1	18.76	40.9	19.39	41.5	18.60	42.7	18.31	43.9	18.48
	47	25.2	15.30	31.5	19.59	36.8	19.69	39.5	19.69	40.0	19.79	41.2	19.66	42.5	19.84
	50	23.1	15.02	28.2	19.23	32.9	20.76	35.2	21.32	35.7	21.13	36.8	21.02	38.2	20.75
	52	17.5	12.67	21.0	16.22	24.6	17.68	26.5	19.39	27.3	19.04	29.3	18.76	31.0	18.18
90%	-5	27.3	3.93	33.8	4.98	44.3	6.14	48.3	6.79	51.7	7.47	54.5	7.99	55.7	8.06
	0	27.3	3.94	33.8	4.99	44.3	6.16	48.3	6.80	51.7	7.48	54.5	8.01	55.7	8.08
	4	27.3	3.95	33.8	5.00	44.3	6.18	48.3	6.83	51.7	7.51	54.5	8.03	55.7	8.11
	7	27.3	4.03	33.8	5.10	44.3	6.29	48.3	6.95	51.7	7.65	54.1	8.18	55.0	8.26
	10	27.3	4.46	32.5	5.35	37.9	6.27	40.5	7.06	43.1	7.52	48.4	8.61	53.7	9.76
	12	27.3	4.51	32.5	5.42	37.9	6.35	40.5	7.15	43.1	7.66	48.4	8.76	53.7	9.89
	14	27.3	4.59	32.5	5.52	37.9	6.46	40.5	7.26	43.1	7.80	48.4	8.91	53.7	10.05
	16	27.3	4.70	32.5	5.64	37.9	6.60	40.5	7.43	43.1	7.97	48.4	9.11	53.5	10.24
	18	27.3	4.80	32.5	5.77	37.9	6.73	40.5	7.57	43.1	8.12	48.4	9.33	53.0	10.61
	20	27.3	4.87	32.5	5.85	37.9	6.96	40.5	7.72	43.1	8.46	48.4	10.02	52.1	11.06
	21	27.3	4.92	32.5	5.91	37.9	7.19	40.5	7.98	43.1	8.75	48.4	10.36	51.7	11.30
	23	27.3	5.05	32.5	6.32	37.9	7.73	40.5	8.58	43.1	9.37	48.4	11.13	50.9	11.89
	25	27.3	5.37	32.5	6.72	37.9	8.23	40.5	9.16	43.1	10.02	48.4	11.90	50.3	12.37
	27	27.3	5.74	32.5	7.18	37.9	8.83	40.5	9.78	43.1	10.73	48.4	12.70	49.5	12.91
	29	27.3	6.08	32.5	7.67	37.9	9.44	40.5	10.44	43.1	11.45	47.9	13.32	48.9	13.44
	31	27.3	6.47	32.5	8.17	37.9	10.07	40.5	11.15	43.1	12.22	47.1	13.80	48.1	13.98
	33	27.3	6.88	32.5	8.70	37.9	10.73	40.5	11.86	43.1	13.00	46.4	14.36	47.4	14.49
	35	27.3	7.32	32.5	9.27	37.9	11.44	40.5	12.64	43.1	13.91	45.6	14.88	46.6	15.01
	37	27.3	7.80	32.5	9.87	37.9	12.18	39.8	13.10	43.1	14.88	44.8	15.41	46.0	15.37
	39	27.3	8.30	32.5	10.51	37.9	12.98	39.2	13.53	43.1	15.77	44.2	15.99	45.2	15.94
	41	25.8	9.22	30.9	11.68	36.0	14.42	38.5	14.66	41.0	16.13	43.5	17.26	44.4	17.42
	44	24.1	10.03	29.3	12.70	34.3	16.02	36.9	16.56	39.3	17.38	41.8	18.15	42.9	18.32
	47	22.7	13.35	28.3	16.89	33.2	16.82	35.6	16.81	37.9	18.49	40.4	19.49	41.5	19.67
	50	20.8	13.10	25.4	16.59	29.6	17.73	31.7	18.20	33.8	19.75	36.1	20.83	37.3	20.57
	52	15.7	11.05	18.9	13.99	22.2	15.10	23.9	16.56	25.9	17.80	28.8	18.60	30.3	18.02

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
80%	-5	24.3	3.40	30.1	4.19	39.4	5.21	42.9	5.73	45.8	6.26	51.4	7.44	54.3	7.97
	0	24.3	3.40	30.1	4.20	39.4	5.22	42.9	5.74	45.8	6.28	51.4	7.45	54.3	7.98
	4	24.3	3.42	30.1	4.21	39.4	5.24	42.9	5.76	45.8	6.30	51.4	7.48	54.3	8.01
	7	24.3	3.48	30.1	4.29	39.4	5.33	42.9	5.87	45.8	6.42	51.0	7.62	53.6	8.16
	10	24.3	4.05	28.9	4.85	33.7	5.71	36.0	6.14	38.3	6.58	43.1	7.52	47.7	8.73
	12	24.3	4.11	28.9	4.93	33.7	5.81	36.0	6.26	38.3	6.71	43.1	7.65	47.7	8.66
	14	24.3	4.19	28.9	5.03	33.7	5.91	36.0	6.36	38.3	6.83	43.1	7.78	47.7	8.85
	16	24.3	4.25	28.9	5.11	33.7	6.02	36.0	6.48	38.3	6.93	43.1	7.95	47.7	9.18
	18	24.3	4.33	28.9	5.21	33.7	6.16	36.0	6.62	38.3	7.07	43.1	8.13	47.7	9.81
	20	24.3	4.41	28.9	5.31	33.7	6.26	36.0	6.74	38.3	7.23	43.1	8.43	47.7	10.17
	21	24.3	4.45	28.9	5.35	33.7	6.32	36.0	6.82	38.3	7.39	43.1	8.73	47.7	10.89
	23	24.3	4.53	28.9	5.47	33.7	6.62	36.0	7.26	38.3	7.90	43.1	9.34	47.7	11.64
	25	24.3	4.67	28.9	5.81	33.7	7.08	36.0	7.76	38.3	8.43	43.1	10.00	47.7	12.43
	27	24.3	4.97	28.9	6.18	33.7	7.54	36.0	8.28	38.3	9.05	43.1	10.67	47.7	12.86
	29	24.3	5.29	28.9	6.58	33.7	8.04	36.0	8.82	38.2	9.65	43.1	11.39	47.7	13.33
	31	24.3	5.61	28.9	7.00	33.7	8.56	36.0	9.40	38.2	10.29	43.1	12.16	46.9	13.82
	33	24.3	5.97	28.9	7.80	33.7	9.12	36.0	10.01	38.2	10.95	43.1	12.97	46.3	14.32
	35	24.3	6.32	28.9	7.80	33.7	9.70	36.0	10.67	38.2	11.67	43.1	13.85	45.5	14.84
	37	24.3	6.70	28.9	8.40	33.7	10.31	35.4	11.37	38.2	12.42	43.1	14.75	44.8	15.38
	39	24.3	7.10	28.9	8.92	33.7	10.97	34.9	12.11	38.2	13.23	43.1	15.71	44.0	15.95
	41	23.0	7.97	27.5	9.83	32.0	12.22	34.2	12.38	36.3	13.53	41.0	16.06	43.3	17.21
	44	21.4	8.66	26.0	10.69	30.5	13.57	32.8	13.98	34.9	14.58	39.4	16.89	41.8	18.10
	47	20.2	11.53	25.2	14.22	29.5	14.25	31.6	14.19	33.6	15.52	38.1	18.14	40.5	19.43
	50	18.5	11.32	22.6	13.96	26.3	15.03	28.2	15.37	30.0	16.56	34.0	19.39	36.4	20.32
	52	14.0	9.55	16.8	11.78	19.7	12.80	21.2	13.98	22.9	14.93	27.1	17.31	29.6	17.80
70%	-5	21.3	2.89	26.3	3.58	34.4	4.34	37.6	4.76	40.2	5.19	45.0	6.11	49.9	7.10
	0	21.3	2.90	26.3	3.58	34.4	4.35	37.6	4.77	40.2	5.19	45.0	6.12	49.9	7.12
	4	21.3	2.91	26.3	3.60	34.4	4.36	37.6	4.78	40.2	5.21	45.0	6.14	49.9	7.14
	7	21.3	2.96	26.3	3.66	34.4	4.44	37.6	4.87	40.2	5.31	44.6	6.25	49.3	7.27
	10	21.3	3.57	25.3	4.23	29.5	4.93	31.5	5.31	33.5	5.69	37.7	6.46	41.8	7.26
	12	21.3	3.61	25.3	4.29	29.5	5.03	31.5	5.41	33.5	5.79	37.7	6.58	41.8	7.40
	14	21.3	3.67	25.3	4.37	29.5	5.11	31.5	5.49	33.5	5.89	37.7	6.70	41.8	7.54
	16	21.3	3.73	25.3	4.45	29.5	5.21	31.5	5.61	33.5	6.00	37.7	6.82	41.8	7.68
	18	21.3	3.79	25.3	4.53	29.5	5.31	31.5	5.71	33.5	6.10	37.7	6.96	41.8	7.84
	20	21.3	3.85	25.3	4.61	29.5	5.41	31.5	5.81	33.5	6.22	37.7	7.10	41.8	8.06
	21	21.3	3.89	25.3	4.65	29.5	5.45	31.5	5.87	33.5	6.28	37.7	7.18	41.8	8.34
	23	21.3	3.95	25.3	4.73	29.5	5.57	31.5	6.06	33.5	6.60	37.7	7.72	41.8	8.94
	25	21.3	4.03	25.3	4.93	29.5	5.93	31.5	6.48	33.5	7.04	37.7	8.26	41.8	9.56
	27	21.3	4.27	25.3	5.25	29.5	6.32	31.5	6.90	33.5	7.52	37.7	8.82	41.8	10.21
	29	21.3	4.53	25.3	5.57	29.5	6.72	31.5	7.36	33.5	8.00	37.7	9.40	41.8	10.91
	31	21.3	4.79	25.3	5.91	29.5	7.16	31.5	7.82	33.5	8.52	37.7	10.01	41.8	11.63
	33	21.3	5.09	25.3	6.28	29.5	7.62	31.5	8.32	33.5	9.08	37.7	10.67	41.8	12.41
	35	21.3	5.39	25.3	6.66	29.5	8.08	31.5	8.86	33.5	9.66	37.7	11.37	41.8	13.23
	37	21.3	5.69	25.3	7.06	29.5	8.60	30.9	9.42	33.5	10.27	37.7	12.11	41.8	14.08
	39	21.3	6.02	25.3	7.48	29.5	9.12	30.5	9.99	33.5	10.91	37.7	12.87	41.8	15.00
	41	20.1	6.79	24.0	8.40	28.0	10.18	29.9	10.28	31.9	11.20	35.9	13.19	39.8	15.34
	44	18.7	7.38	22.8	9.13	26.7	11.31	28.7	11.60	30.6	12.07	34.5	13.87	38.4	16.14
	47	17.6	9.82	22.0	12.15	25.8	11.88	27.7	11.78	29.5	12.84	33.3	14.90	37.2	17.33
	50	16.2	9.64	19.7	11.93	23.0	12.52	24.7	12.76	26.3	13.71	29.8	15.92	33.4	18.12
	52	12.2	8.13	14.7	10.06	17.2	10.67	18.6	11.60	20.1	12.36	23.7	14.21	27.2	15.87

Combination	Outdoor air temp (℃ DB)	Indoor air temp													
		14.0℃ WB		16.0℃ WB		18.0℃ WB		19.0℃ WB		20.0℃ WB		22.0℃ WB		24.0℃ WB	
		20.0℃ DB		23.0℃ DB		26.0℃ DB		27.0℃ DB		28.0℃ DB		30.0℃ DB		32.0℃ DB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW	KW
60%	-5	18.2	2.43	22.5	2.97	29.5	3.56	32.2	3.88	34.5	4.21	38.6	4.92	42.8	5.68
	0	18.2	2.44	22.5	2.97	29.5	3.56	32.2	3.89	34.5	4.22	38.6	4.93	42.8	5.69
	4	18.2	2.45	22.5	2.98	29.5	3.58	32.2	3.90	34.5	4.23	38.6	4.94	42.8	5.71
	7	18.2	2.49	22.5	3.04	29.5	3.64	32.2	3.97	34.5	4.31	38.2	5.04	42.3	5.82
	10	18.2	3.09	21.7	3.63	25.3	4.21	27.0	4.51	28.7	4.81	32.3	5.45	35.8	6.10
	12	18.2	3.15	21.7	3.69	25.3	4.29	27.0	4.59	28.7	4.89	32.3	5.55	35.8	6.20
	14	18.2	3.19	21.7	3.75	25.3	4.35	27.0	4.67	28.7	4.99	32.3	5.65	35.8	6.32
	16	18.2	3.23	21.7	3.81	25.3	4.43	27.0	4.75	28.7	5.07	32.3	5.75	35.8	6.44
	18	18.2	3.29	21.7	3.87	25.3	4.51	27.0	4.83	28.7	5.17	32.3	5.85	35.8	6.56
	20	18.2	3.33	21.7	3.95	25.3	4.59	27.0	4.93	28.7	5.27	32.3	5.97	35.8	6.70
	21	18.2	3.37	21.7	3.97	25.3	4.63	27.0	4.97	28.7	5.31	32.3	6.02	35.8	6.76
	23	18.2	3.41	21.7	4.05	25.3	4.71	27.0	5.07	28.7	5.41	32.3	6.26	35.8	7.20
	25	18.2	3.47	21.7	4.13	25.3	4.89	27.0	5.31	28.7	5.75	32.3	6.68	35.8	7.68
	27	18.2	3.61	21.7	4.37	25.3	5.21	27.0	5.67	28.7	6.12	32.3	7.12	35.8	8.20
	29	18.2	3.81	21.7	4.63	25.3	5.55	27.0	6.02	28.7	6.52	32.3	7.60	35.8	8.76
	31	18.2	4.05	21.7	4.93	25.3	5.89	27.0	6.40	28.7	6.94	32.3	8.08	35.8	9.32
	33	18.2	4.27	21.7	5.21	25.3	6.24	27.0	6.80	28.7	7.38	32.3	8.60	35.8	9.94
	35	18.2	4.53	21.7	5.53	25.3	6.62	27.0	7.22	28.7	7.84	32.3	9.16	35.8	10.57
	37	18.2	4.79	21.7	5.85	25.3	7.02	26.5	7.66	28.7	8.32	32.3	9.74	35.8	11.25
	39	18.2	5.05	21.7	6.18	25.3	7.44	26.2	8.12	28.7	8.84	32.3	10.33	35.8	11.97
	41	17.2	5.71	20.6	6.96	24.0	8.35	25.7	8.38	27.3	9.09	30.7	10.62	34.2	12.27
	44	16.0	6.20	19.5	7.57	22.9	9.27	24.6	9.46	26.2	9.80	29.6	11.17	33.0	12.90
	47	15.1	8.26	18.9	10.07	22.1	9.74	23.7	9.61	25.3	10.43	28.6	12.00	31.9	13.85
	50	13.9	8.11	16.9	9.89	19.7	10.27	21.1	10.40	22.6	11.13	25.5	12.82	28.7	14.49
	52	10.5	6.84	12.6	8.34	14.8	8.74	15.9	9.46	17.2	10.04	20.3	11.45	23.3	12.69
50%	-5	15.2	2.01	18.8	2.41	24.6	2.85	26.8	3.09	28.6	3.33	32.1	3.86	35.7	4.41
	0	15.2	2.02	18.8	2.41	24.6	2.86	26.8	3.09	28.6	3.34	32.1	3.86	35.7	4.42
	4	15.2	2.03	18.8	2.42	24.6	2.87	26.8	3.10	28.6	3.35	32.1	3.88	35.7	4.44
	7	15.2	2.06	18.8	2.47	24.6	2.92	26.8	3.16	28.6	3.41	31.9	3.95	35.2	4.52
	10	15.2	2.67	18.1	3.09	21.1	3.53	22.5	3.77	23.9	3.99	26.9	4.49	29.9	5.01
	12	15.2	2.69	18.1	3.13	21.1	3.59	22.5	3.81	23.9	4.07	26.9	4.57	29.9	5.09
	14	15.2	2.73	18.1	3.17	21.1	3.63	22.5	3.89	23.9	4.13	26.9	4.65	29.9	5.19
	16	15.2	2.77	18.1	3.21	21.1	3.69	22.5	3.95	23.9	4.19	26.9	4.73	29.9	5.27
	18	15.2	2.81	18.1	3.27	21.1	3.75	22.5	4.01	23.9	4.27	26.9	4.81	29.9	5.37
	20	15.2	2.85	18.1	3.31	21.1	3.81	22.5	4.09	23.9	4.35	26.9	4.91	29.9	5.47
	21	15.2	2.87	18.1	3.35	21.1	3.85	22.5	4.11	23.9	4.39	26.9	4.95	29.9	5.53
	23	15.2	2.91	18.1	3.39	21.1	3.91	22.5	4.19	23.9	4.47	26.9	5.03	29.9	5.65
	25	15.2	2.95	18.1	3.45	21.1	3.99	22.5	4.27	23.9	4.61	26.9	5.29	29.9	6.02
	27	15.2	3.01	18.1	3.59	21.1	4.21	22.5	4.55	23.9	4.89	26.9	5.63	29.9	6.42
	29	15.2	3.17	18.1	3.79	21.1	4.47	22.5	4.83	23.9	5.21	26.9	5.99	29.9	6.84
	31	15.2	3.35	18.1	4.01	21.1	4.77	22.5	5.13	23.9	5.53	26.9	6.36	29.9	7.28
	33	15.2	3.55	18.1	4.25	21.1	5.03	22.5	5.43	23.9	5.87	26.9	6.76	29.9	7.74
	35	15.2	3.75	18.1	4.49	21.1	5.31	22.5	5.75	23.9	6.20	26.9	7.18	29.9	8.22
	37	15.2	3.95	18.1	4.75	21.1	5.63	22.1	6.08	23.9	6.58	26.9	7.62	29.9	8.74
	39	15.2	4.17	18.1	5.01	21.1	5.95	21.8	6.44	23.9	6.98	26.9	8.08	29.9	9.28
	41	14.4	4.73	17.2	5.66	20.0	6.69	21.4	6.66	22.7	7.20	25.6	8.33	28.5	9.53
	44	13.4	5.14	16.3	6.15	19.1	7.43	20.5	7.53	21.8	7.76	24.6	8.76	27.5	10.03
	47	12.6	6.84	15.7	8.18	18.4	7.80	19.8	7.64	21.0	8.25	23.8	9.41	26.6	10.77
	50	11.5	6.71	14.1	8.03	16.4	8.23	17.6	8.27	18.7	8.81	21.3	10.05	23.9	11.26
	52	8.7	5.66	10.5	6.78	12.3	7.00	13.3	7.53	14.3	7.94	17.0	8.98	19.4	9.86

Heating Capacity Calculation Method

GMV-Q224WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
135%	-19.8	-20.0	16.2	3.72	16.1	3.98	16.0	4.24	16.0	4.37	16.0	4.50	16.0	4.77
	-18.8	-19.0	16.4	3.80	16.4	4.06	16.4	4.32	16.3	4.45	16.3	4.57	16.2	4.83
	-16.7	-17.0	17.1	3.98	17.0	4.22	16.9	4.47	16.9	4.58	16.9	4.72	16.8	4.97
	-13.7	-15.0	17.8	4.16	17.7	4.40	17.6	4.64	17.6	4.75	17.5	4.88	17.5	5.12
	-11.8	-13.0	18.5	4.34	18.5	4.58	18.4	4.80	18.3	4.92	18.3	5.03	18.3	5.26
	-9.8	-11.0	19.4	4.54	19.3	4.75	19.2	4.97	19.2	5.08	19.2	5.19	19.1	5.41
	-9.5	-10.0	19.8	4.63	19.8	4.84	19.7	5.05	19.7	5.16	19.6	5.27	19.6	5.48
	-8.5	-9.1	20.2	4.71	20.2	4.92	20.2	5.13	20.1	5.23	20.1	5.33	20.0	5.55
	-7.0	-7.6	21.0	4.85	21.0	5.05	20.9	5.25	20.9	5.35	20.8	5.45	20.7	5.66
	-5.0	-5.6	22.1	5.03	22.0	5.12	21.9	5.42	21.9	5.51	21.8	5.60	21.8	5.79
	-3.0	-3.7	23.1	5.20	23.0	5.38	23.0	5.56	22.9	5.66	22.9	5.74	22.9	5.92
	0.0	-0.7	24.9	5.45	24.9	5.62	24.8	5.79	24.8	5.87	24.8	5.96	24.8	6.12
	3.0	2.2	26.9	5.68	26.8	5.83	26.7	5.99	26.7	6.07	26.7	6.15	26.7	6.30
	5.0	4.1	28.3	5.82	28.2	5.97	28.2	6.11	28.1	6.19	28.1	6.26	28.0	6.41
	7.0	6.0	29.7	5.96	29.6	6.09	29.6	6.24	29.5	5.62	29.5	6.37	28.3	6.12
	9.0	7.9	31.2	6.08	31.1	6.22	31.1	6.35	31.0	6.41	30.4	6.28	28.3	5.75
	11.0	9.8	32.8	6.20	32.7	6.32	32.5	6.41	31.4	6.15	30.4	5.90	28.3	5.42
	13.0	11.8	34.5	6.32	34.4	6.44	32.5	6.00	31.4	5.76	30.4	5.54	28.3	5.08
	15.0	13.7	36.2	6.43	34.6	6.10	32.5	5.66	31.4	5.44	30.4	5.22	28.3	4.79
	18.0	16.8	36.2	6.09	34.6	5.81	32.5	5.36	31.4	5.16	30.4	4.93	28.3	4.56
	20.0	18.5	36.2	5.79	34.6	5.55	32.5	5.12	31.4	4.93	30.4	4.69	28.3	4.35
	24.0	20.5	36.2	5.54	34.6	5.33	32.5	4.92	31.4	4.74	30.4	4.47	28.3	4.19
120%	-19.8	-20.0	16.1	4.07	16.0	4.31	16.0	4.56	16.0	4.67	16.0	4.79	15.9	5.04
	-18.8	-19.0	16.4	4.15	16.3	4.38	16.3	4.58	16.2	4.74	16.2	4.86	16.1	5.10
	-16.7	-17.0	17.0	4.31	16.9	4.54	16.9	4.77	16.8	4.88	16.8	5.00	16.7	5.22
	-13.7	-15.0	17.7	4.48	17.6	4.70	17.5	4.92	17.5	5.03	17.5	5.14	17.5	5.36
	-11.8	-13.0	18.4	4.65	18.4	4.86	18.3	5.07	18.3	5.18	18.3	5.29	18.3	5.50
	-9.8	-11.0	19.3	4.83	19.2	5.03	19.2	5.23	19.1	5.33	19.1	5.43	19.0	5.64
	-9.5	-10.0	19.8	4.92	19.7	5.12	19.6	5.31	19.6	5.41	19.6	5.46	19.5	5.70
	-8.5	-9.1	20.2	4.99	20.1	5.18	20.1	5.38	20.0	5.47	20.0	5.57	19.9	5.76
	-7.0	-7.6	20.9	5.12	20.9	5.31	20.8	5.49	20.8	5.59	20.7	5.68	20.7	5.86
	-5.0	-5.6	22.0	5.29	21.9	5.46	21.8	5.64	21.8	5.73	21.8	5.82	21.7	5.99
	-3.0	-3.7	23.0	5.44	23.0	5.61	22.9	5.78	22.9	5.86	22.9	5.95	22.9	6.11
	0.0	-0.7	24.8	5.68	24.8	5.83	24.8	6.06	24.8	6.07	24.7	6.14	24.7	6.30
	3.0	2.2	26.8	5.89	26.7	6.03	26.7	6.17	26.7	6.25	26.7	6.32	26.1	6.28
	5.0	4.1	28.2	6.02	28.1	6.15	28.1	6.29	28.0	6.36	28.0	6.43	26.1	5.90
	7.0	6.0	29.6	6.14	29.6	6.27	29.5	6.40	29.0	6.31	28.1	6.05	26.1	5.55
	9.0	7.9	31.1	6.26	31.0	6.39	30.0	6.17	29.0	5.93	28.1	5.69	26.1	5.22
	11.0	9.8	32.7	6.37	31.9	6.26	30.0	5.81	29.0	5.58	28.1	5.35	26.1	4.92
	13.0	11.8	33.9	6.31	31.9	5.87	30.0	5.44	29.0	5.24	28.1	5.03	26.1	4.63
	15.0	13.7	33.9	5.94	31.9	5.53	30.0	5.14	29.0	4.94	28.1	4.75	26.1	4.37
	18.0	16.8	33.9	5.61	31.9	5.24	30.0	4.88	29.0	4.68	28.1	4.49	26.1	4.15
	20.0	18.5	33.9	5.32	31.9	5.00	30.0	4.66	29.0	4.46	28.1	4.28	26.1	3.95
	24.0	20.5	33.9	5.06	31.9	4.79	30.0	4.49	29.0	4.28	28.1	4.11	26.1	3.78

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-19.8	-20.0	16.0	4.43	16.0	4.64	15.9	4.87	15.9	4.98	15.9	5.09	15.8	5.31
	-18.8	-19.0	16.3	4.49	16.3	4.71	16.2	4.93	16.2	5.04	16.1	5.15	16.1	5.37
	-16.7	-17.0	16.9	4.64	16.8	4.86	16.8	5.07	16.7	5.17	16.7	5.28	16.7	5.48
	-13.7	-15.0	17.6	4.80	17.5	5.01	17.5	5.20	17.5	5.31	17.5	5.41	17.4	5.61
	-11.8	-13.0	18.3	4.97	18.3	5.16	18.3	5.35	18.3	5.44	18.2	5.54	18.2	5.74
	-9.8	-11.0	19.2	5.12	19.1	5.31	19.1	5.49	19.0	5.59	19.0	5.68	19.0	5.86
	-9.5	-10.0	19.7	5.20	19.6	5.38	19.5	5.57	19.5	5.66	19.5	5.74	19.4	5.92
	-8.5	-9.1	20.1	5.27	20.0	5.45	20.0	5.63	20.0	5.72	19.9	5.81	19.9	5.98
	-7.0	-7.6	20.8	5.40	20.8	5.56	20.7	5.73	20.7	5.82	21.0	5.90	20.6	6.07
	-5.0	-5.6	21.9	5.55	21.8	5.71	21.7	5.87	21.7	5.95	22.8	6.03	21.7	6.19
	-3.0	-3.7	22.9	5.69	22.9	5.84	22.9	6.00	22.9	6.07	24.7	6.15	22.8	6.30
	0.0	-0.7	24.8	5.90	24.8	6.04	24.7	6.19	24.7	6.26	25.7	6.33	24.0	6.21
	3.0	2.2	26.7	6.10	26.7	6.23	26.7	6.36	26.6	6.42	25.7	6.16	24.0	5.65
	5.0	4.1	28.1	6.22	28.1	6.35	27.5	6.28	26.6	6.03	25.7	5.79	24.0	5.31
	7.0	6.0	29.5	6.33	29.3	6.37	27.5	5.90	26.6	5.67	25.7	5.44	24.0	5.00
	9.0	7.9	31.0	6.43	29.3	5.99	27.5	5.55	26.6	5.33	25.7	5.12	24.0	4.71
	11.0	9.8	31.0	6.05	29.3	5.63	27.5	5.22	26.6	5.03	25.7	4.83	24.0	4.45
	13.0	11.8	31.0	5.68	29.3	5.29	27.5	4.91	26.6	4.73	25.7	4.54	24.0	4.19
	15.0	13.7	31.0	5.35	29.3	4.99	27.5	4.64	26.6	4.46	25.7	4.30	24.0	3.96
	18.0	16.8	31.0	5.06	29.3	4.73	27.5	4.23	26.6	4.23	25.7	4.09	24.0	3.77
	20.0	18.5	31.0	4.80	29.3	4.49	27.5	4.01	26.6	4.02	25.7	3.92	24.0	3.61
	24.0	20.5	31.0	4.58	29.3	4.29	27.5	3.82	26.6	3.85	25.7	3.78	24.0	3.47
100%	-19.8	-20.0	16.0	4.78	15.9	4.98	15.9	5.18	15.8	5.29	15.8	5.38	15.7	5.59
	-18.8	-19.0	16.2	4.84	16.2	5.04	16.1	5.24	16.1	5.34	16.0	5.44	16.0	5.64
	-16.7	-17.0	16.8	4.98	16.7	5.17	16.7	5.36	16.7	5.46	16.7	5.55	16.7	5.74
	-13.7	-15.0	17.5	5.12	17.5	5.31	17.5	5.49	17.4	5.59	17.4	5.68	17.3	5.86
	-11.8	-13.0	18.3	5.27	18.3	5.44	18.2	5.62	18.2	5.71	18.2	5.59	18.1	5.98
	-9.8	-11.0	19.1	5.42	19.0	5.59	19.0	5.75	19.0	5.84	19.0	5.92	19.0	6.09
	-9.5	-10.0	19.6	5.49	19.5	5.66	19.5	5.82	19.4	5.90	19.4	5.98	19.4	6.15
	-8.5	-9.1	20.0	5.55	20.0	5.72	19.9	5.87	19.9	5.96	19.8	6.04	19.8	6.19
	-7.0	-7.6	20.7	5.66	20.7	5.82	20.6	5.97	20.6	6.05	20.6	6.13	20.6	6.28
	-5.0	-5.6	21.8	5.81	21.7	5.95	21.7	6.10	21.7	6.17	21.7	6.24	21.7	6.39
	-3.0	-3.7	22.9	5.94	22.9	6.07	22.8	6.22	22.8	6.28	22.8	6.35	21.8	6.09
	0.0	-0.7	24.7	6.13	24.7	6.26	24.6	6.39	24.2	6.28	23.4	6.02	21.8	5.53
	3.0	2.2	26.7	6.30	26.6	6.42	25.0	5.94	24.2	5.71	23.4	5.48	21.8	5.03
	5.0	4.1	28.0	6.42	26.6	6.03	25.0	5.59	24.2	5.38	23.4	5.16	21.8	4.75
	7.0	6.0	28.2	6.09	26.6	5.67	25.0	5.26	24.2	5.06	23.4	4.86	21.8	4.47
	9.0	7.9	28.2	5.72	26.6	5.33	25.0	4.95	24.2	4.77	23.4	4.58	21.8	4.22
	11.0	9.8	28.2	5.39	26.6	5.03	25.0	4.67	24.2	4.49	23.4	4.32	21.8	3.99
	13.0	11.8	28.2	5.06	26.6	4.73	25.0	4.40	24.2	4.23	23.4	4.08	21.8	3.76
	15.0	13.7	28.2	4.77	26.6	4.46	25.0	4.15	24.2	4.00	23.4	3.85	21.8	3.57
	18.0	16.8	28.2	4.50	26.6	4.26	25.0	4.02	24.2	3.80	23.4	3.65	21.8	3.39
	20.0	18.5	28.2	4.25	26.6	4.08	25.0	3.85	24.2	3.63	23.4	3.48	21.8	3.26
	24.0	20.5	28.2	4.02	26.6	3.95	25.0	3.70	24.2	3.49	23.4	3.34	21.8	3.16

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-19.8	-20.0	15.9	5.14	15.8	5.31	15.8	5.50	15.7	5.59	15.7	5.68	15.7	5.86
	-18.8	-19.0	16.1	5.19	16.1	5.38	16.0	5.55	16.0	5.64	16.0	5.73	16.0	5.91
	-16.7	-17.0	16.7	5.32	16.7	5.49	16.7	5.66	16.7	5.75	16.6	5.83	16.6	6.00
	-13.7	-15.0	17.5	5.45	17.4	5.61	17.4	5.78	17.3	5.81	17.3	5.94	17.3	6.11
	-11.8	-13.0	18.2	5.58	18.2	5.74	18.1	5.89	18.1	5.98	18.1	6.05	18.0	6.21
	-9.8	-11.0	19.0	5.71	19.0	5.86	19.0	6.01	19.0	6.09	19.0	6.17	18.9	6.32
	-9.5	-10.0	19.5	5.78	19.4	5.93	19.4	6.07	19.4	6.15	19.4	6.22	19.4	6.37
	-8.5	-9.1	19.9	5.84	19.9	5.98	19.8	6.13	19.8	6.19	19.8	6.27	19.6	6.33
	-7.0	-7.6	20.6	5.94	20.6	6.07	20.6	6.22	20.6	6.28	20.6	6.35	19.6	6.04
	-5.0	-5.6	21.7	6.07	21.7	6.19	21.7	6.32	21.7	6.39	21.0	6.19	19.6	5.68
	-3.0	-3.7	22.8	6.18	22.8	5.62	22.5	6.33	21.7	6.08	21.0	5.83	19.6	5.35
	0.0	-0.7	24.7	6.36	24.0	5.52	22.5	5.74	21.7	5.52	21.0	5.30	19.6	4.87
	3.0	2.2	25.4	6.06	24.0	5.64	22.5	5.23	21.7	5.03	21.0	4.84	19.6	4.45
	5.0	4.1	25.4	5.70	24.0	5.31	22.5	4.93	21.7	4.74	21.0	4.56	19.6	4.20
	7.0	6.0	25.4	5.35	24.0	5.00	22.5	4.64	21.7	4.47	21.0	4.30	19.6	3.97
	9.0	7.9	25.4	5.05	24.0	4.71	22.5	4.38	21.7	4.22	21.0	4.06	19.6	3.75
	11.0	9.8	25.4	4.75	24.0	4.44	22.5	4.14	21.7	3.99	21.0	3.84	19.6	3.55
	13.0	11.8	25.4	4.47	24.0	4.19	22.5	3.90	21.7	3.76	21.0	3.63	19.6	3.35
	15.0	13.7	25.4	4.23	24.0	3.95	22.5	3.70	21.7	3.55	21.0	3.44	19.6	3.18
	18.0	16.8	25.4	4.00	24.0	3.74	22.5	3.50	21.7	3.35	21.0	3.26	19.6	3.03
	20.0	18.5	25.4	3.78	24.0	3.53	22.5	3.33	21.7	3.16	21.0	3.09	19.6	2.89
	24.0	20.5	25.4	3.57	24.0	3.33	22.5	3.16	21.7	2.98	21.0	2.94	19.6	2.76
80%	-19.8	-20.0	15.8	5.49	15.7	5.65	15.7	5.81	15.7	5.89	15.6	5.98	15.6	6.13
	-18.8	-19.0	16.0	5.54	16.0	5.70	16.0	5.86	16.0	5.94	16.0	6.02	15.9	6.18
	-16.7	-17.0	16.7	5.66	16.6	5.81	16.6	5.96	16.6	6.04	16.6	6.11	16.5	6.26
	-13.7	-15.0	17.4	5.77	17.3	5.91	17.3	6.07	17.3	6.13	17.2	6.21	17.2	6.36
	-11.8	-13.0	18.1	5.89	18.1	6.03	18.0	6.17	18.0	6.24	18.0	6.31	17.5	6.14
	-9.8	-11.0	19.0	6.00	19.0	6.14	18.9	6.28	18.9	6.34	18.7	6.32	17.5	5.80
	-9.5	-10.0	19.4	6.07	19.4	6.19	19.4	6.32	19.4	6.39	18.7	6.14	17.5	5.63
	-8.5	-9.1	19.8	6.12	19.8	6.25	19.8	6.37	19.4	6.24	18.7	5.98	17.5	5.48
	-7.0	-7.6	20.6	6.21	20.6	6.33	20.0	6.19	19.4	5.95	18.7	5.71	17.5	5.26
	-5.0	-5.6	21.7	5.63	21.3	6.28	20.0	5.82	19.4	5.59	18.7	5.37	17.5	4.93
	-3.0	-3.7	22.5	5.67	21.3	5.91	20.0	5.48	19.4	5.29	18.7	5.06	17.5	4.66
	0.0	-0.7	22.5	5.76	21.3	5.37	20.0	4.99	19.4	4.80	18.7	4.61	17.5	4.25
	3.0	2.2	22.5	5.25	21.3	4.90	20.0	4.56	19.4	4.38	18.7	4.22	17.5	3.89
	5.0	4.1	22.5	4.94	21.3	4.62	20.0	4.30	19.4	4.14	18.7	3.99	17.5	3.68
	7.0	6.0	22.5	4.66	21.3	4.36	20.0	4.06	19.4	3.91	18.7	3.77	17.5	3.48
	9.0	7.9	22.5	4.40	21.3	4.11	20.0	3.85	19.4	3.70	18.7	3.57	17.5	3.30
	11.0	9.8	22.5	4.15	21.3	3.89	20.0	3.63	19.4	3.50	18.7	3.37	17.5	3.13
	13.0	11.8	22.5	3.91	21.3	3.67	20.0	3.43	19.4	3.31	18.7	3.19	17.5	2.96
	15.0	13.7	22.5	3.70	21.3	3.48	20.0	3.25	19.4	3.13	18.7	3.03	17.5	2.81
	18.0	16.8	22.5	3.53	21.3	3.31	20.0	3.09	19.4	2.98	18.7	2.87	17.5	2.68
	20.0	18.5	22.5	3.39	21.3	3.17	20.0	2.96	19.4	2.84	18.7	2.73	17.5	2.56
	24.0	20.5	22.5	3.29	21.3	3.07	20.0	2.83	19.4	2.72	18.7	2.61	17.5	2.45

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20.0	15.7	5.85	15.6	5.98	15.6	6.13	15.6	6.19	15.6	6.27	15.2	6.20
	-18.8	-19.0	16.0	5.89	16.0	6.03	15.9	6.17	15.9	6.24	15.9	6.31	15.2	6.07
	-16.7	-17.0	16.6	5.99	16.6	6.13	16.5	6.26	16.5	6.32	16.4	6.32	15.2	5.79
	-13.7	-15.0	17.3	6.09	17.2	6.22	17.2	6.35	16.9	60.90	16.4	6.00	15.2	5.50
	-11.8	-13.0	18.0	6.19	18.0	6.32	17.5	6.17	16.9	5.93	16.4	5.69	15.2	5.22
	-9.8	-11.0	18.9	6.30	18.7	6.29	17.5	5.83	16.9	5.60	16.4	5.38	15.2	4.94
	-9.5	-10.0	19.4	6.35	18.7	6.11	17.5	5.66	16.9	5.44	16.4	5.22	15.2	4.80
	-8.5	-9.1	19.8	6.39	18.7	5.94	17.5	5.50	16.9	5.29	16.4	5.09	15.2	4.68
	-7.0	-7.6	19.8	6.10	18.7	5.68	17.5	5.27	16.9	5.07	16.4	4.87	15.2	4.48
	-5.0	-5.6	19.8	5.73	18.7	5.34	17.5	4.96	16.9	4.77	16.4	4.58	15.2	4.23
	-3.0	-3.7	19.8	5.40	18.7	5.03	17.5	4.68	16.9	4.50	16.4	4.33	15.2	4.00
	0.0	-0.7	19.8	4.91	18.7	4.61	17.5	4.27	16.9	4.11	16.4	3.96	15.2	3.66
	3.0	2.2	19.8	4.49	18.7	0.10	17.5	3.91	16.9	3.77	16.4	3.63	15.2	3.36
	5.0	4.1	19.8	4.23	18.7	3.96	17.5	3.70	16.9	3.57	16.4	3.44	15.2	3.18
	7.0	6.0	19.8	4.00	18.7	3.75	17.5	3.50	16.9	3.37	16.4	3.26	15.2	3.02
	9.0	7.9	19.8	3.78	18.7	3.54	17.5	3.31	16.9	3.20	16.4	3.09	15.2	2.86
	11.0	9.8	19.8	3.58	18.7	3.35	17.5	3.14	16.9	3.03	16.4	2.93	15.2	2.72
	13.0	11.8	19.8	3.38	18.7	3.18	17.5	2.97	16.9	2.88	16.4	2.77	15.2	2.58
	15.0	13.7	19.8	3.20	18.7	3.01	17.5	2.82	16.9	2.73	16.4	2.64	15.2	2.46
	18.0	16.8	19.8	3.04	18.7	2.86	17.5	2.68	16.9	2.60	16.4	2.51	15.2	2.35
	20.0	18.5	19.8	2.90	18.7	2.73	17.5	2.56	16.9	2.49	16.4	2.40	15.2	2.25
	24.0	20.5	19.8	2.77	18.7	2.60	17.5	2.46	16.9	2.38	16.4	2.32	15.2	2.17
60%	-19.8	-20.0	15.6	6.20	15.6	6.32	15.0	6.08	14.5	5.84	14.0	5.61	13.1	5.14
	-18.8	-19.0	15.9	6.24	15.9	6.36	15.0	5.95	14.5	5.72	14.0	5.48	13.1	5.03
	-16.7	-17.0	16.5	6.32	16.0	6.13	15.0	5.68	14.5	5.46	14.0	5.24	13.1	4.82
	-13.7	-15.0	16.9	6.26	16.0	5.82	15.0	5.40	14.5	5.19	14.0	4.99	13.1	4.58
	-11.8	-13.0	16.9	5.92	16.0	5.51	15.0	5.12	14.5	4.92	14.0	4.73	13.1	4.36
	-9.8	-11.0	16.9	5.59	16.0	5.21	15.0	4.84	14.5	4.66	14.0	4.48	13.1	4.13
	-9.5	-10.0	16.9	5.44	16.0	5.07	15.0	4.71	14.5	4.54	14.0	4.36	13.1	4.02
	-8.5	-9.1	16.9	5.29	16.0	4.94	15.0	4.59	14.5	4.42	14.0	4.25	13.1	3.92
	-7.0	-7.6	16.9	5.06	16.0	4.73	15.0	4.39	14.5	4.23	14.0	4.07	13.1	3.76
	-5.0	-5.6	16.9	4.77	16.0	4.45	15.0	4.15	14.5	4.00	14.0	3.85	13.1	3.56
	-3.0	-3.7	16.9	4.50	16.0	4.21	15.0	3.93	14.5	3.78	14.0	3.64	13.1	3.37
	0.0	-0.7	16.9	4.11	16.0	3.85	15.0	3.59	14.5	3.47	14.0	3.34	13.1	3.09
	3.0	2.2	16.9	3.77	16.0	3.54	15.0	3.31	14.5	3.19	14.0	3.08	13.1	0.12
	5.0	4.1	16.9	3.57	16.0	3.35	15.0	3.13	14.5	3.03	14.0	2.92	13.1	2.71
	7.0	6.0	16.9	3.37	16.0	3.17	15.0	2.96	14.5	2.87	14.0	2.77	13.1	2.57
	9.0	7.9	16.9	3.20	16.0	3.01	15.0	2.81	14.5	2.73	14.0	2.63	13.1	2.45
	11.0	9.8	16.9	3.03	16.0	2.85	15.0	2.68	14.5	2.59	14.0	2.50	13.1	2.34
	13.0	11.8	16.9	2.87	16.0	2.70	15.0	2.54	14.5	2.46	14.0	2.38	13.1	2.22
	15.0	13.7	16.9	2.73	16.0	2.57	15.0	2.42	14.5	2.34	14.0	2.27	13.1	2.12
	18.0	16.8	16.9	2.61	16.0	2.45	15.0	2.31	14.5	2.24	14.0	2.17	13.1	2.03
	20.0	18.5	16.9	2.50	16.0	2.34	15.0	2.21	14.5	2.15	14.0	2.09	13.1	1.95
	24.0	20.5	16.9	2.40	16.0	2.24	15.0	2.13	14.5	2.08	14.0	2.02	13.1	1.89

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-19.8	-20.0	14.1	5.64	13.3	5.25	12.5	4.88	12.1	4.70	11.7	4.51	10.9	4.16
	-18.8	-19.0	14.1	5.52	13.3	5.14	12.5	4.78	12.1	4.60	11.7	4.42	10.9	4.08
	-16.7	-17.0	14.1	5.27	13.3	4.91	12.5	4.57	12.1	4.40	11.7	4.23	10.9	3.91
	-13.7	-15.0	14.1	5.01	13.3	4.68	12.5	4.35	12.1	4.19	11.7	4.04	10.9	3.73
	-11.8	-13.0	14.1	4.76	13.3	4.45	12.5	4.14	12.1	3.99	11.7	3.84	10.9	3.55
	-9.8	-11.0	14.1	4.51	13.3	4.21	12.5	3.93	12.1	3.78	11.7	3.65	10.9	3.37
	-9.5	-10.0	14.1	4.38	13.3	4.10	12.5	3.82	12.1	3.69	11.7	3.55	10.9	3.29
	-8.5	-9.1	14.1	4.28	13.3	4.00	12.5	3.73	12.1	3.60	11.7	3.47	10.9	3.21
	-7.0	-7.6	14.1	4.10	13.3	3.85	12.5	3.58	12.1	3.46	11.7	3.33	10.9	3.09
	-5.0	-5.6	14.1	3.87	13.3	3.63	12.5	3.39	12.1	3.27	11.7	3.16	10.9	2.92
	-3.0	-3.7	14.1	3.66	13.3	3.44	12.5	3.21	12.1	3.10	11.7	2.99	10.9	2.78
	0.0	-0.7	14.1	3.36	13.3	3.16	12.5	2.96	12.1	2.85	11.7	2.76	10.9	2.57
	3.0	2.2	14.1	3.09	13.3	2.91	12.5	2.73	12.1	2.64	11.7	2.55	10.9	2.38
	5.0	4.1	14.1	2.94	13.3	2.76	12.5	2.59	12.1	2.51	11.7	2.42	10.9	2.26
	7.0	6.0	14.1	2.79	13.3	2.62	12.5	2.47	12.1	2.38	11.7	2.31	10.9	2.16
	9.0	7.9	14.1	2.64	13.3	2.49	12.5	2.34	12.1	2.27	11.7	2.20	10.9	2.06
	11.0	9.8	14.1	2.51	13.3	2.37	12.5	2.23	12.1	2.17	11.7	2.10	10.9	1.96
	13.0	11.8	14.1	2.39	13.3	2.25	12.5	2.12	12.1	2.06	11.7	1.99	10.9	1.87
	15.0	13.7	14.1	2.27	13.3	2.15	12.5	2.03	12.1	1.97	11.7	1.91	10.9	1.78
	18.0	16.8	14.1	2.17	13.3	2.06	12.5	1.95	12.1	1.89	11.7	1.82	10.9	1.70
	20.0	18.5	14.1	2.06	13.3	1.97	12.5	1.87	12.1	1.82	11.7	1.75	10.9	1.63
	24.0	20.5	14.1	1.97	13.3	1.89	12.5	1.74	12.1	1.76	11.7	1.68	10.9	1.56

GMV-Q280WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
135%	-19.8	-20.0	20.4	5.16	20.3	5.52	20.2	5.89	20.2	6.07	20.1	6.25	20.1	6.62
	-18.8	-19.0	20.7	5.27	20.6	5.63	20.6	5.99	20.5	6.17	20.5	6.34	20.4	6.70
	-16.7	-17.0	21.5	5.52	21.4	5.86	21.3	6.21	21.3	6.35	21.3	6.55	21.2	6.90
	-13.7	-15.0	22.4	5.77	22.3	6.11	22.2	6.44	22.2	6.60	22.1	6.77	22.1	7.10
	-11.8	-13.0	23.3	6.03	23.3	6.35	23.2	6.66	23.1	6.83	23.1	6.99	23.0	7.30
	-9.8	-11.0	24.4	6.29	24.3	6.60	24.2	6.90	24.2	7.05	24.2	7.20	24.1	7.51
	-9.5	-10.0	25.0	6.43	24.9	6.72	24.8	7.02	24.8	7.17	24.7	7.31	24.7	7.60
	-8.5	-9.1	25.5	6.54	25.4	6.83	25.4	7.12	25.3	7.26	25.3	7.40	25.2	7.70
	-7.0	-7.6	26.4	6.73	26.4	7.02	26.3	7.29	26.3	7.43	26.2	7.57	26.1	7.85
	-5.0	-5.6	27.8	6.99	27.7	7.11	27.6	7.52	27.6	7.65	27.5	7.77	27.5	8.04
	-3.0	-3.7	29.1	7.21	29.0	7.47	29.0	7.72	28.9	7.85	28.9	7.97	28.8	8.22
	0.0	-0.7	31.4	7.57	31.4	7.80	31.3	8.03	31.3	8.14	31.2	8.27	31.2	8.49
	3.0	2.2	33.9	7.88	33.8	8.10	33.7	8.31	33.7	8.42	33.7	8.53	33.6	8.74
	5.0	4.1	35.6	8.08	35.5	8.29	35.5	8.48	35.4	8.59	35.4	8.69	35.3	8.89
	7.0	6.0	37.4	8.27	37.3	8.46	37.3	8.66	37.2	7.80	37.2	8.84	35.7	8.49
	9.0	7.9	39.3	8.44	39.2	8.63	39.2	8.81	39.1	8.90	38.3	8.72	35.7	7.98
	11.0	9.8	41.3	8.61	41.2	8.78	41.0	8.89	39.6	8.54	38.3	8.19	35.7	7.52
	13.0	11.8	43.5	8.77	43.4	8.94	41.0	8.33	39.6	8.00	38.3	7.69	35.7	7.05
	15.0	13.7	45.6	8.92	43.6	8.47	41.0	7.85	39.6	7.55	38.3	7.24	35.7	6.65
	18.0	16.8	45.6	8.45	43.6	8.06	41.0	7.44	39.6	7.17	38.3	6.84	35.7	6.32
	20.0	18.5	45.6	8.04	43.6	7.70	41.0	7.10	39.6	6.84	38.3	6.50	35.7	6.04
	24.0	20.5	45.6	7.69	43.6	7.40	41.0	6.83	39.6	6.58	38.3	6.21	35.7	5.82

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-19.8	-20.0	20.3	5.65	20.2	5.98	20.1	6.32	20.1	6.48	20.1	6.65	20.0	7.00
	-18.8	-19.0	20.6	5.75	20.5	6.09	20.5	6.35	20.4	6.58	20.4	6.75	20.3	7.08
	-16.7	-17.0	21.4	5.98	21.3	6.30	21.3	6.62	21.2	6.78	21.2	6.94	21.1	7.25
	-13.7	-15.0	22.3	6.22	22.2	6.52	22.1	6.83	22.1	6.99	22.1	7.14	22.0	7.44
	-11.8	-13.0	23.2	6.46	23.2	6.75	23.1	7.04	23.1	7.20	23.0	7.34	23.0	7.63
	-9.8	-11.0	24.3	6.70	24.2	6.98	24.2	7.26	24.1	7.40	24.1	7.54	24.0	7.83
	-9.5	-10.0	24.9	6.83	24.8	7.10	24.7	7.37	24.7	7.51	24.7	7.58	24.6	7.92
	-8.5	-9.1	25.4	6.93	25.3	7.20	25.3	7.46	25.2	7.59	25.2	7.74	25.1	8.00
	-7.0	-7.6	26.3	7.11	26.3	7.37	26.2	7.62	26.2	7.75	26.1	7.88	26.1	8.13
	-5.0	-5.6	27.7	7.34	27.6	7.58	27.5	7.83	27.5	7.95	27.5	8.08	27.4	8.31
	-3.0	-3.7	29.0	7.56	29.0	7.79	28.9	8.02	28.9	8.13	28.8	8.26	28.8	8.48
	0.0	-0.7	31.3	7.88	31.3	8.10	31.2	8.41	31.2	8.42	31.1	8.52	31.1	8.74
	3.0	2.2	33.8	8.17	33.7	8.37	33.7	8.57	33.6	8.67	33.6	8.77	32.9	8.72
	5.0	4.1	35.5	8.35	35.4	8.54	35.4	8.73	35.3	8.83	35.3	8.92	32.9	8.19
	7.0	6.0	37.3	8.52	37.3	8.70	37.2	8.88	36.6	8.76	35.4	8.40	32.9	7.71
	9.0	7.9	39.2	8.69	39.1	8.86	37.8	8.57	36.6	8.23	35.4	7.90	32.9	7.25
	11.0	9.8	41.2	8.84	40.2	8.69	37.8	8.06	36.6	7.75	35.4	7.43	32.9	6.84
	13.0	11.8	42.7	8.76	40.2	8.15	37.8	7.56	36.6	7.27	35.4	6.99	32.9	6.43
	15.0	13.7	42.7	8.25	40.2	7.68	37.8	7.13	36.6	6.85	35.4	6.59	32.9	6.07
	18.0	16.8	42.7	7.79	40.2	7.27	37.8	6.77	36.6	6.49	35.4	6.24	32.9	5.75
	20.0	18.5	42.7	7.38	40.2	6.94	37.8	6.47	36.6	6.19	35.4	5.94	32.9	5.48
	24.0	20.5	42.7	7.02	40.2	6.65	37.8	6.24	36.6	5.93	35.4	5.71	32.9	5.25
110%	-19.8	-20.0	20.2	6.14	20.1	6.45	20.0	6.76	20.0	6.91	20.0	7.06	19.9	7.38
	-18.8	-19.0	20.5	6.24	20.5	6.54	20.4	6.84	20.4	7.00	20.3	7.15	20.3	7.45
	-16.7	-17.0	21.3	6.45	21.2	6.74	21.2	7.03	21.1	7.18	21.1	7.33	21.0	7.61
	-13.7	-15.0	22.2	6.66	22.1	6.95	22.0	7.22	22.0	7.37	22.0	7.51	21.9	7.78
	-11.8	-13.0	23.1	6.89	23.1	7.16	23.0	7.42	23.0	7.56	22.9	7.69	22.9	7.96
	-9.8	-11.0	24.2	7.11	24.1	7.37	24.1	7.62	24.0	7.75	24.0	7.88	24.0	8.13
	-9.5	-10.0	24.8	7.22	24.7	7.47	24.6	7.73	24.6	7.85	24.6	7.97	24.5	8.22
	-8.5	-9.1	25.3	7.32	25.2	7.57	25.2	7.81	25.2	7.93	25.1	8.06	25.1	8.30
	-7.0	-7.6	26.2	7.49	26.2	7.72	26.1	7.95	26.1	8.08	26.4	8.19	26.0	8.43
	-5.0	-5.6	27.6	7.70	27.5	7.93	27.4	8.14	27.4	8.26	28.7	8.37	27.3	8.60
	-3.0	-3.7	28.9	7.90	28.9	8.11	28.8	8.32	28.8	8.43	31.1	8.53	28.7	8.75
	0.0	-0.7	31.2	8.19	31.2	8.39	31.1	8.59	31.1	8.68	32.4	8.79	30.2	8.62
	3.0	2.2	33.7	8.47	33.6	8.65	33.6	8.83	33.5	8.91	32.4	8.55	30.2	7.84
	5.0	4.1	35.4	8.63	35.4	8.81	34.7	8.72	33.5	8.37	32.4	8.04	30.2	7.38
	7.0	6.0	37.2	8.79	36.9	8.84	34.7	8.19	33.5	7.87	32.4	7.56	30.2	6.94
	9.0	7.9	39.1	8.93	36.9	8.31	34.7	7.71	33.5	7.40	32.4	7.11	30.2	6.54
	11.0	9.8	39.1	8.40	36.9	7.82	34.7	7.25	33.5	6.98	32.4	6.70	30.2	6.17
	13.0	11.8	39.1	7.88	36.9	7.34	34.7	6.82	33.5	6.56	32.4	6.30	30.2	5.81
	15.0	13.7	39.1	7.42	36.9	6.92	34.7	6.44	33.5	6.19	32.4	5.96	30.2	5.50
	18.0	16.8	39.1	7.02	36.9	6.56	34.7	5.87	33.5	5.87	32.4	5.68	30.2	5.23
	20.0	18.5	39.1	6.66	36.9	6.24	34.7	5.56	33.5	5.58	32.4	5.44	30.2	5.01
	24.0	20.5	39.1	6.36	36.9	5.95	34.7	5.30	33.5	5.35	32.4	5.24	30.2	4.82

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20.0	20.1	6.64	20.0	6.91	20.0	7.20	19.9	7.34	19.9	7.47	19.8	7.75
	-18.8	-19.0	20.4	6.72	20.4	7.00	20.3	7.27	20.3	7.41	20.2	7.56	20.2	7.83
	-16.7	-17.0	21.2	6.91	21.1	7.18	21.1	7.44	21.1	7.57	21.0	7.71	21.0	7.97
	-13.7	-15.0	22.1	7.11	22.0	7.37	22.0	7.62	21.9	7.75	21.9	7.88	21.8	8.13
	-11.8	-13.0	23.0	7.32	23.0	7.56	22.9	7.80	22.9	7.93	22.9	7.76	22.8	8.30
	-9.8	-11.0	24.1	7.52	24.0	7.75	24.0	7.98	24.0	8.11	23.9	8.22	23.9	8.45
	-9.5	-10.0	24.7	7.62	24.6	7.85	24.6	8.08	24.5	8.19	24.5	8.30	24.4	8.53
	-8.5	-9.1	25.2	7.71	25.2	7.93	25.1	8.15	25.1	8.27	25.0	8.38	25.0	8.60
	-7.0	-7.6	26.1	7.86	26.1	8.08	26.0	8.29	26.0	8.40	26.0	8.50	25.9	8.72
	-5.0	-5.6	27.5	8.06	27.4	8.26	27.4	8.47	27.3	8.57	27.3	8.66	27.3	8.87
	-3.0	-3.7	28.8	8.24	28.8	8.43	28.7	8.63	28.7	8.72	28.7	8.82	27.5	8.45
	0.0	-0.7	31.1	8.51	31.1	8.68	31.0	8.86	30.5	8.72	29.5	8.36	27.5	7.68
	3.0	2.2	33.6	8.75	33.5	8.91	31.5	8.25	30.5	7.93	29.5	7.61	27.5	6.99
	5.0	4.1	35.3	8.91	33.5	8.37	31.5	7.75	30.5	7.46	29.5	7.17	27.5	6.59
	7.0	6.0	35.5	8.46	33.5	7.87	31.5	7.30	30.5	7.02	29.5	6.75	27.5	6.21
	9.0	7.9	35.5	7.94	33.5	7.40	31.5	6.87	30.5	6.62	29.5	6.36	27.5	5.86
	11.0	9.8	35.5	7.48	33.5	6.98	31.5	6.48	30.5	6.24	29.5	6.00	27.5	5.54
	13.0	11.8	35.5	7.02	33.5	6.56	31.5	6.11	30.5	5.88	29.5	5.66	27.5	5.22
	15.0	13.7	35.5	6.63	33.5	6.19	31.5	5.76	30.5	5.56	29.5	5.35	27.5	4.95
	18.0	16.8	35.5	6.25	33.5	5.91	31.5	5.57	30.5	5.27	29.5	5.06	27.5	4.71
	20.0	18.5	35.5	5.90	33.5	5.67	31.5	5.35	30.5	5.03	29.5	4.83	27.5	4.52
	24.0	20.5	35.5	5.57	33.5	5.48	31.5	5.14	30.5	4.84	29.5	4.64	27.5	4.38
90%	-19.8	-20.0	20.0	7.13	19.9	7.38	19.9	7.63	19.8	7.75	19.8	7.89	19.8	8.13
	-18.8	-19.0	20.3	7.20	20.3	7.46	20.2	7.71	20.2	7.83	20.2	7.95	20.1	8.20
	-16.7	-17.0	21.1	7.38	21.0	7.62	21.0	7.86	21.0	7.98	20.9	8.10	20.9	8.33
	-13.7	-15.0	22.0	7.57	21.9	7.79	21.9	8.02	21.8	8.06	21.8	8.25	21.8	8.48
	-11.8	-13.0	22.9	7.75	22.9	7.96	22.8	8.18	22.8	8.30	22.8	8.40	22.7	8.62
	-9.8	-11.0	24.0	7.93	24.0	8.13	23.9	8.34	23.9	8.46	23.9	8.56	23.8	8.77
	-9.5	-10.0	24.6	8.02	24.5	8.23	24.5	8.43	24.4	8.53	24.4	8.64	24.4	8.84
	-8.5	-9.1	25.1	8.11	25.1	8.30	25.0	8.50	25.0	8.60	25.0	8.70	24.7	8.79
	-7.0	-7.6	26.0	8.24	26.0	8.43	25.9	8.63	25.9	8.72	25.9	8.82	24.7	8.39
	-5.0	-5.6	27.4	8.42	27.3	8.60	27.3	8.78	27.3	8.87	26.5	8.60	24.7	7.89
	-3.0	-3.7	28.7	8.58	28.7	7.80	28.4	8.79	27.4	8.44	26.5	8.10	24.7	7.43
	0.0	-0.7	31.1	8.83	30.2	7.66	28.4	7.97	27.4	7.66	26.5	7.36	24.7	6.76
	3.0	2.2	32.0	8.41	30.2	7.83	28.4	7.26	27.4	6.99	26.5	6.71	24.7	6.18
	5.0	4.1	32.0	7.91	30.2	7.37	28.4	6.84	27.4	6.58	26.5	6.33	24.7	5.83
	7.0	6.0	32.0	7.43	30.2	6.94	28.4	6.45	27.4	6.21	26.5	5.97	24.7	5.51
	9.0	7.9	32.0	7.01	30.2	6.53	28.4	6.08	27.4	5.86	26.5	5.64	24.7	5.20
	11.0	9.8	32.0	6.60	30.2	6.16	28.4	5.74	27.4	5.54	26.5	5.33	24.7	4.93
	13.0	11.8	32.0	6.21	30.2	5.81	28.4	5.41	27.4	5.22	26.5	5.03	24.7	4.65
	15.0	13.7	32.0	5.87	30.2	5.49	28.4	5.13	27.4	4.93	26.5	4.77	24.7	4.42
	18.0	16.8	32.0	5.55	30.2	5.19	28.4	4.86	27.4	4.65	26.5	4.52	24.7	4.20
	20.0	18.5	32.0	5.24	30.2	4.90	28.4	4.62	27.4	4.39	26.5	4.29	24.7	4.01
	24.0	20.5	32.0	4.95	30.2	4.63	28.4	4.38	27.4	4.14	26.5	4.08	24.7	3.83

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-19.8	-20.0	19.9	7.62	19.8	7.84	19.8	8.07	19.8	8.18	19.7	8.30	19.7	8.51
	-18.8	-19.0	20.2	7.69	20.2	7.92	20.1	8.13	20.1	8.25	20.1	8.35	20.0	8.58
	-16.7	-17.0	21.0	7.85	20.9	8.06	20.9	8.28	20.9	8.38	20.9	8.48	20.8	8.69
	-13.7	-15.0	21.9	8.01	21.8	8.21	21.8	8.42	21.8	8.51	21.7	8.62	21.7	8.83
	-11.8	-13.0	22.8	8.17	22.8	8.37	22.7	8.56	22.7	8.66	22.7	8.76	22.0	8.52
	-9.8	-11.0	23.9	8.33	23.9	8.52	23.8	8.71	23.8	8.80	23.6	8.78	22.0	8.05
	-9.5	-10.0	24.5	8.42	24.4	8.60	24.4	8.78	24.4	8.87	23.6	8.52	22.0	7.81
	-8.5	-9.1	25.0	8.49	25.0	8.67	24.9	8.84	24.4	8.66	23.6	8.30	22.0	7.60
	-7.0	-7.6	25.9	8.62	25.9	8.79	25.2	8.60	24.4	8.26	23.6	7.93	22.0	7.30
	-5.0	-5.6	27.3	7.82	26.8	8.72	25.2	8.08	24.4	7.76	23.6	7.45	22.0	6.84
	-3.0	-3.7	28.4	7.87	26.8	8.21	25.2	7.60	24.4	7.35	23.6	7.02	22.0	6.47
	0.0	-0.7	28.4	8.00	26.8	7.45	25.2	6.92	24.4	6.66	23.6	6.40	22.0	5.90
	3.0	2.2	28.4	7.29	26.8	6.80	25.2	6.32	24.4	6.09	23.6	5.86	22.0	5.40
	5.0	4.1	28.4	6.86	26.8	6.41	25.2	5.96	24.4	5.74	23.6	5.54	22.0	5.11
	7.0	6.0	28.4	6.47	26.8	6.06	25.2	5.63	24.4	5.43	23.6	5.23	22.0	4.83
	9.0	7.9	28.4	6.11	26.8	5.71	25.2	5.35	24.4	5.13	23.6	4.95	22.0	4.58
	11.0	9.8	28.4	5.76	26.8	5.39	25.2	5.03	24.4	4.85	23.6	4.68	22.0	4.34
	13.0	11.8	28.4	5.43	26.8	5.09	25.2	4.76	24.4	4.59	23.6	4.43	22.0	4.10
	15.0	13.7	28.4	5.14	26.8	4.83	25.2	4.51	24.4	4.35	23.6	4.20	22.0	3.91
	18.0	16.8	28.4	4.90	26.8	4.59	25.2	4.29	24.4	4.13	23.6	3.98	22.0	3.73
	20.0	18.5	28.4	4.71	26.8	4.40	25.2	4.10	24.4	3.94	23.6	3.79	22.0	3.56
	24.0	20.5	28.4	4.57	26.8	4.26	25.2	3.93	24.4	3.77	23.6	3.62	22.0	3.40
70%	-19.8	-20.0	19.8	8.11	19.7	8.30	19.7	8.50	19.7	8.60	19.7	8.70	19.2	8.61
	-18.8	-19.0	20.1	8.18	20.1	8.37	20.0	8.56	20.0	8.66	20.0	8.76	19.2	8.43
	-16.7	-17.0	20.9	8.31	20.9	8.50	20.8	8.68	20.8	8.78	20.6	8.77	19.2	8.04
	-13.7	-15.0	21.8	8.46	21.7	8.64	21.7	8.82	21.3	84.52	20.6	8.33	19.2	7.64
	-11.8	-13.0	22.7	8.60	22.7	8.77	22.1	8.56	21.3	8.23	20.6	7.90	19.2	7.24
	-9.8	-11.0	23.8	8.74	23.5	8.73	22.1	8.09	21.3	7.77	20.6	7.46	19.2	6.85
	-9.5	-10.0	24.4	8.82	23.5	8.48	22.1	7.85	21.3	7.55	20.6	7.25	19.2	6.66
	-8.5	-9.1	24.9	8.86	23.5	8.25	22.1	7.64	21.3	7.35	20.6	7.06	19.2	6.49
	-7.0	-7.6	24.9	8.47	23.5	7.88	22.1	7.31	21.3	7.03	20.6	6.76	19.2	6.22
	-5.0	-5.6	24.9	7.95	23.5	7.41	22.1	6.88	21.3	6.62	20.6	6.36	19.2	5.87
	-3.0	-3.7	24.9	7.49	23.5	6.99	22.1	6.49	21.3	6.25	20.6	6.01	19.2	5.55
	0.0	-0.7	24.9	6.82	23.5	6.40	22.1	5.93	21.3	5.71	20.6	5.50	19.2	5.08
	3.0	2.2	24.9	6.23	23.5	0.14	22.1	5.43	21.3	5.23	20.6	5.04	19.2	4.66
	5.0	4.1	24.9	5.88	23.5	5.50	22.1	5.14	21.3	4.95	20.6	4.78	19.2	4.42
	7.0	6.0	24.9	5.56	23.5	5.20	22.1	4.85	21.3	4.68	20.6	4.52	19.2	4.19
	9.0	7.9	24.9	5.25	23.5	4.92	22.1	4.60	21.3	4.44	20.6	4.28	19.2	3.97
	11.0	9.8	24.9	4.97	23.5	4.65	22.1	4.36	21.3	4.21	20.6	4.07	19.2	3.77
	13.0	11.8	24.9	4.69	23.5	4.41	22.1	4.12	21.3	3.99	20.6	3.85	19.2	3.58
	15.0	13.7	24.9	4.45	23.5	4.18	22.1	3.92	21.3	3.79	20.6	3.66	19.2	3.41
	18.0	16.8	24.9	4.22	23.5	3.97	22.1	3.73	21.3	3.61	20.6	3.49	19.2	3.26
	20.0	18.5	24.9	4.02	23.5	3.78	22.1	3.56	21.3	3.45	20.6	3.34	19.2	3.13
	24.0	20.5	24.9	3.84	23.5	3.61	22.1	3.41	21.3	3.31	20.6	3.21	19.2	3.01

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-19.8	-20.0	19.7	8.61	19.6	8.77	18.9	8.44	18.3	8.11	17.7	7.78	16.5	7.14
	-18.8	-19.0	20.0	8.66	20.0	8.83	18.9	8.26	18.3	7.93	17.7	7.61	16.5	6.99
	-16.7	-17.0	20.8	8.78	20.1	8.50	18.9	7.88	18.3	7.57	17.7	7.27	16.5	6.68
	-13.7	-15.0	21.3	8.68	20.1	8.08	18.9	7.49	18.3	7.20	17.7	6.92	16.5	6.36
	-11.8	-13.0	21.3	8.22	20.1	7.65	18.9	7.10	18.3	6.84	17.7	6.57	16.5	6.05
	-9.8	-11.0	21.3	7.76	20.1	7.23	18.9	6.72	18.3	6.47	17.7	6.22	16.5	5.74
	-9.5	-10.0	21.3	7.55	20.1	7.03	18.9	6.53	18.3	6.29	17.7	6.05	16.5	5.57
	-8.5	-9.1	21.3	7.35	20.1	6.85	18.9	6.37	18.3	6.13	17.7	5.90	16.5	5.44
	-7.0	-7.6	21.3	7.02	20.1	6.56	18.9	6.10	18.3	5.88	17.7	5.65	16.5	5.22
	-5.0	-5.6	21.3	6.62	20.1	6.18	18.9	5.75	18.3	5.55	17.7	5.34	16.5	4.94
	-3.0	-3.7	21.3	6.25	20.1	5.84	18.9	5.46	18.3	5.25	17.7	5.05	16.5	4.67
	0.0	-0.7	21.3	5.71	20.1	5.35	18.9	4.99	18.3	4.82	17.7	4.64	16.5	4.29
	3.0	2.2	21.3	5.23	20.1	4.91	18.9	4.59	18.3	4.43	17.7	4.28	16.5	0.17
	5.0	4.1	21.3	4.95	20.1	4.65	18.9	4.34	18.3	4.20	17.7	4.05	16.5	3.76
	7.0	6.0	21.3	4.68	20.1	4.40	18.9	4.11	18.3	3.98	17.7	3.85	16.5	3.57
	9.0	7.9	21.3	4.44	20.1	4.17	18.9	3.91	18.3	3.78	17.7	3.65	16.5	3.40
	11.0	9.8	21.3	4.21	20.1	3.96	18.9	3.72	18.3	3.59	17.7	3.47	16.5	3.24
	13.0	11.8	21.3	3.98	20.1	3.75	18.9	3.53	18.3	3.41	17.7	3.30	16.5	3.08
	15.0	13.7	21.3	3.79	20.1	3.56	18.9	3.36	18.3	3.25	17.7	3.15	16.5	2.94
	18.0	16.8	21.3	3.62	20.1	3.39	18.9	3.20	18.3	3.11	17.7	3.01	16.5	2.82
	20.0	18.5	21.3	3.47	20.1	3.24	18.9	3.07	18.3	2.99	17.7	2.90	16.5	2.71
	24.0	20.5	21.3	3.34	20.1	3.11	18.9	2.96	18.3	2.88	17.7	2.81	16.5	2.62
50%	-19.8	-20.0	17.8	7.83	16.8	7.29	15.8	6.77	15.2	6.52	14.7	6.27	13.7	5.77
	-18.8	-19.0	17.8	7.66	16.8	7.14	15.8	6.64	15.2	6.38	14.7	6.13	13.7	5.66
	-16.7	-17.0	17.8	7.31	16.8	6.82	15.8	6.34	15.2	6.11	14.7	5.88	13.7	5.42
	-13.7	-15.0	17.8	6.96	16.8	6.49	15.8	6.04	15.2	5.82	14.7	5.60	13.7	5.18
	-11.8	-13.0	17.8	6.61	16.8	6.18	15.8	5.74	15.2	5.54	14.7	5.33	13.7	4.93
	-9.8	-11.0	17.8	6.26	16.8	5.85	15.8	5.45	15.2	5.25	14.7	5.06	13.7	4.68
	-9.5	-10.0	17.8	6.09	16.8	5.69	15.8	5.31	15.2	5.12	14.7	4.93	13.7	4.56
	-8.5	-9.1	17.8	5.93	16.8	5.56	15.8	5.18	15.2	5.00	14.7	4.82	13.7	4.46
	-7.0	-7.6	17.8	5.69	16.8	5.35	15.8	4.97	15.2	4.80	14.7	4.63	13.7	4.28
	-5.0	-5.6	17.8	5.37	16.8	5.03	15.8	4.70	15.2	4.54	14.7	4.38	13.7	4.06
	-3.0	-3.7	17.8	5.08	16.8	4.77	15.8	4.46	15.2	4.30	14.7	4.15	13.7	3.86
	0.0	-0.7	17.8	4.66	16.8	4.38	15.8	4.10	15.2	3.96	14.7	3.83	13.7	3.56
	3.0	2.2	17.8	4.29	16.8	4.04	15.8	3.78	15.2	3.66	14.7	3.55	13.7	3.30
	5.0	4.1	17.8	4.08	16.8	3.83	15.8	3.59	15.2	3.48	14.7	3.37	13.7	3.14
	7.0	6.0	17.8	3.87	16.8	3.64	15.8	3.42	15.2	3.31	14.7	3.20	13.7	3.00
	9.0	7.9	17.8	3.67	16.8	3.46	15.8	3.25	15.2	3.16	14.7	3.05	13.7	2.85
	11.0	9.8	17.8	3.49	16.8	3.29	15.8	3.10	15.2	3.01	14.7	2.91	13.7	2.72
	13.0	11.8	17.8	3.32	16.8	3.13	15.8	2.95	15.2	2.86	14.7	2.77	13.7	2.60
	15.0	13.7	17.8	3.16	16.8	2.99	15.8	2.82	15.2	2.73	14.7	2.64	13.7	2.47
	18.0	16.8	17.8	3.01	16.8	2.85	15.8	2.70	15.2	2.62	14.7	2.53	13.7	2.36
	20.0	18.5	17.8	2.86	16.8	2.73	15.8	2.60	15.2	2.52	14.7	2.43	13.7	2.26
	24.0	20.5	17.8	2.73	16.8	2.62	15.8	2.42	15.2	2.44	14.7	2.33	13.7	2.16

GMV-Q335WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
135%	-19.8	-20.0	24.3	5.44	24.2	5.82	24.0	6.21	24.0	6.40	23.9	6.59	23.9	6.98
	-18.8	-19.0	24.6	5.56	24.5	5.94	24.5	6.32	24.4	6.51	24.4	6.69	24.3	7.07
	-16.7	-17.0	25.6	5.82	25.5	6.18	25.3	6.55	25.3	6.70	25.3	6.91	25.2	7.28
	-13.7	-15.0	26.7	6.09	26.5	6.44	26.4	6.79	26.4	6.96	26.3	7.14	26.3	7.49
	-11.8	-13.0	27.7	6.36	27.7	6.70	27.6	7.03	27.5	7.20	27.5	7.37	27.4	7.70
	-9.8	-11.0	29.0	6.64	28.9	6.96	28.8	7.28	28.8	7.44	28.8	7.60	28.7	7.92
	-9.5	-10.0	29.8	6.78	29.6	7.09	29.5	7.40	29.5	7.56	29.4	7.71	29.4	8.02
	-8.5	-9.1	30.3	6.90	30.2	7.20	30.2	7.51	30.1	7.66	30.1	7.81	30.0	8.12
	-7.0	-7.6	31.4	7.10	31.4	7.40	31.3	7.69	31.3	7.84	31.2	7.98	31.1	8.28
	-5.0	-5.6	33.1	7.37	33.0	7.50	32.8	7.93	32.8	8.07	32.7	8.20	32.7	8.48
	-3.0	-3.7	34.6	7.61	34.5	7.88	34.5	8.14	34.4	8.28	34.4	8.41	34.3	8.67
	0.0	-0.7	37.4	7.98	37.4	8.23	37.2	8.47	37.2	8.59	37.1	8.72	37.1	8.96
	3.0	2.2	40.3	8.31	40.2	8.54	40.1	8.77	40.1	8.88	40.1	9.00	40.0	9.22
	5.0	4.1	42.4	8.52	42.2	8.74	42.2	8.95	42.1	9.06	42.1	9.17	42.0	9.38
	7.0	6.0	44.5	8.72	44.4	8.92	44.4	9.13	44.3	8.23	44.3	9.33	42.5	8.96
	9.0	7.9	46.8	8.90	46.6	9.10	46.6	9.29	46.5	9.39	45.6	9.20	42.5	8.42
	11.0	9.8	49.1	9.08	49.0	9.26	48.8	9.38	47.1	9.01	45.6	8.64	42.5	7.93
	13.0	11.8	51.8	9.25	51.6	9.43	48.8	8.79	47.1	8.44	45.6	8.11	42.5	7.44
	15.0	13.7	54.3	9.41	51.9	8.93	48.8	8.28	47.1	7.96	45.6	7.64	42.5	7.02
	18.0	16.8	54.3	8.91	51.9	8.50	48.8	7.85	47.1	7.56	45.6	7.22	42.5	6.67
	20.0	18.5	54.3	8.48	51.9	8.12	48.8	7.49	47.1	7.22	45.6	6.86	42.5	6.37
	24.0	20.5	54.3	8.11	51.9	7.81	48.8	7.20	47.1	6.94	45.6	6.55	42.5	6.14
120%	-19.8	-20.0	24.2	5.96	24.0	6.31	23.9	6.67	23.9	6.84	23.9	7.02	23.8	7.38
	-18.8	-19.0	24.5	6.07	24.4	6.42	24.4	6.70	24.3	6.94	24.3	7.12	24.2	7.47
	-16.7	-17.0	25.5	6.31	25.3	6.65	25.3	6.98	25.2	7.15	25.2	7.32	25.1	7.65
	-13.7	-15.0	26.5	6.56	26.4	6.88	26.3	7.20	26.3	7.37	26.3	7.53	26.2	7.85
	-11.8	-13.0	27.6	6.81	27.6	7.12	27.5	7.43	27.5	7.59	27.4	7.74	27.4	8.05
	-9.8	-11.0	28.9	7.07	28.8	7.36	28.8	7.66	28.7	7.81	28.7	7.95	28.6	8.26
	-9.5	-10.0	29.6	7.20	29.5	7.49	29.4	7.77	29.4	7.92	29.4	8.00	29.3	8.35
	-8.5	-9.1	30.2	7.31	30.1	7.59	30.1	7.87	30.0	8.01	30.0	8.16	29.9	8.44
	-7.0	-7.6	31.3	7.50	31.3	7.77	31.2	8.04	31.2	8.18	31.1	8.31	31.1	8.58
	-5.0	-5.6	33.0	7.74	32.8	8.00	32.7	8.26	32.7	8.39	32.7	8.52	32.6	8.77
	-3.0	-3.7	34.5	7.97	34.5	8.22	34.4	8.46	34.4	8.58	34.3	8.71	34.3	8.95
	0.0	-0.7	37.2	8.31	37.2	8.54	37.1	8.87	37.1	8.88	37.0	8.99	37.0	9.22
	3.0	2.2	40.2	8.62	40.1	8.83	40.1	9.04	40.0	9.15	40.0	9.25	39.2	9.20
	5.0	4.1	42.2	8.81	42.1	9.01	42.1	9.21	42.0	9.31	42.0	9.41	39.2	8.64
	7.0	6.0	44.4	8.99	44.4	9.18	44.3	9.37	43.6	9.24	42.1	8.86	39.2	8.13
	9.0	7.9	46.6	9.17	46.5	9.35	45.0	9.04	43.6	8.68	42.1	8.33	39.2	7.65
	11.0	9.8	49.0	9.33	47.8	9.17	45.0	8.50	43.6	8.17	42.1	7.84	39.2	7.21
	13.0	11.8	50.8	9.24	47.8	8.60	45.0	7.97	43.6	7.67	42.1	7.37	39.2	6.78
	15.0	13.7	50.8	8.70	47.8	8.10	45.0	7.52	43.6	7.23	42.1	6.95	39.2	6.40
	18.0	16.8	50.8	8.22	47.8	7.67	45.0	7.14	43.6	6.85	42.1	6.58	39.2	6.07
	20.0	18.5	50.8	7.79	47.8	7.32	45.0	6.83	43.6	6.53	42.1	6.27	39.2	5.78
	24.0	20.5	50.8	7.41	47.8	7.02	45.0	6.58	43.6	6.26	42.1	6.02	39.2	5.54

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-19.8	-20.0	24.0	6.48	23.9	6.80	23.8	7.13	23.8	7.29	23.8	7.45	23.7	7.78
	-18.8	-19.0	24.4	6.58	24.4	6.90	24.3	7.22	24.3	7.38	24.2	7.54	24.2	7.86
	-16.7	-17.0	25.3	6.80	25.2	7.11	25.2	7.42	25.1	7.57	25.1	7.73	25.0	8.03
	-13.7	-15.0	26.4	7.03	26.3	7.33	26.2	7.62	26.2	7.77	26.2	7.92	26.1	8.21
	-11.8	-13.0	27.5	7.27	27.5	7.55	27.4	7.83	27.4	7.97	27.3	8.11	27.3	8.40
	-9.8	-11.0	28.8	7.50	28.7	7.77	28.7	8.04	28.6	8.18	28.6	8.31	28.6	8.58
	-9.5	-10.0	29.5	7.62	29.4	7.88	29.3	8.15	29.3	8.28	29.3	8.41	29.2	8.67
	-8.5	-9.1	30.1	7.72	30.0	7.98	30.0	8.24	30.0	8.37	29.9	8.50	29.9	8.75
	-7.0	-7.6	31.2	7.90	31.2	8.14	31.1	8.39	31.1	8.52	31.4	8.64	30.9	8.89
	-5.0	-5.6	32.8	8.12	32.7	8.36	32.6	8.59	32.6	8.71	34.2	8.83	32.5	9.07
	-3.0	-3.7	34.4	8.33	34.4	8.55	34.3	8.78	34.3	8.89	37.0	9.00	34.2	9.23
	0.0	-0.7	37.1	8.64	37.1	8.85	37.0	9.06	37.0	9.16	38.6	9.27	35.9	9.09
	3.0	2.2	40.1	8.93	40.0	9.12	40.0	9.31	39.9	9.40	38.6	9.02	35.9	8.27
	5.0	4.1	42.1	9.10	42.1	9.29	41.3	9.20	39.9	8.83	38.6	8.48	35.9	7.78
	7.0	6.0	44.3	9.27	43.9	9.33	41.3	8.64	39.9	8.30	38.6	7.97	35.9	7.32
	9.0	7.9	46.5	9.42	43.9	8.77	41.3	8.13	39.9	7.81	38.6	7.50	35.9	6.90
	11.0	9.8	46.5	8.86	43.9	8.25	41.3	7.65	39.9	7.36	38.6	7.07	35.9	6.51
	13.0	11.8	46.5	8.31	43.9	7.74	41.3	7.19	39.9	6.92	38.6	6.65	35.9	6.13
	15.0	13.7	46.5	7.83	43.9	7.30	41.3	6.79	39.9	6.53	38.6	6.29	35.9	5.80
	18.0	16.8	46.5	7.41	43.9	6.92	41.3	6.19	39.9	6.19	38.6	5.99	35.9	5.52
	20.0	18.5	46.5	7.03	43.9	6.58	41.3	5.87	39.9	5.89	38.6	5.74	35.9	5.28
	24.0	20.5	46.5	6.71	43.9	6.28	41.3	5.59	39.9	5.64	38.6	5.53	35.9	5.08
100%	-19.8	-20.0	23.9	7.00	23.8	7.29	23.8	7.59	23.7	7.74	23.7	7.88	23.6	8.18
	-18.8	-19.0	24.3	7.09	24.3	7.38	24.2	7.67	24.2	7.82	24.0	7.97	24.0	8.26
	-16.7	-17.0	25.2	7.29	25.1	7.57	25.1	7.85	25.1	7.99	25.0	8.13	25.0	8.41
	-13.7	-15.0	26.3	7.50	26.2	7.77	26.2	8.04	26.1	8.18	26.1	8.31	25.9	8.58
	-11.8	-13.0	27.4	7.72	27.4	7.97	27.3	8.23	27.3	8.36	27.3	8.19	27.1	8.75
	-9.8	-11.0	28.7	7.93	28.6	8.18	28.6	8.42	28.6	8.55	28.4	8.67	28.4	8.91
	-9.5	-10.0	29.4	8.04	29.3	8.28	29.3	8.52	29.2	8.64	29.2	8.76	29.0	9.00
	-8.5	-9.1	30.0	8.13	30.0	8.37	29.9	8.60	29.9	8.72	29.8	8.84	29.8	9.07
	-7.0	-7.6	31.1	8.29	31.1	8.52	30.9	8.74	30.9	8.86	30.9	8.97	30.8	9.20
	-5.0	-5.6	32.7	8.50	32.6	8.71	32.6	8.93	32.5	9.04	32.5	9.14	32.5	9.36
	-3.0	-3.7	34.3	8.69	34.3	8.89	34.2	9.10	34.2	9.20	34.2	9.30	32.7	8.91
	0.0	-0.7	37.0	8.98	37.0	9.16	36.9	9.35	36.3	9.20	35.1	8.82	32.7	8.10
	3.0	2.2	40.0	9.23	39.9	9.40	37.5	8.70	36.3	8.36	35.1	8.03	32.7	7.37
	5.0	4.1	42.0	9.40	39.9	8.83	37.5	8.18	36.3	7.87	35.1	7.56	32.7	6.95
	7.0	6.0	42.2	8.92	39.9	8.30	37.5	7.70	36.3	7.41	35.1	7.12	32.7	6.55
	9.0	7.9	42.2	8.38	39.9	7.81	37.5	7.25	36.3	6.98	35.1	6.71	32.7	6.18
	11.0	9.8	42.2	7.89	39.9	7.36	37.5	6.84	36.3	6.58	35.1	6.33	32.7	5.84
	13.0	11.8	42.2	7.41	39.9	6.92	37.5	6.44	36.3	6.20	35.1	5.97	32.7	5.51
	15.0	13.7	42.2	6.99	39.9	6.53	37.5	6.08	36.3	5.86	35.1	5.64	32.7	5.22
	18.0	16.8	42.2	6.59	39.9	6.23	37.5	5.88	36.3	5.56	35.1	5.34	32.7	4.97
	20.0	18.5	42.2	6.22	39.9	5.98	37.5	5.64	36.3	5.31	35.1	5.09	32.7	4.77
	24.0	20.5	42.2	5.88	39.9	5.78	37.5	5.42	36.3	5.11	35.1	4.89	32.7	4.62

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-19.8	-20.0	23.8	7.52	23.7	7.78	23.7	8.05	23.6	8.18	23.6	8.32	23.6	8.58
	-18.8	-19.0	24.2	7.60	24.2	7.87	24.0	8.13	24.0	8.26	24.0	8.39	23.9	8.65
	-16.7	-17.0	25.1	7.79	25.0	8.04	25.0	8.29	25.0	8.42	24.9	8.54	24.9	8.79
	-13.7	-15.0	26.2	7.98	26.1	8.22	26.1	8.46	25.9	8.50	25.9	8.70	25.9	8.94
	-11.8	-13.0	27.3	8.17	27.3	8.40	27.1	8.63	27.1	8.75	27.1	8.86	27.0	9.09
	-9.8	-11.0	28.6	8.36	28.6	8.58	28.4	8.80	28.4	8.92	28.4	9.03	28.3	9.25
	-9.5	-10.0	29.3	8.46	29.2	8.68	29.2	8.89	29.0	9.00	29.0	9.11	29.0	9.32
	-8.5	-9.1	29.9	8.55	29.9	8.76	29.8	8.97	29.8	9.07	29.8	9.18	29.4	9.27
	-7.0	-7.6	30.9	8.69	30.9	8.89	30.8	9.10	30.8	9.20	30.8	9.30	29.4	8.85
	-5.0	-5.6	32.6	8.88	32.5	9.07	32.5	9.26	32.5	9.36	31.5	9.07	29.4	8.32
	-3.0	-3.7	34.2	9.05	34.2	8.23	33.8	9.27	32.6	8.90	31.5	8.54	29.4	7.84
	0.0	-0.7	37.0	9.31	35.9	8.08	33.8	8.41	32.6	8.08	31.5	7.76	29.4	7.13
	3.0	2.2	38.1	8.87	35.9	8.26	33.8	7.66	32.6	7.37	31.5	7.08	29.4	6.52
	5.0	4.1	38.1	8.34	35.9	7.77	33.8	7.22	32.6	6.94	31.5	6.68	29.4	6.15
	7.0	6.0	38.1	7.84	35.9	7.32	33.8	6.80	32.6	6.55	31.5	6.30	29.4	5.81
	9.0	7.9	38.1	7.39	35.9	6.89	33.8	6.41	32.6	6.18	31.5	5.95	29.4	5.49
	11.0	9.8	38.1	6.96	35.9	6.50	33.8	6.06	32.6	5.84	31.5	5.62	29.4	5.20
	13.0	11.8	38.1	6.55	35.9	6.13	33.8	5.71	32.6	5.51	31.5	5.31	29.4	4.91
	15.0	13.7	38.1	6.19	35.9	5.79	33.8	5.41	32.6	5.20	31.5	5.03	29.4	4.66
	18.0	16.8	38.1	5.85	35.9	5.47	33.8	5.13	32.6	4.91	31.5	4.77	29.4	4.43
	20.0	18.5	38.1	5.53	35.9	5.17	33.8	4.87	32.6	4.63	31.5	4.53	29.4	4.23
	24.0	20.5	38.1	5.22	35.9	4.88	33.8	4.62	32.6	4.37	31.5	4.30	29.4	4.04
80%	-19.8	-20.0	23.7	8.04	23.6	8.27	23.6	8.51	23.6	8.63	23.4	8.75	23.4	8.98
	-18.8	-19.0	24.0	8.11	24.0	8.35	23.9	8.58	23.9	8.70	23.9	8.81	23.8	9.05
	-16.7	-17.0	25.0	8.28	24.9	8.50	24.9	8.73	24.9	8.84	24.9	8.95	24.8	9.17
	-13.7	-15.0	26.1	8.45	25.9	8.66	25.9	8.88	25.9	8.98	25.8	9.09	25.8	9.31
	-11.8	-13.0	27.1	8.62	27.1	8.83	27.0	9.03	27.0	9.13	27.0	9.24	26.2	8.99
	-9.8	-11.0	28.4	8.79	28.4	8.99	28.3	9.19	28.3	9.28	28.1	9.26	26.2	8.49
	-9.5	-10.0	29.2	8.88	29.0	9.07	29.0	9.26	29.0	9.36	28.1	8.99	26.2	8.24
	-8.5	-9.1	29.8	8.96	29.8	9.15	29.6	9.33	29.0	9.13	28.1	8.75	26.2	8.02
	-7.0	-7.6	30.8	9.09	30.8	9.27	30.0	9.07	29.0	8.71	28.1	8.36	26.2	7.70
	-5.0	-5.6	32.5	8.25	31.9	9.20	30.0	8.52	29.0	8.19	28.1	7.86	26.2	7.22
	-3.0	-3.7	33.8	8.30	31.9	8.66	30.0	8.02	29.0	7.75	28.1	7.41	26.2	6.82
	0.0	-0.7	33.8	8.44	31.9	7.86	30.0	7.30	29.0	7.03	28.1	6.75	26.2	6.22
	3.0	2.2	33.8	7.69	31.9	7.17	30.0	6.67	29.0	6.42	28.1	6.18	26.2	5.70
	5.0	4.1	33.8	7.24	31.9	6.76	30.0	6.29	29.0	6.06	28.1	5.84	26.2	5.39
	7.0	6.0	33.8	6.82	31.9	6.39	30.0	5.94	29.0	5.73	28.1	5.52	26.2	5.10
	9.0	7.9	33.8	6.44	31.9	6.02	30.0	5.64	29.0	5.41	28.1	5.22	26.2	4.83
	11.0	9.8	33.8	6.08	31.9	5.69	30.0	5.31	29.0	5.12	28.1	4.94	26.2	4.58
	13.0	11.8	33.8	5.73	31.9	5.37	30.0	5.02	29.0	4.84	28.1	4.67	26.2	4.33
	15.0	13.7	33.8	5.42	31.9	5.09	30.0	4.76	29.0	4.59	28.1	4.43	26.2	4.12
	18.0	16.8	33.8	5.17	31.9	4.84	30.0	4.53	29.0	4.36	28.1	4.20	26.2	3.93
	20.0	18.5	33.8	4.97	31.9	4.64	30.0	4.33	29.0	4.16	28.1	4.00	26.2	3.75
	24.0	20.5	33.8	4.82	31.9	4.49	30.0	4.15	29.0	3.98	28.1	3.82	26.2	3.59

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20.0	23.6	8.56	23.4	8.76	23.4	8.97	23.4	9.07	23.4	9.18	22.8	9.08
	-18.8	-19.0	23.9	8.63	23.9	8.83	23.8	9.03	23.8	9.13	23.8	9.24	22.8	8.89
	-16.7	-17.0	24.9	8.77	24.9	8.97	24.8	9.16	24.8	9.26	24.5	9.25	22.8	8.48
	-13.7	-15.0	25.9	8.92	25.8	9.11	25.8	9.30	25.3	89.16	24.5	8.79	22.8	8.06
	-11.8	-13.0	27.0	9.07	27.0	9.25	26.3	9.03	25.3	8.68	24.5	8.33	22.8	7.64
	-9.8	-11.0	28.3	9.22	28.0	9.21	26.3	8.53	25.3	8.20	24.5	7.87	22.8	7.23
	-9.5	-10.0	29.0	9.30	28.0	8.94	26.3	8.28	25.3	7.96	24.5	7.65	22.8	7.03
	-8.5	-9.1	29.6	9.35	28.0	8.70	26.3	8.06	25.3	7.75	24.5	7.45	22.8	6.85
	-7.0	-7.6	29.6	8.93	28.0	8.31	26.3	7.71	25.3	7.42	24.5	7.13	22.8	6.56
	-5.0	-5.6	29.6	8.39	28.0	7.82	26.3	7.26	25.3	6.98	24.5	6.71	22.8	6.19
	-3.0	-3.7	29.6	7.90	28.0	7.37	26.3	6.85	25.3	6.59	24.5	6.34	22.8	5.85
	0.0	-0.7	29.6	7.19	28.0	6.75	26.3	6.25	25.3	6.02	24.5	5.80	22.8	5.36
	3.0	2.2	29.6	6.57	28.0	0.15	26.3	5.73	25.3	5.52	24.5	5.32	22.8	4.92
	5.0	4.1	29.6	6.20	28.0	5.80	26.3	5.42	25.3	5.22	24.5	5.04	22.8	4.66
	7.0	6.0	29.6	5.86	28.0	5.49	26.3	5.12	25.3	4.94	24.5	4.77	22.8	4.42
	9.0	7.9	29.6	5.54	28.0	5.19	26.3	4.85	25.3	4.68	24.5	4.52	22.8	4.19
	11.0	9.8	29.6	5.24	28.0	4.91	26.3	4.60	25.3	4.44	24.5	4.29	22.8	3.98
	13.0	11.8	29.6	4.95	28.0	4.65	26.3	4.35	25.3	4.21	24.5	4.06	22.8	3.78
	15.0	13.7	29.6	4.69	28.0	4.41	26.3	4.13	25.3	4.00	24.5	3.86	22.8	3.60
	18.0	16.8	29.6	4.45	28.0	4.19	26.3	3.93	25.3	3.81	24.5	3.68	22.8	3.44
	20.0	18.5	29.6	4.24	28.0	3.99	26.3	3.75	25.3	3.64	24.5	3.52	22.8	3.30
	24.0	20.5	29.6	4.05	28.0	3.81	26.3	3.60	25.3	3.49	24.5	3.39	22.8	3.18
60%	-19.8	-20.0	23.4	9.08	23.3	9.25	22.5	8.90	21.8	8.55	21.1	8.21	19.6	7.53
	-18.8	-19.0	23.8	9.14	23.8	9.31	22.5	8.71	21.8	8.37	21.1	8.03	19.6	7.37
	-16.7	-17.0	24.8	9.26	23.9	8.97	22.5	8.31	21.8	7.99	21.1	7.67	19.6	7.05
	-13.7	-15.0	25.3	9.16	23.9	8.52	22.5	7.90	21.8	7.60	21.1	7.30	19.6	6.71
	-11.8	-13.0	25.3	8.67	23.9	8.07	22.5	7.49	21.8	7.21	21.1	6.93	19.6	6.38
	-9.8	-11.0	25.3	8.19	23.9	7.63	22.5	7.09	21.8	6.82	21.1	6.56	19.6	6.05
	-9.5	-10.0	25.3	7.96	23.9	7.42	22.5	6.89	21.8	6.64	21.1	6.38	19.6	5.88
	-8.5	-9.1	25.3	7.75	23.9	7.23	22.5	6.72	21.8	6.47	21.1	6.22	19.6	5.74
	-7.0	-7.6	25.3	7.41	23.9	6.92	22.5	6.43	21.8	6.20	21.1	5.96	19.6	5.51
	-5.0	-5.6	25.3	6.98	23.9	6.52	22.5	6.07	21.8	5.85	21.1	5.63	19.6	5.21
	-3.0	-3.7	25.3	6.59	23.9	6.16	22.5	5.76	21.8	5.54	21.1	5.33	19.6	4.93
	0.0	-0.7	25.3	6.02	23.9	5.64	22.5	5.26	21.8	5.08	21.1	4.89	19.6	4.53
	3.0	2.2	25.3	5.52	23.9	5.18	22.5	4.84	21.8	4.67	21.1	4.51	19.6	0.18
	5.0	4.1	25.3	5.22	23.9	4.90	22.5	4.58	21.8	4.43	21.1	4.27	19.6	3.97
	7.0	6.0	25.3	4.94	23.9	4.64	22.5	4.34	21.8	4.20	21.1	4.06	19.6	3.77
	9.0	7.9	25.3	4.68	23.9	4.40	22.5	4.12	21.8	3.99	21.1	3.85	19.6	3.59
	11.0	9.8	25.3	4.44	23.9	4.18	22.5	3.92	21.8	3.79	21.1	3.66	19.6	3.42
	13.0	11.8	25.3	4.20	23.9	3.96	22.5	3.72	21.8	3.60	21.1	3.48	19.6	3.25
	15.0	13.7	25.3	4.00	23.9	3.76	22.5	3.54	21.8	3.43	21.1	3.32	19.6	3.10
	18.0	16.8	25.3	3.82	23.9	3.58	22.5	3.38	21.8	3.28	21.1	3.18	19.6	2.97
	20.0	18.5	25.3	3.66	23.9	3.42	22.5	3.24	21.8	3.15	21.1	3.06	19.6	2.86
	24.0	20.5	25.3	3.52	23.9	3.28	22.5	3.12	21.8	3.04	21.1	2.96	19.6	2.76

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-19.8	-20.0	21.2	8.26	20.0	7.69	18.8	7.14	18.1	6.88	17.5	6.61	16.3	6.09
	-18.8	-19.0	21.2	8.08	20.0	7.53	18.8	7.00	18.1	6.73	17.5	6.47	16.3	5.97
	-16.7	-17.0	21.2	7.71	20.0	7.19	18.8	6.69	18.1	6.44	17.5	6.20	16.3	5.72
	-13.7	-15.0	21.2	7.34	20.0	6.85	18.8	6.37	18.1	6.14	17.5	5.91	16.3	5.46
	-11.8	-13.0	21.2	6.97	20.0	6.52	18.8	6.06	18.1	5.84	17.5	5.62	16.3	5.20
	-9.8	-11.0	21.2	6.60	20.0	6.17	18.8	5.75	18.1	5.54	17.5	5.34	16.3	4.94
	-9.5	-10.0	21.2	6.42	20.0	6.00	18.8	5.60	18.1	5.40	17.5	5.20	16.3	4.81
	-8.5	-9.1	21.2	6.26	20.0	5.86	18.8	5.46	18.1	5.27	17.5	5.08	16.3	4.70
	-7.0	-7.6	21.2	6.00	20.0	5.64	18.8	5.24	18.1	5.06	17.5	4.88	16.3	4.52
	-5.0	-5.6	21.2	5.66	20.0	5.31	18.8	4.96	18.1	4.79	17.5	4.62	16.3	4.28
	-3.0	-3.7	21.2	5.36	20.0	5.03	18.8	4.70	18.1	4.54	17.5	4.38	16.3	4.07
	0.0	-0.7	21.2	4.92	20.0	4.62	18.8	4.33	18.1	4.18	17.5	4.04	16.3	3.76
	3.0	2.2	21.2	4.53	20.0	4.26	18.8	3.99	18.1	3.86	17.5	3.74	16.3	3.48
	5.0	4.1	21.2	4.30	20.0	4.04	18.8	3.79	18.1	3.67	17.5	3.55	16.3	3.31
	7.0	6.0	21.2	4.08	20.0	3.84	18.8	3.61	18.1	3.49	17.5	3.38	16.3	3.16
	9.0	7.9	21.2	3.87	20.0	3.65	18.8	3.43	18.1	3.33	17.5	3.22	16.3	3.01
	11.0	9.8	21.2	3.68	20.0	3.47	18.8	3.27	18.1	3.17	17.5	3.07	16.3	2.87
	13.0	11.8	21.2	3.50	20.0	3.30	18.8	3.11	18.1	3.02	17.5	2.92	16.3	2.74
	15.0	13.7	21.2	3.33	20.0	3.15	18.8	2.97	18.1	2.88	17.5	2.79	16.3	2.61
	18.0	16.8	21.2	3.17	20.0	3.01	18.8	2.85	18.1	2.76	17.5	2.67	16.3	2.49
	20.0	18.5	21.2	3.02	20.0	2.88	18.8	2.74	18.1	2.66	17.5	2.56	16.3	2.38
	24.0	20.5	21.2	2.88	20.0	2.76	18.8	2.55	18.1	2.57	17.5	2.46	16.3	2.28

GMV-Q400WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
135%	-19.8	-20.0	29.1	7.07	29.0	7.56	28.9	8.07	28.9	8.31	28.7	8.56	28.7	9.07
	-18.8	-19.0	29.6	7.22	29.4	7.72	29.4	8.21	29.3	8.46	29.3	8.69	29.1	9.18
	-16.7	-17.0	30.7	7.56	30.6	8.03	30.4	8.51	30.4	8.70	30.4	8.98	30.3	9.46
	-13.7	-15.0	32.0	7.91	31.9	8.37	31.7	8.82	31.7	9.04	31.6	9.27	31.6	9.73
	-11.8	-13.0	33.3	8.26	33.3	8.70	33.1	9.13	33.0	9.35	33.0	9.57	32.9	10.00
	-9.8	-11.0	34.9	8.63	34.7	9.04	34.6	9.46	34.6	9.66	34.6	9.87	34.4	10.29
	-9.5	-10.0	35.7	8.81	35.6	9.21	35.4	9.61	35.4	9.82	35.3	10.02	35.3	10.42
	-8.5	-9.1	36.4	8.96	36.3	9.35	36.3	9.76	36.1	9.95	36.1	10.15	36.0	10.55
	-7.0	-7.6	37.7	9.22	37.7	9.61	37.6	9.99	37.6	10.18	37.4	10.37	37.3	10.76
	-5.0	-5.6	39.7	9.57	39.6	9.74	39.4	10.30	39.4	10.48	39.3	10.65	39.3	11.02
	-3.0	-3.7	41.6	9.89	41.4	10.24	41.4	10.57	41.3	10.76	41.3	10.92	41.1	11.26
	0.0	-0.7	44.9	10.37	44.9	10.69	44.7	11.00	44.7	11.16	44.6	11.33	44.6	11.64
	3.0	2.2	48.4	10.79	48.3	11.09	48.1	11.39	48.1	11.54	48.1	11.69	48.0	11.98
	5.0	4.1	50.9	11.07	50.7	11.35	50.7	11.63	50.6	11.77	50.6	11.91	50.4	12.18
	7.0	6.0	53.4	11.33	53.3	11.59	53.3	11.86	53.1	10.69	53.1	12.12	51.0	11.64
	9.0	7.9	56.1	11.56	56.0	11.82	56.0	12.07	55.9	12.20	54.7	11.95	51.0	10.94
	11.0	9.8	59.0	11.79	58.9	12.03	58.6	12.18	56.6	11.70	54.7	11.22	51.0	10.30
	13.0	11.8	62.1	12.02	62.0	12.25	58.6	11.42	56.6	10.96	54.7	10.53	51.0	9.66
	15.0	13.7	65.1	12.22	62.3	11.60	58.6	10.76	56.6	10.34	54.7	9.92	51.0	9.12
	18.0	16.8	65.1	11.57	62.3	11.04	58.6	10.20	56.6	9.82	54.7	9.38	51.0	8.66
	20.0	18.5	65.1	11.02	62.3	10.55	58.6	9.73	56.6	9.38	54.7	8.91	51.0	8.27
	24.0	20.5	65.1	10.53	62.3	10.15	58.6	9.35	56.6	9.02	54.7	8.51	51.0	7.98

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-19.8	-20.0	29.0	7.74	28.9	8.20	28.7	8.66	28.7	8.89	28.7	9.12	28.6	9.59
	-18.8	-19.0	29.4	7.88	29.3	8.34	29.3	8.70	29.1	9.02	29.1	9.25	29.0	9.70
	-16.7	-17.0	30.6	8.20	30.4	8.64	30.4	9.07	30.3	9.29	30.3	9.51	30.1	9.94
	-13.7	-15.0	31.9	8.52	31.7	8.94	31.6	9.35	31.6	9.57	31.6	9.78	31.4	10.20
	-11.8	-13.0	33.1	8.85	33.1	9.25	33.0	9.65	33.0	9.86	32.9	10.05	32.9	10.46
	-9.8	-11.0	34.7	9.18	34.6	9.56	34.6	9.95	34.4	10.15	34.4	10.33	34.3	10.73
	-9.5	-10.0	35.6	9.35	35.4	9.73	35.3	10.09	35.3	10.29	35.3	10.39	35.1	10.85
	-8.5	-9.1	36.3	9.50	36.1	9.86	36.1	10.22	36.0	10.40	36.0	10.60	35.9	10.96
	-7.0	-7.6	37.6	9.74	37.6	10.09	37.4	10.44	37.4	10.63	37.3	10.79	37.3	11.15
	-5.0	-5.6	39.6	10.05	39.4	10.39	39.3	10.73	39.3	10.90	39.3	11.07	39.1	11.39
	-3.0	-3.7	41.4	10.35	41.4	10.68	41.3	10.99	41.3	11.15	41.1	11.31	41.1	11.63
	0.0	-0.7	44.7	10.79	44.7	11.09	44.6	11.52	44.6	11.54	44.4	11.68	44.4	11.98
	3.0	2.2	48.3	11.20	48.1	11.47	48.1	11.74	48.0	11.89	48.0	12.02	47.0	11.95
	5.0	4.1	50.7	11.44	50.6	11.70	50.6	11.96	50.4	12.09	50.4	12.22	47.0	11.22
	7.0	6.0	53.3	11.68	53.3	11.92	53.1	12.17	52.3	12.00	50.6	11.51	47.0	10.56
	9.0	7.9	56.0	11.91	55.9	12.15	54.0	11.74	52.3	11.28	50.6	10.82	47.0	9.94
	11.0	9.8	58.9	12.12	57.4	11.91	54.0	11.04	52.3	10.61	50.6	10.18	47.0	9.37
	13.0	11.8	61.0	12.00	57.4	11.17	54.0	10.35	52.3	9.96	50.6	9.57	47.0	8.81
	15.0	13.7	61.0	11.30	57.4	10.52	54.0	9.77	52.3	9.39	50.6	9.03	47.0	8.31
	18.0	16.8	61.0	10.68	57.4	9.96	54.0	9.27	52.3	8.90	50.6	8.55	47.0	7.88
	20.0	18.5	61.0	10.12	57.4	9.51	54.0	8.87	52.3	8.48	50.6	8.14	47.0	7.51
	24.0	20.5	61.0	9.63	57.4	9.12	54.0	8.55	52.3	8.13	50.6	7.82	47.0	7.20
110%	-19.8	-20.0	28.9	8.42	28.7	8.83	28.6	9.26	28.6	9.47	28.6	9.68	28.4	10.11
	-18.8	-19.0	29.3	8.55	29.3	8.96	29.1	9.38	29.1	9.59	29.0	9.79	29.0	10.21
	-16.7	-17.0	30.4	8.83	30.3	9.24	30.3	9.64	30.1	9.83	30.1	10.04	30.0	10.43
	-13.7	-15.0	31.7	9.13	31.6	9.52	31.4	9.90	31.4	10.09	31.4	10.29	31.3	10.66
	-11.8	-13.0	33.0	9.44	33.0	9.81	32.9	10.17	32.9	10.35	32.7	10.53	32.7	10.91
	-9.8	-11.0	34.6	9.74	34.4	10.09	34.4	10.44	34.3	10.63	34.3	10.79	34.3	11.15
	-9.5	-10.0	35.4	9.90	35.3	10.24	35.1	10.59	35.1	10.76	35.1	10.92	35.0	11.26
	-8.5	-9.1	36.1	10.03	36.0	10.37	36.0	10.70	36.0	10.87	35.9	11.04	35.9	11.37
	-7.0	-7.6	37.4	10.26	37.4	10.57	37.3	10.90	37.3	11.07	37.7	11.22	37.1	11.55
	-5.0	-5.6	39.4	10.55	39.3	10.86	39.1	11.16	39.1	11.31	41.0	11.47	39.0	11.78
	-3.0	-3.7	41.3	10.82	41.3	11.11	41.1	11.41	41.1	11.55	44.4	11.69	41.0	11.99
	0.0	-0.7	44.6	11.22	44.6	11.50	44.4	11.77	44.4	11.90	46.3	12.04	43.1	11.81
	3.0	2.2	48.1	11.60	48.0	11.85	48.0	12.09	47.9	12.21	46.3	11.72	43.1	10.74
	5.0	4.1	50.6	11.82	50.6	12.07	49.6	11.95	47.9	11.47	46.3	11.02	43.1	10.11
	7.0	6.0	53.1	12.04	52.7	12.12	49.6	11.22	47.9	10.78	46.3	10.35	43.1	9.51
	9.0	7.9	55.9	12.24	52.7	11.39	49.6	10.56	47.9	10.15	46.3	9.74	43.1	8.96
	11.0	9.8	55.9	11.51	52.7	10.72	49.6	9.94	47.9	9.56	46.3	9.18	43.1	8.46
	13.0	11.8	55.9	10.79	52.7	10.05	49.6	9.34	47.9	8.99	46.3	8.64	43.1	7.96
	15.0	13.7	55.9	10.17	52.7	9.48	49.6	8.82	47.9	8.48	46.3	8.17	43.1	7.53
	18.0	16.8	55.9	9.63	52.7	8.99	49.6	8.04	47.9	8.04	46.3	7.78	43.1	7.17
	20.0	18.5	55.9	9.13	52.7	8.55	49.6	7.63	47.9	7.65	46.3	7.46	43.1	6.86
	24.0	20.5	55.9	8.72	52.7	8.16	49.6	7.26	47.9	7.33	46.3	7.18	43.1	6.60

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20.0	28.7	9.09	28.6	9.47	28.6	9.86	28.4	10.05	28.4	10.24	28.3	10.63
	-18.8	-19.0	29.1	9.21	29.1	9.59	29.0	9.96	29.0	10.16	28.9	10.35	28.9	10.73
	-16.7	-17.0	30.3	9.47	30.1	9.83	30.1	10.20	30.1	10.38	30.0	10.56	30.0	10.92
	-13.7	-15.0	31.6	9.74	31.4	10.09	31.4	10.44	31.3	10.63	31.3	10.79	31.1	11.15
	-11.8	-13.0	32.9	10.03	32.9	10.35	32.7	10.69	32.7	10.86	32.7	10.64	32.6	11.37
	-9.8	-11.0	34.4	10.30	34.3	10.63	34.3	10.94	34.3	11.11	34.1	11.26	34.1	11.57
	-9.5	-10.0	35.3	10.44	35.1	10.76	35.1	11.07	35.0	11.22	35.0	11.38	34.9	11.69
	-8.5	-9.1	36.0	10.56	36.0	10.87	35.9	11.17	35.9	11.33	35.7	11.48	35.7	11.78
	-7.0	-7.6	37.3	10.77	37.3	11.07	37.1	11.35	37.1	11.51	37.1	11.65	37.0	11.95
	-5.0	-5.6	39.3	11.04	39.1	11.31	39.1	11.60	39.0	11.74	39.0	11.87	39.0	12.16
	-3.0	-3.7	41.1	11.29	41.1	11.55	41.0	11.82	41.0	11.95	41.0	12.08	39.3	11.57
	0.0	-0.7	44.4	11.67	44.4	11.90	44.3	12.15	43.6	11.95	42.1	11.46	39.3	10.52
	3.0	2.2	48.0	11.99	47.9	12.21	45.0	11.30	43.6	10.86	42.1	10.43	39.3	9.57
	5.0	4.1	50.4	12.21	47.9	11.47	45.0	10.63	43.6	10.22	42.1	9.82	39.3	9.03
	7.0	6.0	50.7	11.59	47.9	10.78	45.0	10.00	43.6	9.63	42.1	9.25	39.3	8.51
	9.0	7.9	50.7	10.89	47.9	10.15	45.0	9.42	43.6	9.07	42.1	8.72	39.3	8.03
	11.0	9.8	50.7	10.25	47.9	9.56	45.0	8.89	43.6	8.55	42.1	8.22	39.3	7.59
	13.0	11.8	50.7	9.63	47.9	8.99	45.0	8.37	43.6	8.05	42.1	7.76	39.3	7.16
	15.0	13.7	50.7	9.08	47.9	8.48	45.0	7.90	43.6	7.61	42.1	7.33	39.3	6.78
	18.0	16.8	50.7	8.56	47.9	8.09	45.0	7.64	43.6	7.22	42.1	6.94	39.3	6.46
	20.0	18.5	50.7	8.08	47.9	7.77	45.0	7.33	43.6	6.90	42.1	6.61	39.3	6.20
	24.0	20.5	50.7	7.64	47.9	7.51	45.0	7.04	43.6	6.64	42.1	6.35	39.3	6.00
90%	-19.8	-20.0	28.6	9.77	28.4	10.11	28.4	10.46	28.3	10.63	28.3	10.81	28.3	11.15
	-18.8	-19.0	29.0	9.87	29.0	10.22	28.9	10.56	28.9	10.73	28.9	10.90	28.7	11.24
	-16.7	-17.0	30.1	10.12	30.0	10.44	30.0	10.77	30.0	10.94	29.9	11.09	29.9	11.42
	-13.7	-15.0	31.4	10.37	31.3	10.68	31.3	10.99	31.1	11.04	31.1	11.30	31.1	11.61
	-11.8	-13.0	32.7	10.61	32.7	10.91	32.6	11.21	32.6	11.37	32.6	11.51	32.4	11.81
	-9.8	-11.0	34.3	10.86	34.3	11.15	34.1	11.43	34.1	11.59	34.1	11.73	34.0	12.02
	-9.5	-10.0	35.1	10.99	35.0	11.28	35.0	11.55	34.9	11.69	34.9	11.83	34.9	12.11
	-8.5	-9.1	35.9	11.11	35.9	11.38	35.7	11.65	35.7	11.78	35.7	11.92	35.3	12.04
	-7.0	-7.6	37.1	11.29	37.1	11.55	37.0	11.82	37.0	11.95	37.0	12.08	35.3	11.50
	-5.0	-5.6	39.1	11.54	39.0	11.78	39.0	12.03	39.0	12.16	37.9	11.78	35.3	10.81
	-3.0	-3.7	41.0	11.76	41.0	10.69	40.6	12.04	39.1	11.56	37.9	11.09	35.3	10.18
	0.0	-0.7	44.4	12.09	43.1	10.50	40.6	10.92	39.1	10.50	37.9	10.08	35.3	9.26
	3.0	2.2	45.7	11.52	43.1	10.73	40.6	9.95	39.1	9.57	37.9	9.20	35.3	8.47
	5.0	4.1	45.7	10.83	43.1	10.09	40.6	9.38	39.1	9.02	37.9	8.68	35.3	7.99
	7.0	6.0	45.7	10.18	43.1	9.51	40.6	8.83	39.1	8.51	37.9	8.18	35.3	7.55
	9.0	7.9	45.7	9.60	43.1	8.95	40.6	8.33	39.1	8.03	37.9	7.73	35.3	7.13
	11.0	9.8	45.7	9.04	43.1	8.44	40.6	7.87	39.1	7.59	37.9	7.30	35.3	6.75
	13.0	11.8	45.7	8.51	43.1	7.96	40.6	7.42	39.1	7.16	37.9	6.90	35.3	6.38
	15.0	13.7	45.7	8.04	43.1	7.52	40.6	7.03	39.1	6.75	37.9	6.53	35.3	6.05
	18.0	16.8	45.7	7.60	43.1	7.11	40.6	6.66	39.1	6.38	37.9	6.20	35.3	5.75
	20.0	18.5	45.7	7.18	43.1	6.72	40.6	6.33	39.1	6.01	37.9	5.88	35.3	5.49
	24.0	20.5	45.7	6.78	43.1	6.34	40.6	6.00	39.1	5.68	37.9	5.59	35.3	5.25

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-19.8	-20.0	28.4	10.44	28.3	10.74	28.3	11.05	28.3	11.21	28.1	11.37	28.1	11.67
	-18.8	-19.0	28.9	10.53	28.9	10.85	28.7	11.15	28.7	11.30	28.7	11.44	28.6	11.76
	-16.7	-17.0	30.0	10.76	29.9	11.04	29.9	11.34	29.9	11.48	29.9	11.63	29.7	11.91
	-13.7	-15.0	31.3	10.98	31.1	11.25	31.1	11.54	31.1	11.67	31.0	11.81	31.0	12.09
	-11.8	-13.0	32.6	11.20	32.6	11.47	32.4	11.73	32.4	11.86	32.4	12.00	31.4	11.68
	-9.8	-11.0	34.1	11.42	34.1	11.68	34.0	11.94	34.0	12.05	33.7	12.03	31.4	11.03
	-9.5	-10.0	35.0	11.54	34.9	11.78	34.9	12.03	34.9	12.16	33.7	11.68	31.4	10.70
	-8.5	-9.1	35.7	11.64	35.7	11.89	35.6	12.12	34.9	11.86	33.7	11.37	31.4	10.42
	-7.0	-7.6	37.0	11.81	37.0	12.04	36.0	11.78	34.9	11.31	33.7	10.86	31.4	10.00
	-5.0	-5.6	39.0	10.72	38.3	11.95	36.0	11.07	34.9	10.64	33.7	10.21	31.4	9.38
	-3.0	-3.7	40.6	10.78	38.3	11.25	36.0	10.42	34.9	10.07	33.7	9.63	31.4	8.86
	0.0	-0.7	40.6	10.96	38.3	10.21	36.0	9.48	34.9	9.13	33.7	8.77	31.4	8.08
	3.0	2.2	40.6	9.99	38.3	9.31	36.0	8.66	34.9	8.34	33.7	8.03	31.4	7.40
	5.0	4.1	40.6	9.40	38.3	8.78	36.0	8.17	34.9	7.87	33.7	7.59	31.4	7.00
	7.0	6.0	40.6	8.86	38.3	8.30	36.0	7.72	34.9	7.44	33.7	7.17	31.4	6.62
	9.0	7.9	40.6	8.37	38.3	7.82	36.0	7.33	34.9	7.03	33.7	6.78	31.4	6.27
	11.0	9.8	40.6	7.90	38.3	7.39	36.0	6.90	34.9	6.65	33.7	6.42	31.4	5.95
	13.0	11.8	40.6	7.44	38.3	6.98	36.0	6.52	34.9	6.29	33.7	6.07	31.4	5.62
	15.0	13.7	40.6	7.04	38.3	6.61	36.0	6.18	34.9	5.96	33.7	5.75	31.4	5.35
	18.0	16.8	40.6	6.72	38.3	6.29	36.0	5.88	34.9	5.66	33.7	5.46	31.4	5.11
	20.0	18.5	40.6	6.46	38.3	6.03	36.0	5.62	34.9	5.40	33.7	5.20	31.4	4.87
	24.0	20.5	40.6	6.26	38.3	5.83	36.0	5.39	34.9	5.17	33.7	4.96	31.4	4.66
70%	-19.8	-20.0	28.3	11.12	28.1	11.38	28.1	11.65	28.1	11.78	28.1	11.92	27.4	11.79
	-18.8	-19.0	28.7	11.21	28.7	11.47	28.6	11.73	28.6	11.86	28.6	12.00	27.4	11.55
	-16.7	-17.0	29.9	11.39	29.9	11.65	29.7	11.90	29.7	12.03	29.4	12.02	27.4	11.02
	-13.7	-15.0	31.1	11.59	31.0	11.83	31.0	12.08	30.4	115.82	29.4	11.42	27.4	10.47
	-11.8	-13.0	32.4	11.78	32.4	12.02	31.6	11.73	30.4	11.28	29.4	10.82	27.4	9.92
	-9.8	-11.0	34.0	11.98	33.6	11.96	31.6	11.08	30.4	10.65	29.4	10.22	27.4	9.39
	-9.5	-10.0	34.9	12.08	33.6	11.61	31.6	10.76	30.4	10.34	29.4	9.94	27.4	9.13
	-8.5	-9.1	35.6	12.15	33.6	11.30	31.6	10.47	30.4	10.07	29.4	9.68	27.4	8.90
	-7.0	-7.6	35.6	11.60	33.6	10.79	31.6	10.02	30.4	9.64	29.4	9.26	27.4	8.52
	-5.0	-5.6	35.6	10.90	33.6	10.16	31.6	9.43	30.4	9.07	29.4	8.72	27.4	8.04
	-3.0	-3.7	35.6	10.26	33.6	9.57	31.6	8.90	30.4	8.56	29.4	8.24	27.4	7.60
	0.0	-0.7	35.6	9.34	33.6	8.77	31.6	8.12	30.4	7.82	29.4	7.53	27.4	6.96
	3.0	2.2	35.6	8.53	33.6	0.19	31.6	7.44	30.4	7.17	29.4	6.91	27.4	6.39
	5.0	4.1	35.6	8.05	33.6	7.53	31.6	7.04	30.4	6.78	29.4	6.55	27.4	6.05
	7.0	6.0	35.6	7.61	33.6	7.13	31.6	6.65	30.4	6.42	29.4	6.20	27.4	5.74
	9.0	7.9	35.6	7.20	33.6	6.74	31.6	6.30	30.4	6.08	29.4	5.87	27.4	5.44
	11.0	9.8	35.6	6.81	33.6	6.38	31.6	5.98	30.4	5.77	29.4	5.57	27.4	5.17
	13.0	11.8	35.6	6.43	33.6	6.04	31.6	5.65	30.4	5.47	29.4	5.27	27.4	4.91
	15.0	13.7	35.6	6.09	33.6	5.73	31.6	5.36	30.4	5.20	29.4	5.01	27.4	4.68
	18.0	16.8	35.6	5.78	33.6	5.44	31.6	5.11	30.4	4.95	29.4	4.78	27.4	4.47
	20.0	18.5	35.6	5.51	33.6	5.18	31.6	4.87	30.4	4.73	29.4	4.57	27.4	4.29
	24.0	20.5	35.6	5.26	33.6	4.95	31.6	4.68	30.4	4.53	29.4	4.40	27.4	4.13

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-19.8	-20.0	28.1	11.79	28.0	12.02	27.0	11.56	26.1	11.11	25.3	10.66	23.6	9.78
	-18.8	-19.0	28.6	11.87	28.6	12.09	27.0	11.31	26.1	10.87	25.3	10.43	23.6	9.57
	-16.7	-17.0	29.7	12.03	28.7	11.65	27.0	10.79	26.1	10.38	25.3	9.96	23.6	9.16
	-13.7	-15.0	30.4	11.90	28.7	11.07	27.0	10.26	26.1	9.87	25.3	9.48	23.6	8.72
	-11.8	-13.0	30.4	11.26	28.7	10.48	27.0	9.73	26.1	9.37	25.3	9.00	23.6	8.29
	-9.8	-11.0	30.4	10.64	28.7	9.91	27.0	9.21	26.1	8.86	25.3	8.52	23.6	7.86
	-9.5	-10.0	30.4	10.34	28.7	9.64	27.0	8.95	26.1	8.63	25.3	8.29	23.6	7.64
	-8.5	-9.1	30.4	10.07	28.7	9.39	27.0	8.73	26.1	8.40	25.3	8.08	23.6	7.46
	-7.0	-7.6	30.4	9.63	28.7	8.99	27.0	8.35	26.1	8.05	25.3	7.74	23.6	7.16
	-5.0	-5.6	30.4	9.07	28.7	8.47	27.0	7.88	26.1	7.60	25.3	7.31	23.6	6.77
	-3.0	-3.7	30.4	8.56	28.7	8.00	27.0	7.48	26.1	7.20	25.3	6.92	23.6	6.40
	0.0	-0.7	30.4	7.82	28.7	7.33	27.0	6.83	26.1	6.60	25.3	6.35	23.6	5.88
	3.0	2.2	30.4	7.17	28.7	6.73	27.0	6.29	26.1	6.07	25.3	5.86	23.6	0.23
	5.0	4.1	30.4	6.78	28.7	6.37	27.0	5.95	26.1	5.75	25.3	5.55	23.6	5.16
	7.0	6.0	30.4	6.42	28.7	6.03	27.0	5.64	26.1	5.46	25.3	5.27	23.6	4.90
	9.0	7.9	30.4	6.08	28.7	5.72	27.0	5.35	26.1	5.18	25.3	5.00	23.6	4.66
	11.0	9.8	30.4	5.77	28.7	5.43	27.0	5.09	26.1	4.92	25.3	4.75	23.6	4.44
	13.0	11.8	30.4	5.46	28.7	5.14	27.0	4.83	26.1	4.68	25.3	4.52	23.6	4.22
	15.0	13.7	30.4	5.20	28.7	4.88	27.0	4.60	26.1	4.46	25.3	4.31	23.6	4.03
	18.0	16.8	30.4	4.96	28.7	4.65	27.0	4.39	26.1	4.26	25.3	4.13	23.6	3.86
	20.0	18.5	30.4	4.75	28.7	4.44	27.0	4.21	26.1	4.09	25.3	3.97	23.6	3.72
	24.0	20.5	30.4	4.57	28.7	4.26	27.0	4.05	26.1	3.95	25.3	3.85	23.6	3.59
50%	-19.8	-20.0	25.4	10.73	24.0	9.99	22.6	9.27	21.7	8.94	21.0	8.59	19.6	7.91
	-18.8	-19.0	25.4	10.50	24.0	9.78	22.6	9.09	21.7	8.74	21.0	8.40	19.6	7.76
	-16.7	-17.0	25.4	10.02	24.0	9.34	22.6	8.69	21.7	8.37	21.0	8.05	19.6	7.43
	-13.7	-15.0	25.4	9.53	24.0	8.90	22.6	8.27	21.7	7.98	21.0	7.68	19.6	7.09
	-11.8	-13.0	25.4	9.05	24.0	8.47	22.6	7.87	21.7	7.59	21.0	7.30	19.6	6.75
	-9.8	-11.0	25.4	8.57	24.0	8.01	22.6	7.47	21.7	7.20	21.0	6.94	19.6	6.42
	-9.5	-10.0	25.4	8.34	24.0	7.79	22.6	7.27	21.7	7.01	21.0	6.75	19.6	6.25
	-8.5	-9.1	25.4	8.13	24.0	7.61	22.6	7.09	21.7	6.85	21.0	6.60	19.6	6.11
	-7.0	-7.6	25.4	7.79	24.0	7.33	22.6	6.81	21.7	6.57	21.0	6.34	19.6	5.87
	-5.0	-5.6	25.4	7.35	24.0	6.90	22.6	6.44	21.7	6.22	21.0	6.00	19.6	5.56
	-3.0	-3.7	25.4	6.96	24.0	6.53	22.6	6.11	21.7	5.90	21.0	5.69	19.6	5.29
	0.0	-0.7	25.4	6.39	24.0	6.00	22.6	5.62	21.7	5.43	21.0	5.25	19.6	4.88
	3.0	2.2	25.4	5.88	24.0	5.53	22.6	5.18	21.7	5.01	21.0	4.86	19.6	4.52
	5.0	4.1	25.4	5.59	24.0	5.25	22.6	4.92	21.7	4.77	21.0	4.61	19.6	4.30
	7.0	6.0	25.4	5.30	24.0	4.99	22.6	4.69	21.7	4.53	21.0	4.39	19.6	4.10
	9.0	7.9	25.4	5.03	24.0	4.74	22.6	4.46	21.7	4.33	21.0	4.18	19.6	3.91
	11.0	9.8	25.4	4.78	24.0	4.51	22.6	4.25	21.7	4.12	21.0	3.99	19.6	3.73
	13.0	11.8	25.4	4.55	24.0	4.29	22.6	4.04	21.7	3.92	21.0	3.79	19.6	3.56
	15.0	13.7	25.4	4.33	24.0	4.09	22.6	3.86	21.7	3.74	21.0	3.62	19.6	3.39
	18.0	16.8	25.4	4.12	24.0	3.91	22.6	3.70	21.7	3.59	21.0	3.47	19.6	3.23
	20.0	18.5	25.4	3.92	24.0	3.74	22.6	3.56	21.7	3.46	21.0	3.33	19.6	3.09
	24.0	20.5	25.4	3.74	24.0	3.59	22.6	3.31	21.7	3.34	21.0	3.20	19.6	2.96

GMV-Q450WM/E-X

TC—Total capacity of outdoor unit; PI—Power input of outdoor unit

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
135%	-19.8	-20.0	32.4	8.97	32.2	9.60	32.1	10.24	32.1	10.55	31.9	10.87	31.9	11.51
	-18.8	-19.0	32.9	9.17	32.7	9.80	32.7	10.42	32.5	10.73	32.5	11.03	32.4	11.66
	-16.7	-17.0	34.1	9.60	34.0	10.19	33.8	10.80	33.8	11.05	33.8	11.39	33.7	12.00
	-13.7	-15.0	35.6	10.04	35.4	10.62	35.2	11.20	35.2	11.48	35.1	11.77	35.1	12.35
	-11.8	-13.0	37.0	10.49	37.0	11.05	36.8	11.59	36.7	11.87	36.7	12.15	36.5	12.70
	-9.8	-11.0	38.7	10.95	38.6	11.48	38.4	12.00	38.4	12.27	38.4	12.53	38.3	13.06
	-9.5	-10.0	39.7	11.18	39.5	11.69	39.4	12.20	39.4	12.47	39.2	12.71	39.2	13.22
	-8.5	-9.1	40.5	11.38	40.3	11.87	40.3	12.38	40.2	12.63	40.2	12.88	40.0	13.39
	-7.0	-7.6	41.9	11.71	41.9	12.20	41.7	12.68	41.7	12.93	41.6	13.16	41.4	13.65
	-5.0	-5.6	44.1	12.15	44.0	12.37	43.8	13.08	43.8	13.31	43.7	13.52	43.7	13.98
	-3.0	-3.7	46.2	12.55	46.0	12.99	46.0	13.42	45.9	13.65	45.9	13.87	45.7	14.30
	0.0	-0.7	49.8	13.16	49.8	13.57	49.7	13.97	49.7	14.16	49.5	14.38	49.5	14.78
	3.0	2.2	53.8	13.70	53.7	14.08	53.5	14.46	53.5	14.64	53.5	14.84	53.3	15.20
	5.0	4.1	56.5	14.05	56.3	14.41	56.3	14.76	56.2	14.94	56.2	15.12	56.0	15.47
	7.0	6.0	59.4	14.38	59.2	14.71	59.2	15.06	59.0	13.57	59.0	15.39	56.7	14.78
	9.0	7.9	62.4	14.68	62.2	15.01	62.2	15.32	62.1	15.48	60.8	15.17	56.7	13.88
	11.0	9.8	65.6	14.97	65.4	15.27	65.1	15.47	62.9	14.86	60.8	14.25	56.7	13.08
	13.0	11.8	69.0	15.25	68.9	15.55	65.1	14.49	62.9	13.92	60.8	13.37	56.7	12.27
	15.0	13.7	72.4	15.52	69.2	14.73	65.1	13.65	62.9	13.13	60.8	12.60	56.7	11.58
	18.0	16.8	72.4	14.69	69.2	14.02	65.1	12.94	62.9	12.47	60.8	11.91	56.7	11.00
	20.0	18.5	72.4	13.98	69.2	13.39	65.1	12.35	62.9	11.91	60.8	11.31	56.7	10.50
	24.0	20.5	72.4	13.37	69.2	12.88	65.1	11.87	62.9	11.44	60.8	10.80	56.7	10.12
120%	-19.8	-20.0	32.2	9.83	32.1	10.41	31.9	11.00	31.9	11.28	31.9	11.58	31.7	12.17
	-18.8	-19.0	32.7	10.01	32.5	10.59	32.5	11.05	32.4	11.44	32.4	11.74	32.2	12.32
	-16.7	-17.0	34.0	10.41	33.8	10.97	33.8	11.51	33.7	11.79	33.7	12.07	33.5	12.61
	-13.7	-15.0	35.4	10.82	35.2	11.35	35.1	11.87	35.1	12.15	35.1	12.42	34.9	12.94
	-11.8	-13.0	36.8	11.23	36.8	11.74	36.7	12.25	36.7	12.52	36.5	12.76	36.5	13.27
	-9.8	-11.0	38.6	11.66	38.4	12.14	38.4	12.63	38.3	12.88	38.3	13.11	38.1	13.62
	-9.5	-10.0	39.5	11.87	39.4	12.35	39.2	12.81	39.2	13.06	39.2	13.19	39.0	13.77
	-8.5	-9.1	40.3	12.05	40.2	12.52	40.2	12.98	40.0	13.21	40.0	13.46	39.8	13.92
	-7.0	-7.6	41.7	12.37	41.7	12.81	41.6	13.26	41.6	13.49	41.4	13.70	41.4	14.15
	-5.0	-5.6	44.0	12.76	43.8	13.19	43.7	13.62	43.7	13.84	43.7	14.05	43.5	14.46
	-3.0	-3.7	46.0	13.14	46.0	13.55	45.9	13.95	45.9	14.15	45.7	14.36	45.7	14.76
	0.0	-0.7	49.7	13.70	49.7	14.08	49.5	14.63	49.5	14.64	49.4	14.82	49.4	15.20
	3.0	2.2	53.7	14.21	53.5	14.56	53.5	14.91	53.3	15.09	53.3	15.25	52.2	15.17
	5.0	4.1	56.3	14.53	56.2	14.86	56.2	15.19	56.0	15.35	56.0	15.52	52.2	14.25
	7.0	6.0	59.2	14.82	59.2	15.14	59.0	15.45	58.1	15.24	56.2	14.61	52.2	13.41
	9.0	7.9	62.2	15.12	62.1	15.42	60.0	14.91	58.1	14.31	56.2	13.74	52.2	12.61
	11.0	9.8	65.4	15.39	63.8	15.12	60.0	14.02	58.1	13.47	56.2	12.93	52.2	11.89
	13.0	11.8	67.8	15.24	63.8	14.18	60.0	13.14	58.1	12.65	56.2	12.15	52.2	11.18
	15.0	13.7	67.8	14.35	63.8	13.36	60.0	12.40	58.1	11.92	56.2	11.46	52.2	10.55
	18.0	16.8	67.8	13.55	63.8	12.65	60.0	11.77	58.1	11.30	56.2	10.85	52.2	10.01
	20.0	18.5	67.8	12.85	63.8	12.07	60.0	11.26	58.1	10.77	56.2	10.34	52.2	9.53
	24.0	20.5	67.8	12.22	63.8	11.58	60.0	10.85	58.1	10.32	56.2	9.93	52.2	9.14

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-19.8	-20.0	32.1	10.69	31.9	11.21	31.7	11.76	31.7	12.02	31.7	12.29	31.6	12.83
	-18.8	-19.0	32.5	10.85	32.5	11.38	32.4	11.91	32.4	12.17	32.2	12.43	32.2	12.96
	-16.7	-17.0	33.8	11.21	33.7	11.72	33.7	12.24	33.5	12.48	33.5	12.75	33.3	13.24
	-13.7	-15.0	35.2	11.59	35.1	12.09	34.9	12.57	34.9	12.81	34.9	13.06	34.8	13.54
	-11.8	-13.0	36.7	11.99	36.7	12.45	36.5	12.91	36.5	13.14	36.3	13.37	36.3	13.85
	-9.8	-11.0	38.4	12.37	38.3	12.81	38.3	13.26	38.1	13.49	38.1	13.70	38.1	14.15
	-9.5	-10.0	39.4	12.57	39.2	12.99	39.0	13.44	39.0	13.65	39.0	13.87	38.9	14.30
	-8.5	-9.1	40.2	12.73	40.0	13.16	40.0	13.59	40.0	13.80	39.8	14.02	39.8	14.43
	-7.0	-7.6	41.6	13.03	41.6	13.42	41.4	13.84	41.4	14.05	41.9	14.25	41.3	14.66
	-5.0	-5.6	43.8	13.39	43.7	13.79	43.5	14.16	43.5	14.36	45.6	14.56	43.3	14.96
	-3.0	-3.7	45.9	13.74	45.9	14.10	45.7	14.48	45.7	14.66	49.4	14.84	45.6	15.22
	0.0	-0.7	49.5	14.25	49.5	14.59	49.4	14.94	49.4	15.10	51.4	15.29	47.9	14.99
	3.0	2.2	53.5	14.73	53.3	15.04	53.3	15.35	53.2	15.50	51.4	14.87	47.9	13.64
	5.0	4.1	56.2	15.01	56.2	15.32	55.1	15.17	53.2	14.56	51.4	13.98	47.9	12.83
	7.0	6.0	59.0	15.29	58.6	15.39	55.1	14.25	53.2	13.69	51.4	13.14	47.9	12.07
	9.0	7.9	62.1	15.53	58.6	14.46	55.1	13.41	53.2	12.88	51.4	12.37	47.9	11.38
	11.0	9.8	62.1	14.61	58.6	13.60	55.1	12.61	53.2	12.14	51.4	11.66	47.9	10.73
	13.0	11.8	62.1	13.70	58.6	12.76	55.1	11.86	53.2	11.41	51.4	10.97	47.9	10.11
	15.0	13.7	62.1	12.91	58.6	12.04	55.1	11.20	53.2	10.77	51.4	10.37	47.9	9.56
	18.0	16.8	62.1	12.22	58.6	11.41	55.1	10.21	53.2	10.21	51.4	9.88	47.9	9.10
	20.0	18.5	62.1	11.59	58.6	10.85	55.1	9.68	53.2	9.71	51.4	9.47	47.9	8.71
	24.0	20.5	62.1	11.06	58.6	10.36	55.1	9.22	53.2	9.30	51.4	9.12	47.9	8.38
100%	-19.8	-20.0	31.9	11.54	31.7	12.02	31.7	12.52	31.6	12.76	31.6	12.99	31.4	13.49
	-18.8	-19.0	32.4	11.69	32.4	12.17	32.2	12.65	32.2	12.90	32.1	13.14	32.1	13.62
	-16.7	-17.0	33.7	12.02	33.5	12.48	33.5	12.94	33.5	13.18	33.3	13.41	33.3	13.87
	-13.7	-15.0	35.1	12.37	34.9	12.81	34.9	13.26	34.8	13.49	34.8	13.70	34.6	14.15
	-11.8	-13.0	36.5	12.73	36.5	13.14	36.3	13.57	36.3	13.79	36.3	13.51	36.2	14.43
	-9.8	-11.0	38.3	13.08	38.1	13.49	38.1	13.88	38.1	14.10	37.9	14.30	37.9	14.69
	-9.5	-10.0	39.2	13.26	39.0	13.65	39.0	14.05	38.9	14.25	38.9	14.45	38.7	14.84
	-8.5	-9.1	40.0	13.41	40.0	13.80	39.8	14.18	39.8	14.38	39.7	14.58	39.7	14.96
	-7.0	-7.6	41.4	13.67	41.4	14.05	41.3	14.41	41.3	14.61	41.3	14.79	41.1	15.17
	-5.0	-5.6	43.7	14.02	43.5	14.36	43.5	14.73	43.3	14.91	43.3	15.07	43.3	15.43
	-3.0	-3.7	45.7	14.33	45.7	14.66	45.6	15.01	45.6	15.17	45.6	15.34	43.7	14.69
	0.0	-0.7	49.4	14.81	49.4	15.10	49.2	15.42	48.4	15.17	46.8	14.54	43.7	13.36
	3.0	2.2	53.3	15.22	53.2	15.50	50.0	14.35	48.4	13.79	46.8	13.24	43.7	12.15
	5.0	4.1	56.0	15.50	53.2	14.56	50.0	13.49	48.4	12.98	46.8	12.47	43.7	11.46
	7.0	6.0	56.3	14.71	53.2	13.69	50.0	12.70	48.4	12.22	46.8	11.74	43.7	10.80
	9.0	7.9	56.3	13.82	53.2	12.88	50.0	11.96	48.4	11.51	46.8	11.06	43.7	10.19
	11.0	9.8	56.3	13.01	53.2	12.14	50.0	11.28	48.4	10.85	46.8	10.44	43.7	9.63
	13.0	11.8	56.3	12.22	53.2	11.41	50.0	10.62	48.4	10.22	46.8	9.84	43.7	9.09
	15.0	13.7	56.3	11.53	53.2	10.77	50.0	10.03	48.4	9.66	46.8	9.30	43.7	8.61
	18.0	16.8	56.3	10.87	53.2	10.27	50.0	9.70	48.4	9.17	46.8	8.81	43.7	8.20
	20.0	18.5	56.3	10.26	53.2	9.86	50.0	9.30	48.4	8.76	46.8	8.39	43.7	7.87
	24.0	20.5	56.3	9.70	53.2	9.53	50.0	8.94	48.4	8.43	46.8	8.06	43.7	7.62

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-19.8	-20.0	31.7	12.40	31.6	12.83	31.6	13.27	31.4	13.49	31.4	13.72	31.4	14.15
	-18.8	-19.0	32.2	12.53	32.2	12.98	32.1	13.41	32.1	13.62	32.1	13.84	31.9	14.26
	-16.7	-17.0	33.5	12.85	33.3	13.26	33.3	13.67	33.3	13.88	33.2	14.08	33.2	14.49
	-13.7	-15.0	34.9	13.16	34.8	13.55	34.8	13.95	34.6	14.02	34.6	14.35	34.6	14.74
	-11.8	-13.0	36.3	13.47	36.3	13.85	36.2	14.23	36.2	14.43	36.2	14.61	36.0	14.99
	-9.8	-11.0	38.1	13.79	38.1	14.15	37.9	14.51	37.9	14.71	37.9	14.89	37.8	15.25
	-9.5	-10.0	39.0	13.95	38.9	14.31	38.9	14.66	38.7	14.84	38.7	15.02	38.7	15.37
	-8.5	-9.1	39.8	14.10	39.8	14.45	39.7	14.79	39.7	14.96	39.7	15.14	39.2	15.29
	-7.0	-7.6	41.3	14.33	41.3	14.66	41.1	15.01	41.1	15.17	41.1	15.34	39.2	14.59
	-5.0	-5.6	43.5	14.64	43.3	14.96	43.3	15.27	43.3	15.43	42.1	14.96	39.2	13.72
	-3.0	-3.7	45.6	14.92	45.6	13.57	45.1	15.29	43.5	14.68	42.1	14.08	39.2	12.93
	0.0	-0.7	49.4	15.35	47.9	13.32	45.1	13.87	43.5	13.32	42.1	12.80	39.2	11.76
	3.0	2.2	50.8	14.63	47.9	13.62	45.1	12.63	43.5	12.15	42.1	11.67	39.2	10.75
	5.0	4.1	50.8	13.75	47.9	12.81	45.1	11.91	43.5	11.44	42.1	11.02	39.2	10.14
	7.0	6.0	50.8	12.93	47.9	12.07	45.1	11.21	43.5	10.80	42.1	10.39	39.2	9.58
	9.0	7.9	50.8	12.19	47.9	11.36	45.1	10.57	43.5	10.19	42.1	9.81	39.2	9.05
	11.0	9.8	50.8	11.48	47.9	10.72	45.1	9.99	43.5	9.63	42.1	9.27	39.2	8.57
	13.0	11.8	50.8	10.80	47.9	10.11	45.1	9.42	43.5	9.09	42.1	8.76	39.2	8.10
	15.0	13.7	50.8	10.21	47.9	9.55	45.1	8.92	43.5	8.57	42.1	8.29	39.2	7.68
	18.0	16.8	50.8	9.65	47.9	9.02	45.1	8.46	43.5	8.10	42.1	7.87	39.2	7.31
	20.0	18.5	50.8	9.12	47.9	8.53	45.1	8.03	43.5	7.63	42.1	7.47	39.2	6.98
	24.0	20.5	50.8	8.61	47.9	8.05	45.1	7.62	43.5	7.21	42.1	7.09	39.2	6.66
80%	-19.8	-20.0	31.6	13.26	31.4	13.64	31.4	14.03	31.4	14.23	31.3	14.43	31.3	14.81
	-18.8	-19.0	32.1	13.37	32.1	13.77	31.9	14.15	31.9	14.35	31.9	14.53	31.7	14.92
	-16.7	-17.0	33.3	13.65	33.2	14.02	33.2	14.40	33.2	14.58	33.2	14.76	33.0	15.12
	-13.7	-15.0	34.8	13.93	34.6	14.28	34.6	14.64	34.6	14.81	34.4	14.99	34.4	15.35
	-11.8	-13.0	36.2	14.21	36.2	14.56	36.0	14.89	36.0	15.06	36.0	15.24	34.9	14.82
	-9.8	-11.0	37.9	14.49	37.9	14.82	37.8	15.15	37.8	15.30	37.5	15.27	34.9	14.00
	-9.5	-10.0	38.9	14.64	38.7	14.96	38.7	15.27	38.7	15.43	37.5	14.82	34.9	13.59
	-8.5	-9.1	39.7	14.78	39.7	15.09	39.5	15.39	38.7	15.06	37.5	14.43	34.9	13.22
	-7.0	-7.6	41.1	14.99	41.1	15.29	40.0	14.96	38.7	14.36	37.5	13.79	34.9	12.70
	-5.0	-5.6	43.3	13.60	42.5	15.17	40.0	14.05	38.7	13.51	37.5	12.96	34.9	11.91
	-3.0	-3.7	45.1	13.69	42.5	14.28	40.0	13.22	38.7	12.78	37.5	12.22	34.9	11.25
	0.0	-0.7	45.1	13.92	42.5	12.96	40.0	12.04	38.7	11.59	37.5	11.13	34.9	10.26
	3.0	2.2	45.1	12.68	42.5	11.82	40.0	11.00	38.7	10.59	37.5	10.19	34.9	9.40
	5.0	4.1	45.1	11.94	42.5	11.15	40.0	10.37	38.7	9.99	37.5	9.63	34.9	8.89
	7.0	6.0	45.1	11.25	42.5	10.54	40.0	9.80	38.7	9.45	37.5	9.10	34.9	8.41
	9.0	7.9	45.1	10.62	42.5	9.93	40.0	9.30	38.7	8.92	37.5	8.61	34.9	7.96
	11.0	9.8	45.1	10.03	42.5	9.38	40.0	8.76	38.7	8.44	37.5	8.15	34.9	7.55
	13.0	11.8	45.1	9.45	42.5	8.86	40.0	8.28	38.7	7.98	37.5	7.70	34.9	7.14
	15.0	13.7	45.1	8.94	42.5	8.39	40.0	7.85	38.7	7.57	37.5	7.31	34.9	6.79
	18.0	16.8	45.1	8.53	42.5	7.98	40.0	7.47	38.7	7.19	37.5	6.93	34.9	6.48
	20.0	18.5	45.1	8.20	42.5	7.65	40.0	7.14	38.7	6.86	37.5	6.60	34.9	6.18
	24.0	20.5	45.1	7.95	42.5	7.40	40.0	6.84	38.7	6.56	37.5	6.30	34.9	5.92

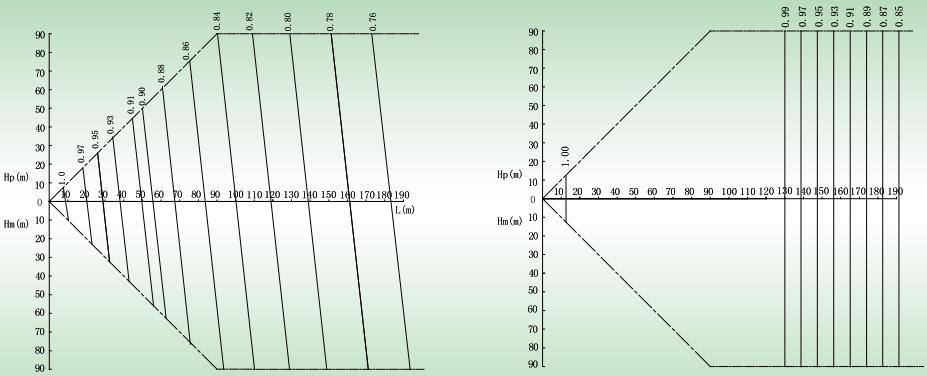
combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20.0	31.4	14.12	31.3	14.45	31.3	14.79	31.3	14.96	31.3	15.14	30.5	14.97
	-18.8	-19.0	31.9	14.23	31.9	14.56	31.7	14.89	31.7	15.06	31.7	15.24	30.5	14.66
	-16.7	-17.0	33.2	14.46	33.2	14.79	33.0	15.10	33.0	15.27	32.7	15.25	30.5	13.98
	-13.7	-15.0	34.6	14.71	34.4	15.02	34.4	15.34	33.8	147.02	32.7	14.49	30.5	13.29
	-11.8	-13.0	36.0	14.96	36.0	15.25	35.1	14.89	33.8	14.31	32.7	13.74	30.5	12.60
	-9.8	-11.0	37.8	15.20	37.3	15.19	35.1	14.07	33.8	13.52	32.7	12.98	30.5	11.92
	-9.5	-10.0	38.7	15.34	37.3	14.74	35.1	13.65	33.8	13.13	32.7	12.61	30.5	11.59
	-8.5	-9.1	39.5	15.42	37.3	14.35	35.1	13.29	33.8	12.78	32.7	12.29	30.5	11.30
	-7.0	-7.6	39.5	14.73	37.3	13.70	35.1	12.71	33.8	12.24	32.7	11.76	30.5	10.82
	-5.0	-5.6	39.5	13.84	37.3	12.90	35.1	11.97	33.8	11.51	32.7	11.06	30.5	10.21
	-3.0	-3.7	39.5	13.03	37.3	12.15	35.1	11.30	33.8	10.87	32.7	10.45	30.5	9.65
	0.0	-0.7	39.5	11.86	37.3	11.13	35.1	10.31	33.8	9.93	32.7	9.56	30.5	8.84
	3.0	2.2	39.5	10.83	37.3	0.25	35.1	9.45	33.8	9.10	32.7	8.77	30.5	8.11
	5.0	4.1	39.5	10.22	37.3	9.56	35.1	8.94	33.8	8.61	32.7	8.31	30.5	7.68
	7.0	6.0	39.5	9.66	37.3	9.05	35.1	8.44	33.8	8.15	32.7	7.87	30.5	7.29
	9.0	7.9	39.5	9.14	37.3	8.56	35.1	8.00	33.8	7.72	32.7	7.45	30.5	6.91
	11.0	9.8	39.5	8.64	37.3	8.10	35.1	7.59	33.8	7.32	32.7	7.07	30.5	6.56
	13.0	11.8	39.5	8.16	37.3	7.67	35.1	7.17	33.8	6.94	32.7	6.69	30.5	6.23
	15.0	13.7	39.5	7.73	37.3	7.27	35.1	6.81	33.8	6.60	32.7	6.37	30.5	5.94
	18.0	16.8	39.5	7.34	37.3	6.91	35.1	6.48	33.8	6.28	32.7	6.07	30.5	5.67
	20.0	18.5	39.5	6.99	37.3	6.58	35.1	6.18	33.8	6.00	32.7	5.80	30.5	5.44
	24.0	20.5	39.5	6.68	37.3	6.28	35.1	5.94	33.8	5.76	32.7	5.59	30.5	5.24
60%	-19.8	-20.0	31.3	14.97	31.1	15.25	30.0	14.68	29.0	14.10	28.1	13.54	26.2	12.42
	-18.8	-19.0	31.7	15.07	31.7	15.35	30.0	14.36	29.0	13.80	28.1	13.24	26.2	12.15
	-16.7	-17.0	33.0	15.27	31.9	14.79	30.0	13.70	29.0	13.18	28.1	12.65	26.2	11.63
	-13.7	-15.0	33.8	15.10	31.9	14.05	30.0	13.03	29.0	12.53	28.1	12.04	26.2	11.06
	-11.8	-13.0	33.8	14.30	31.9	13.31	30.0	12.35	29.0	11.89	28.1	11.43	26.2	10.52
	-9.8	-11.0	33.8	13.51	31.9	12.58	30.0	11.69	29.0	11.25	28.1	10.82	26.2	9.98
	-9.5	-10.0	33.8	13.13	31.9	12.24	30.0	11.36	29.0	10.95	28.1	10.52	26.2	9.70
	-8.5	-9.1	33.8	12.78	31.9	11.92	30.0	11.08	29.0	10.67	28.1	10.26	26.2	9.47
	-7.0	-7.6	33.8	12.22	31.9	11.41	30.0	10.60	29.0	10.22	28.1	9.83	26.2	9.09
	-5.0	-5.6	33.8	11.51	31.9	10.75	30.0	10.01	29.0	9.65	28.1	9.28	26.2	8.59
	-3.0	-3.7	33.8	10.87	31.9	10.16	30.0	9.50	29.0	9.14	28.1	8.79	26.2	8.13
	0.0	-0.7	33.8	9.93	31.9	9.30	30.0	8.67	29.0	8.38	28.1	8.06	26.2	7.47
	3.0	2.2	33.8	9.10	31.9	8.54	30.0	7.98	29.0	7.70	28.1	7.44	26.2	0.30
	5.0	4.1	33.8	8.61	31.9	8.08	30.0	7.55	29.0	7.31	28.1	7.04	26.2	6.55
	7.0	6.0	33.8	8.15	31.9	7.65	30.0	7.16	29.0	6.93	28.1	6.69	26.2	6.22
	9.0	7.9	33.8	7.72	31.9	7.26	30.0	6.79	29.0	6.58	28.1	6.35	26.2	5.92
	11.0	9.8	33.8	7.32	31.9	6.89	30.0	6.46	29.0	6.25	28.1	6.04	26.2	5.64
	13.0	11.8	33.8	6.93	31.9	6.53	30.0	6.13	29.0	5.94	28.1	5.74	26.2	5.36
	15.0	13.7	33.8	6.60	31.9	6.20	30.0	5.84	29.0	5.66	28.1	5.47	26.2	5.11
	18.0	16.8	33.8	6.30	31.9	5.90	30.0	5.57	29.0	5.41	28.1	5.24	26.2	4.90
	20.0	18.5	33.8	6.04	31.9	5.64	30.0	5.34	29.0	5.19	28.1	5.05	26.2	4.72
	24.0	20.5	33.8	5.80	31.9	5.41	30.0	5.14	29.0	5.01	28.1	4.88	26.2	4.55

combination	outdoor air temp		indoor air temperature ℃ DB											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃ DB	℃ WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-19.8	-20.0	28.3	13.62	26.7	12.68	25.1	11.77	24.1	11.35	23.3	10.90	21.7	10.04
	-18.8	-19.0	28.3	13.32	26.7	12.42	25.1	11.54	24.1	11.10	23.3	10.67	21.7	9.84
	-16.7	-17.0	28.3	12.71	26.7	11.86	25.1	11.03	24.1	10.62	23.3	10.22	21.7	9.43
	-13.7	-15.0	28.3	12.10	26.7	11.30	25.1	10.50	24.1	10.12	23.3	9.75	21.7	9.00
	-11.8	-13.0	28.3	11.49	26.7	10.75	25.1	9.99	24.1	9.63	23.3	9.27	21.7	8.57
	-9.8	-11.0	28.3	10.88	26.7	10.17	25.1	9.48	24.1	9.14	23.3	8.81	21.7	8.15
	-9.5	-10.0	28.3	10.59	26.7	9.89	25.1	9.23	24.1	8.90	23.3	8.57	21.7	7.93
	-8.5	-9.1	28.3	10.32	26.7	9.66	25.1	9.00	24.1	8.69	23.3	8.38	21.7	7.75
	-7.0	-7.6	28.3	9.89	26.7	9.30	25.1	8.64	24.1	8.34	23.3	8.05	21.7	7.45
	-5.0	-5.6	28.3	9.33	26.7	8.76	25.1	8.18	24.1	7.90	23.3	7.62	21.7	7.06
	-3.0	-3.7	28.3	8.84	26.7	8.29	25.1	7.75	24.1	7.49	23.3	7.22	21.7	6.71
	0.0	-0.7	28.3	8.11	26.7	7.62	25.1	7.14	24.1	6.89	23.3	6.66	21.7	6.20
	3.0	2.2	28.3	7.47	26.7	7.02	25.1	6.58	24.1	6.37	23.3	6.17	21.7	5.74
	5.0	4.1	28.3	7.09	26.7	6.66	25.1	6.25	24.1	6.05	23.3	5.85	21.7	5.46
	7.0	6.0	28.3	6.73	26.7	6.33	25.1	5.95	24.1	5.76	23.3	5.57	21.7	5.21
	9.0	7.9	28.3	6.38	26.7	6.02	25.1	5.66	24.1	5.49	23.3	5.31	21.7	4.96
	11.0	9.8	28.3	6.07	26.7	5.72	25.1	5.39	24.1	5.23	23.3	5.06	21.7	4.73
	13.0	11.8	28.3	5.77	26.7	5.44	25.1	5.13	24.1	4.98	23.3	4.82	21.7	4.52
	15.0	13.7	28.3	5.49	26.7	5.19	25.1	4.90	24.1	4.75	23.3	4.60	21.7	4.30
	18.0	16.8	28.3	5.23	26.7	4.96	25.1	4.70	24.1	4.55	23.3	4.40	21.7	4.11
	20.0	18.5	28.3	4.98	26.7	4.75	25.1	4.52	24.1	4.39	23.3	4.22	21.7	3.92
	24.0	20.5	28.3	4.75	26.7	4.55	25.1	4.20	24.1	4.24	23.3	4.06	21.7	3.76

7.2 Correction of Capacity Along with Piping Length and Height Drop

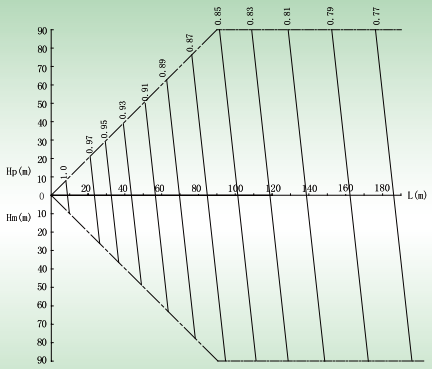
Pipe Diameter Unit: mm

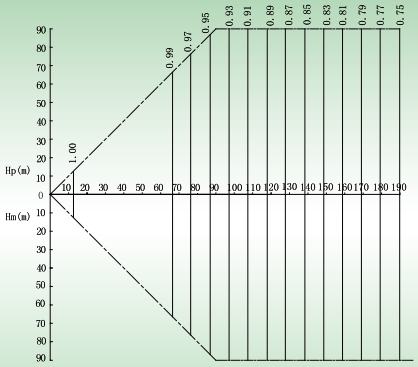
8HP



Refrigeration capacity	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
8HP	19.05	9.52	15.9

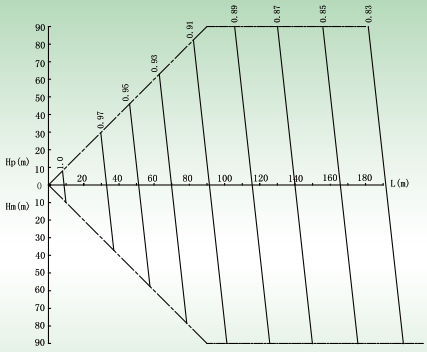
10HP

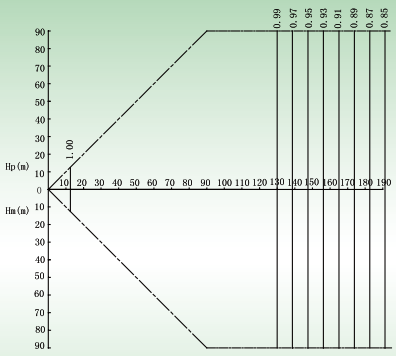




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
10HP	22.2	9.52	19.05

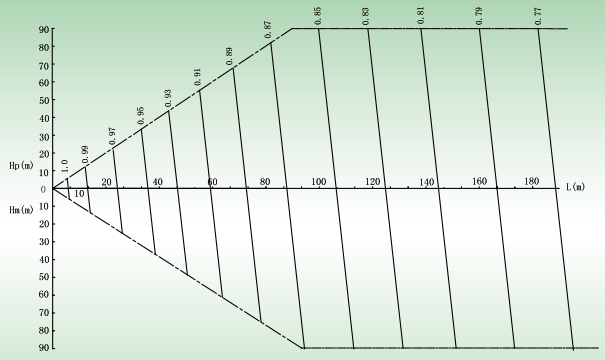
12HP、14HP、24HP、36HP

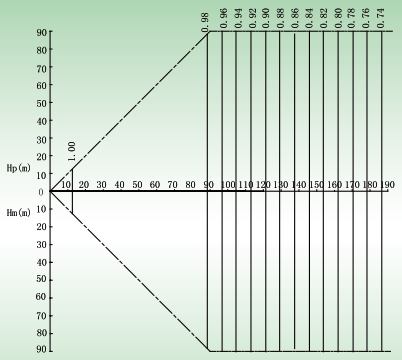




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
12HP	25.4	12.7	19.05
14HP	25.4	12.7	22.2
24HP	28.6	15.9	25.4
36HP	38.1	19.05	31.8

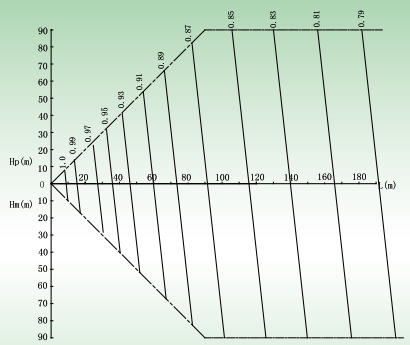
16HP

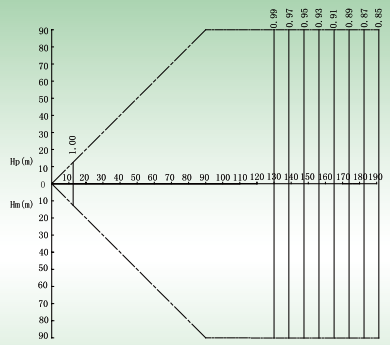




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
16HP	28.6	12.7	22.2

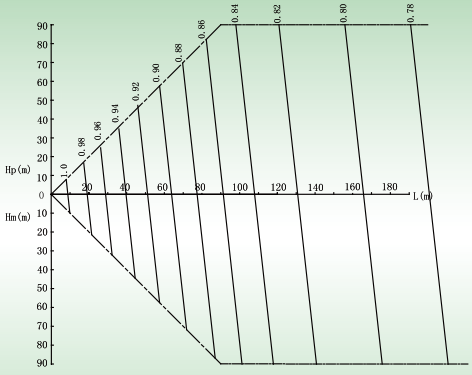
18-30HP、38-44HP

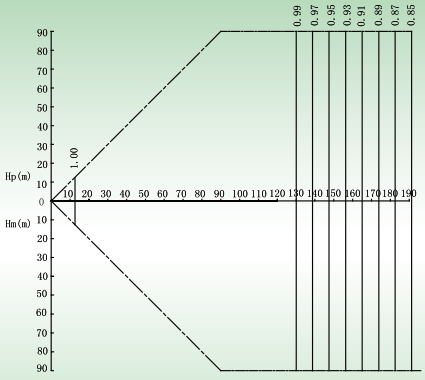




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
18-24HP	28.6	15.9	25.4
26-30HP	31.8	19.05	28.6
38-44HP	38.1	19.05	31.8

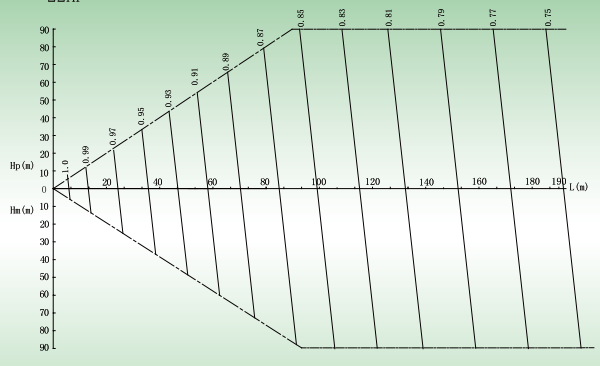
20HP、32-34HP

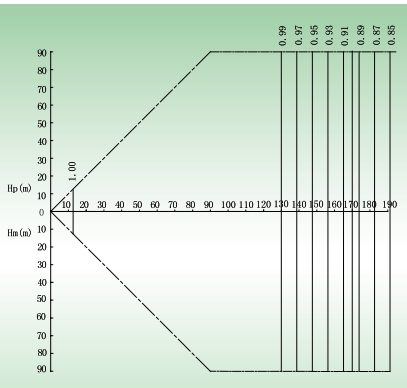




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
20HP	28.6	15.9	25.4
32-34HP	31.8	19.05	28.6

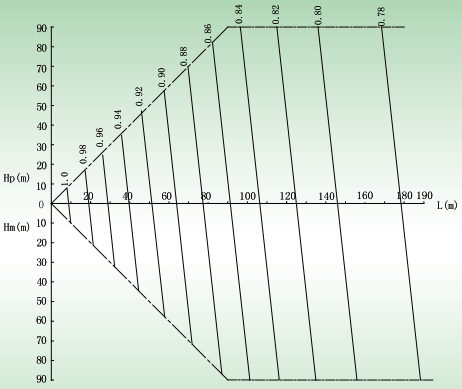
22HP

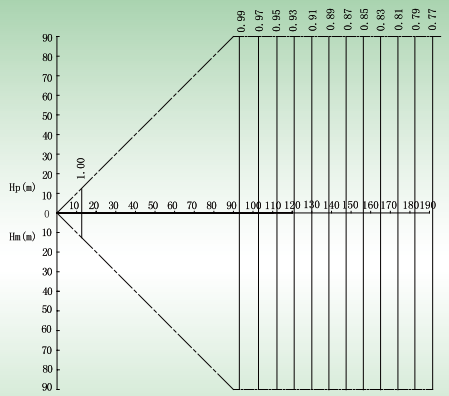




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
22HP	28.6	15.9	25.4

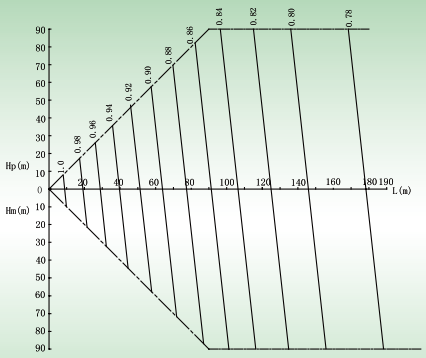
46HP

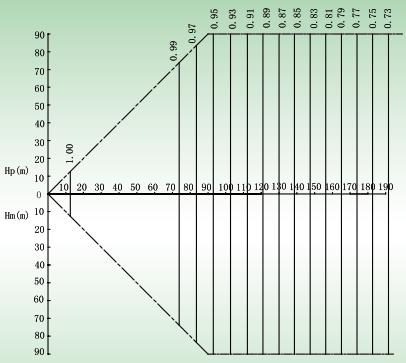




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
46HP	38.1	19.05	31.8

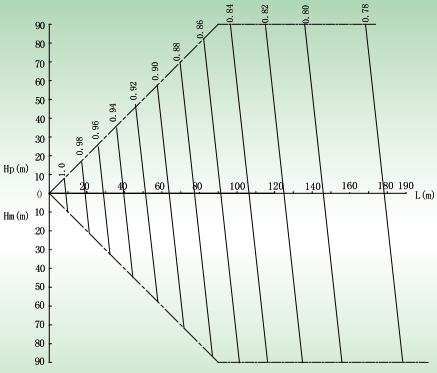
48HP

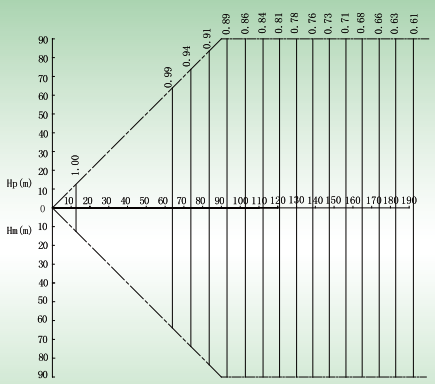




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
48HP	38.1	19.05	31.8

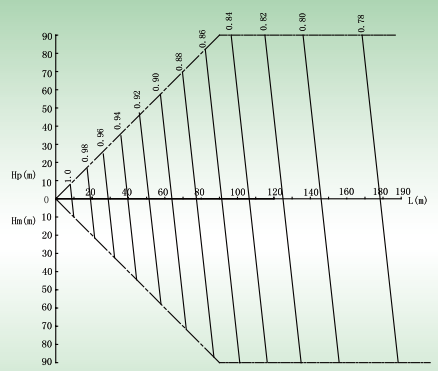
50HP

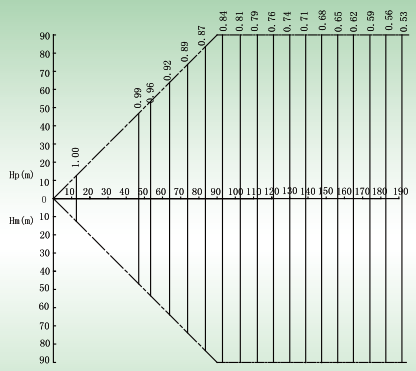




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
50HP	41.3	19.05	38.1

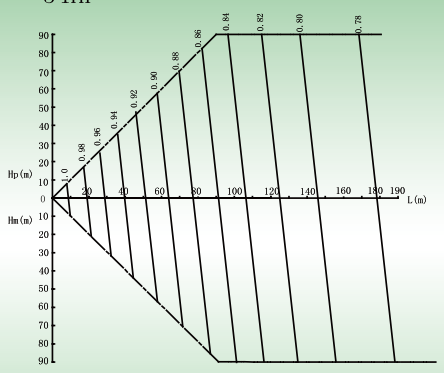
52HP

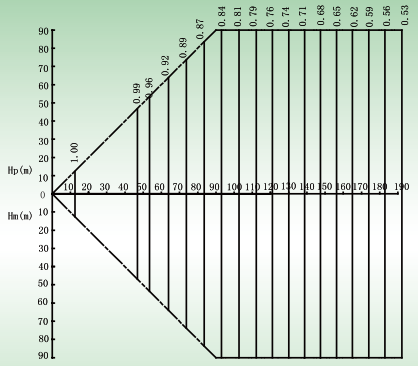




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
52HP	41.3	19.05	38.1

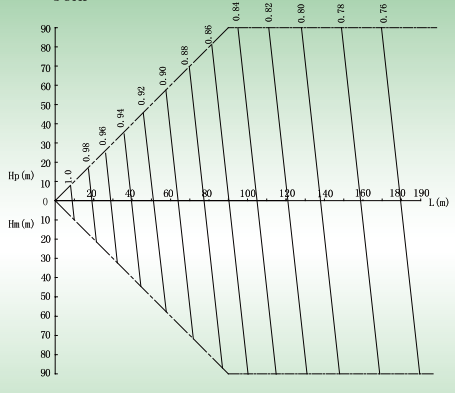
54HP

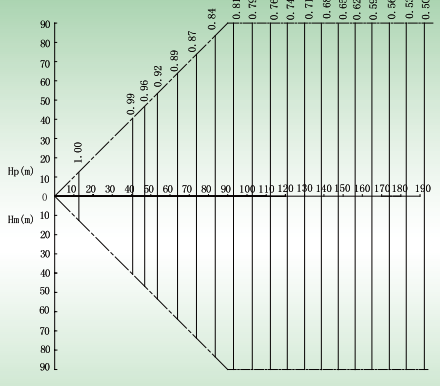




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
54HP	41.3	19.05	38.1

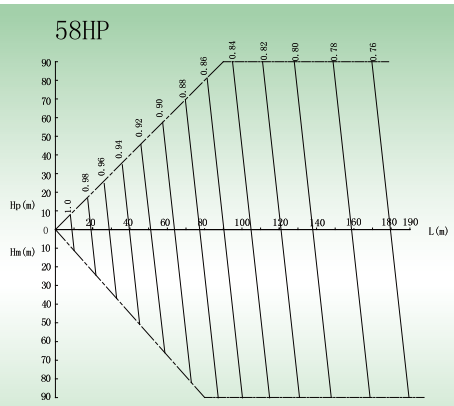
56HP

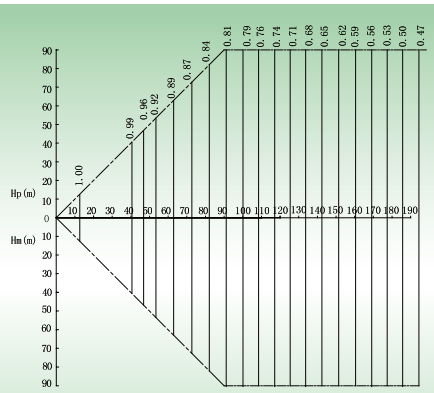




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
56HP	41.3	19.05	38.1

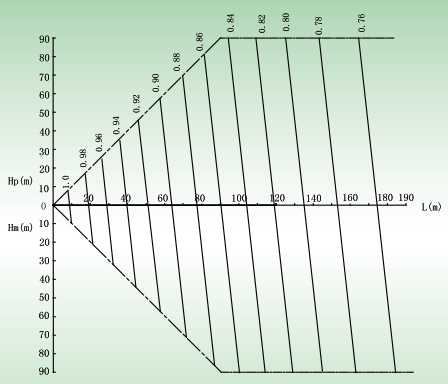
58HP

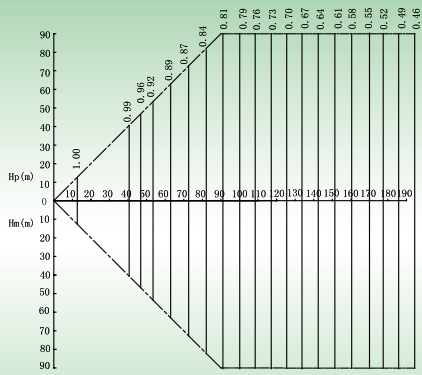




Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
58HP	41.3	19.05	38.1

60-64HP





Refrigeration capacety	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
60-64HP	41.3	19.05	38.1

Notes for correction of the long connection pipe:

a. The above connection of long connection pipe indicates the maximum capacity under the standard indoor unit capacity configuration.

b. Set out below are some load configurations:

Maximum system capacity: the smaller one of the indoor unit capacity and the maximum outdoor unit capacity (two algorithms are provided below)

- When the configuration ratio of indoor unit is less than 100%

Maximum outdoor unit capacity = Capacity when the configuration ratio is 100% in the outdoor unit capacity correction table × Long connection pipe correction coefficient of the longest indoor unit distance

- When the configuration ratio of indoor unit reaches 100%

Maximum outdoor unit capacity = Capacity of the corresponding configuration ratio in the outdoor unit capacity correction table × Long connection pipe correction coefficient of the longest indoor unit distance

7.3 Frosting Correction Factors of Heating

When the outdoor environment meets certain conditions (temperature and humidity conditions), the unit may be frosted or defrosted. In this case, the heating capacity of the whole system will be reduced. Therefore, the frosting correction factor should also be calculated in heating load selection for the whole system.

The table below provides the frosting correction factors:

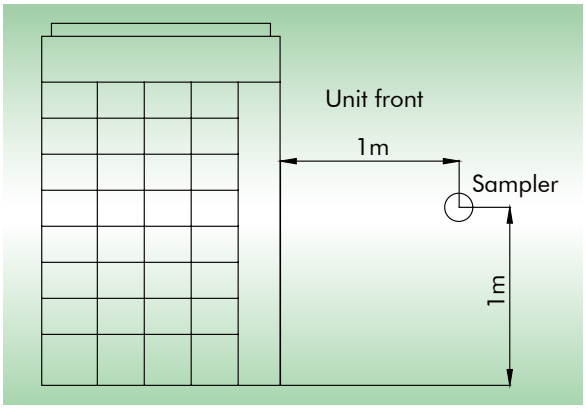
Air inlet dry bulb temperature (°C/RH85%) of the outdoor heat exchanger	-11	-9	-7	-5	-3	0	3	5	7
Frosting (defrosting) capacity correction factor of the whole system	1	0.98	0.96	0.94	0.88	0.8	0.84	0.9	1

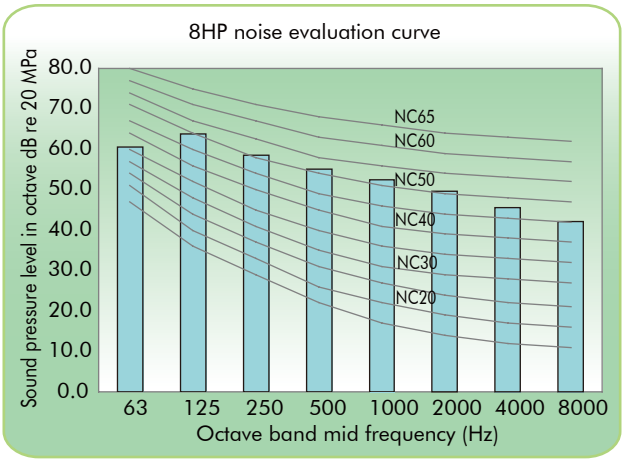
8 UNIT NOISE CURVES

Noise test method:

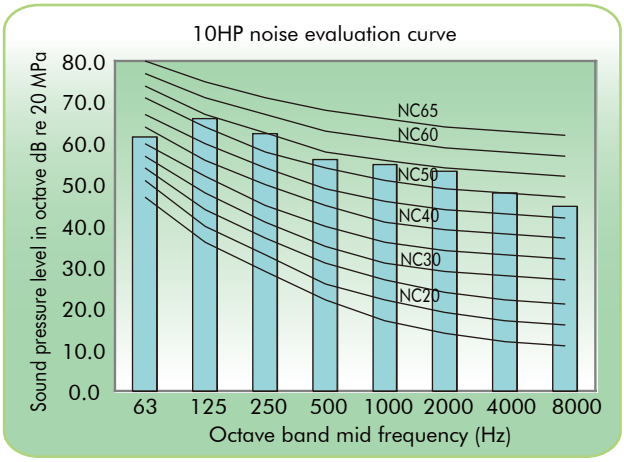
Test environment: semi-anechoic room; the noise level will be slightly higher due to change of the environment during actual operation.

The test points of the following noise curves are shown below:

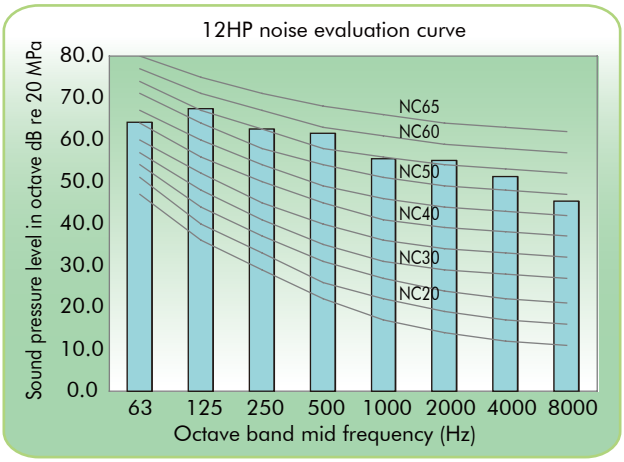




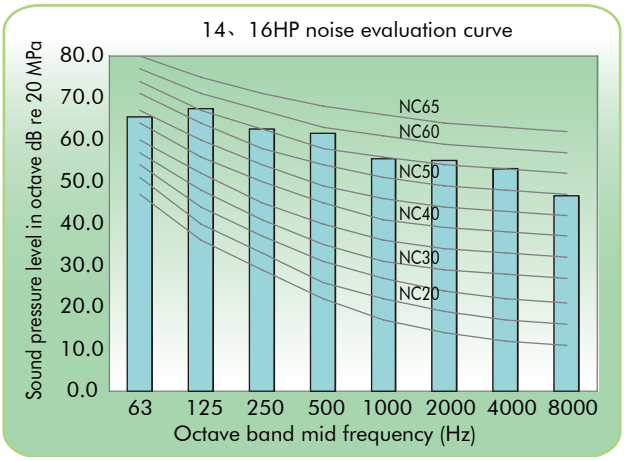
10HP noise evaluation curve



12HP noise evaluation curve



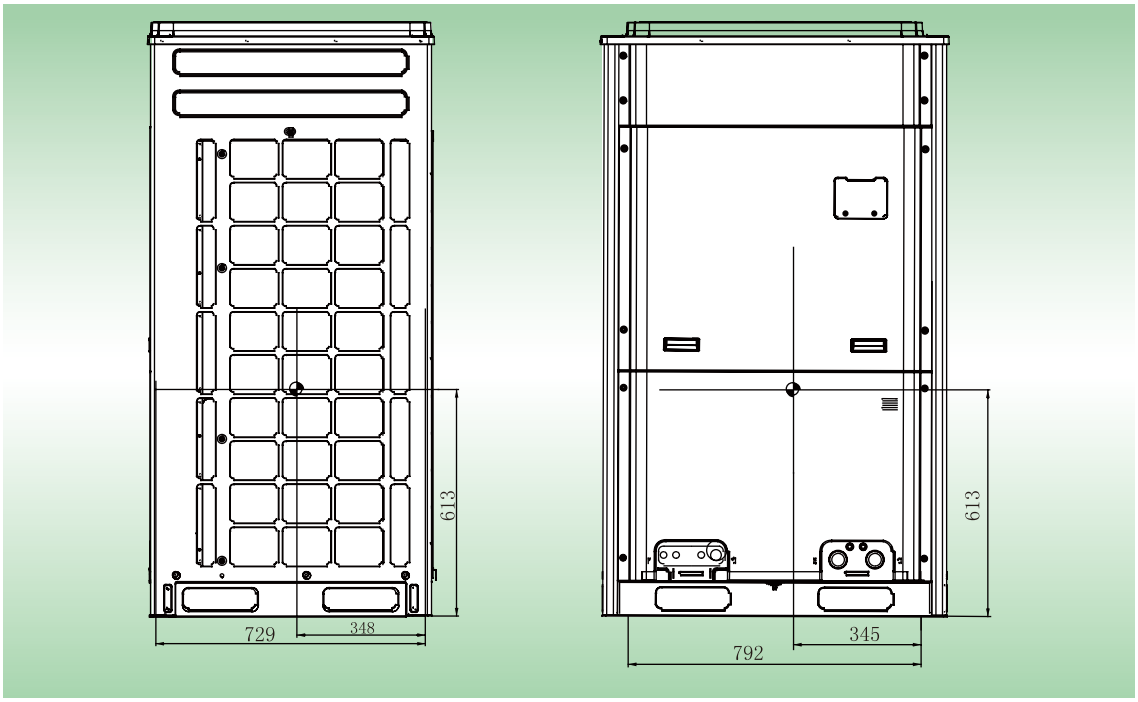
14、16HP noise evaluation curve



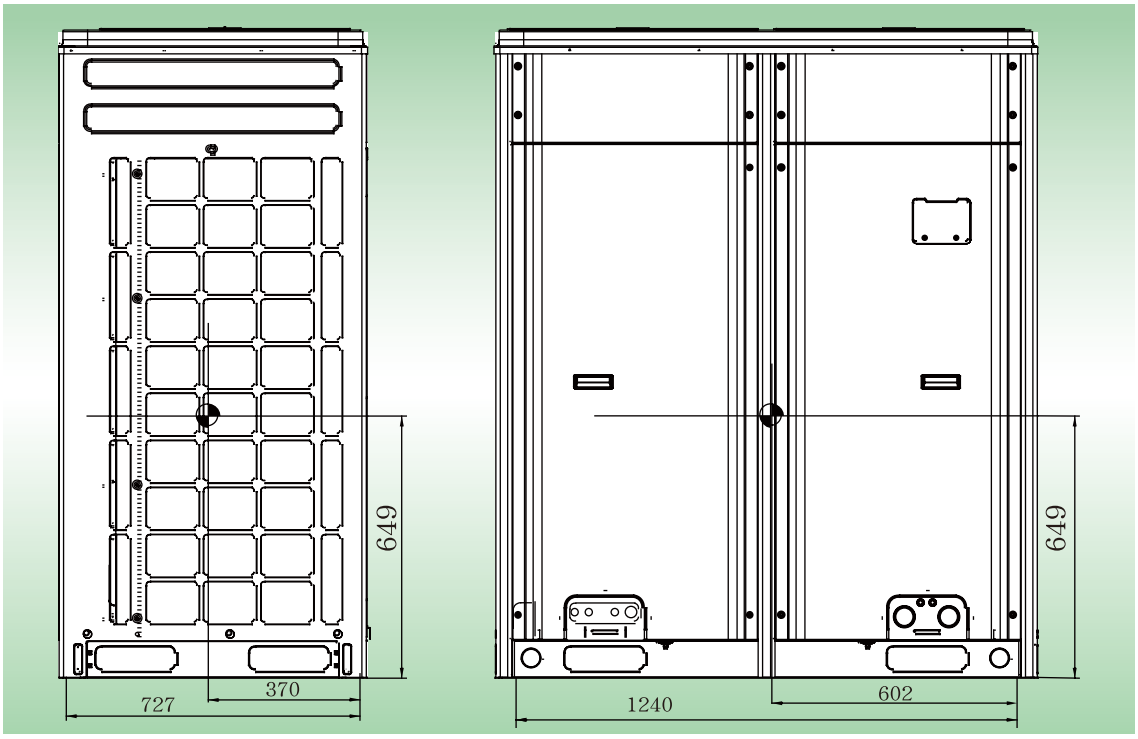
9 UNIT GRAVITY CENTER DIAGRAMS

Unit: mm

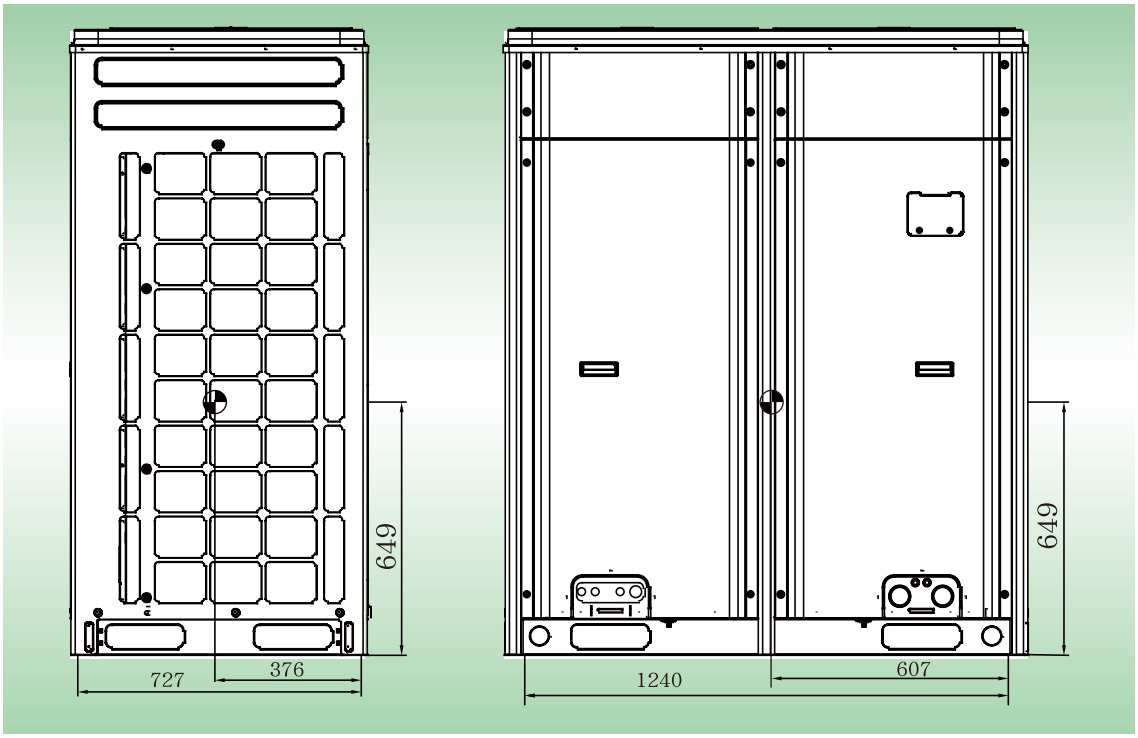
GMV-Q224WM/E-X and GMV-Q280WM/E-X



GMV-Q335WM/E-X



GMV-Q400WM/E-X、GMV-Q450WM/E-X



10 UNIT INSTALLATION SPACE REQUIREMENTS

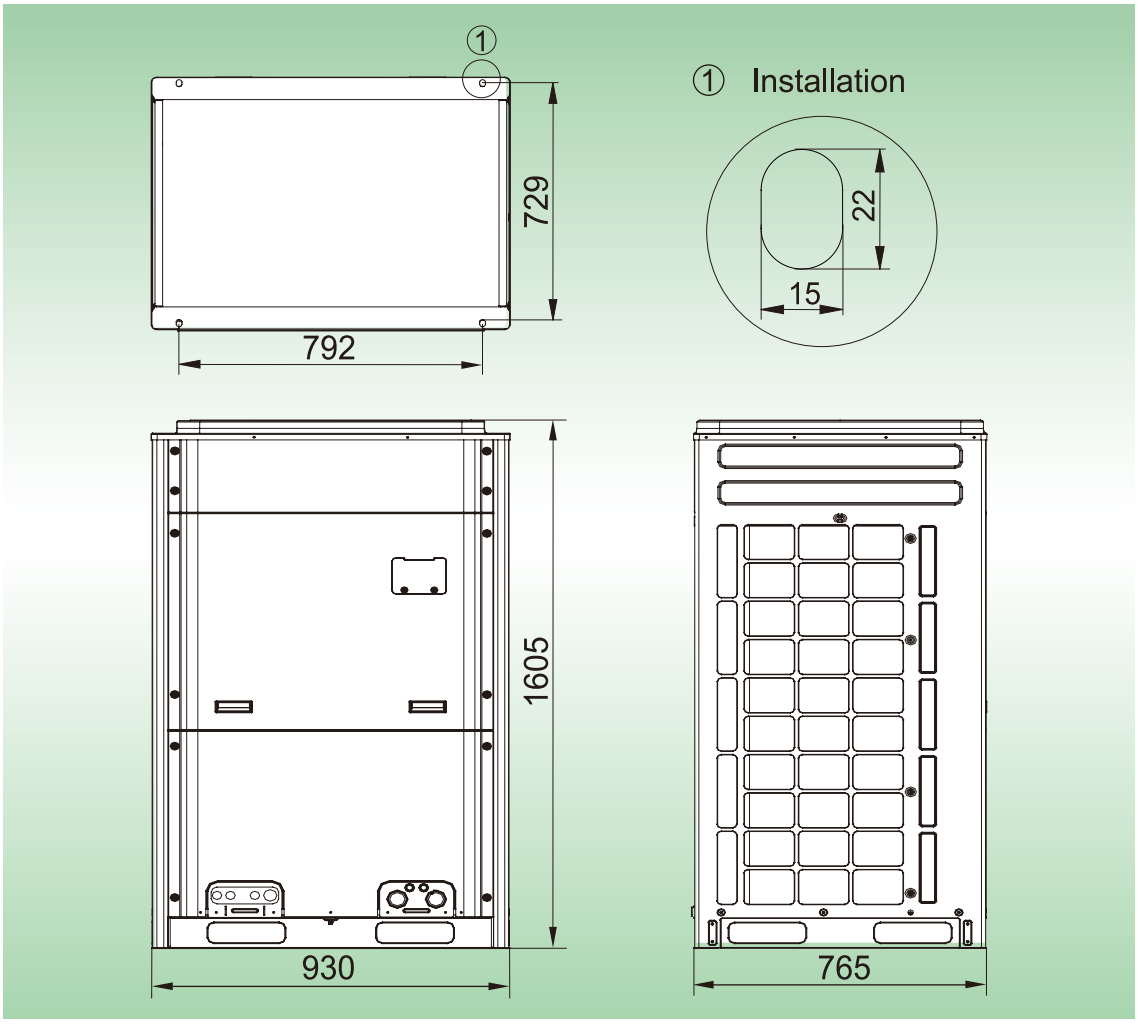
10.1 Selection of outdoor unit installation site

VRF units are used in a lot of situations and serve wider users. If the unit is installed in a living environment, the cooling, heating and noise requirements will be higher, especially for the aged and infants. Therefore, the indoor/outdoor unit model with sufficient capacity and low noise should be preferred during model selection. It is not advisable to install the outdoor unit outside the bedroom, study room, or meeting room. For the commercial site, it is improper to install the outdoor unit near the office.

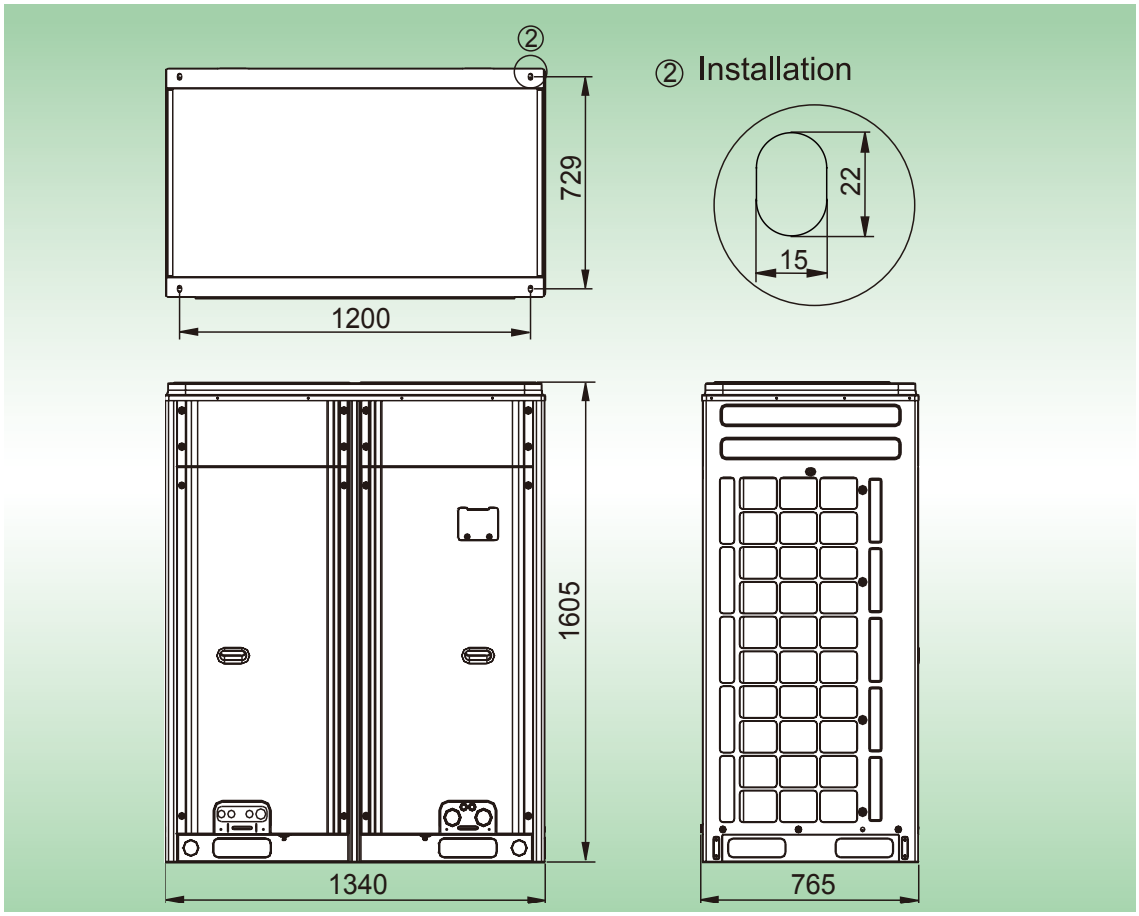
10.2 External dimensions and mounting hole dimensions of the outdoor unit

Unit: mm

External and installation dimensions of GMV-Q224WM/E-X, GMV-Q280WM/E-X:



External and installation dimensions of GMV-Q335WM/E-X、GMV-Q400WM/E-X、GMV-Q450WM/E-X:

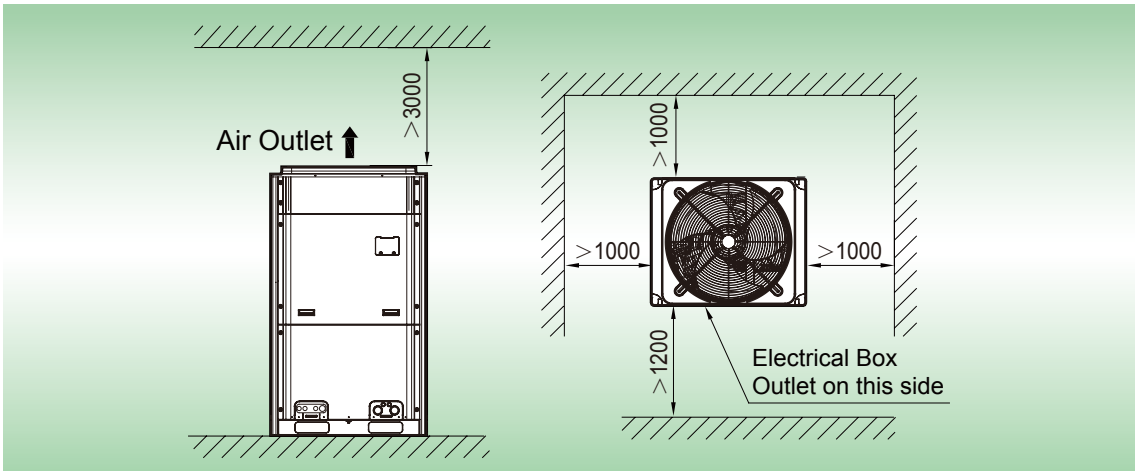


10.3 External unit installation space requirements

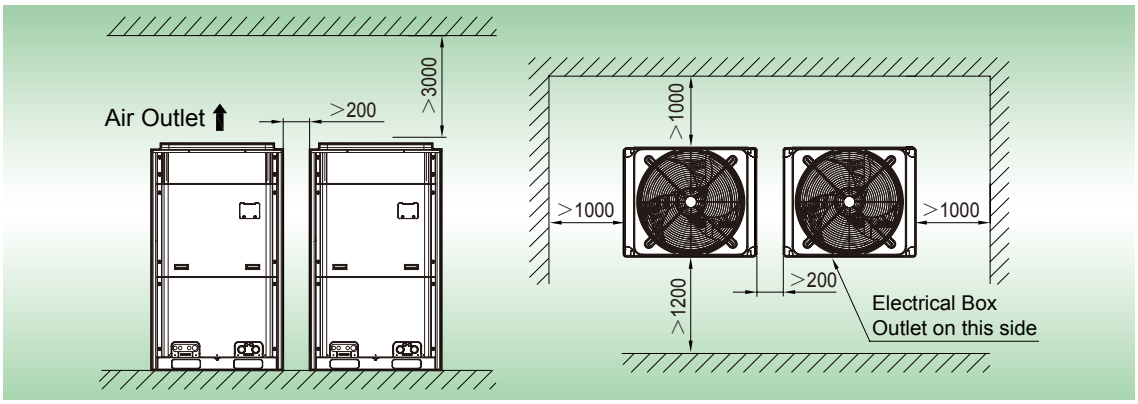
Unit: mm

1) If all sides of the outdoor unit (including the top) are surrounded by walls, process according to the following requirements for installation space:

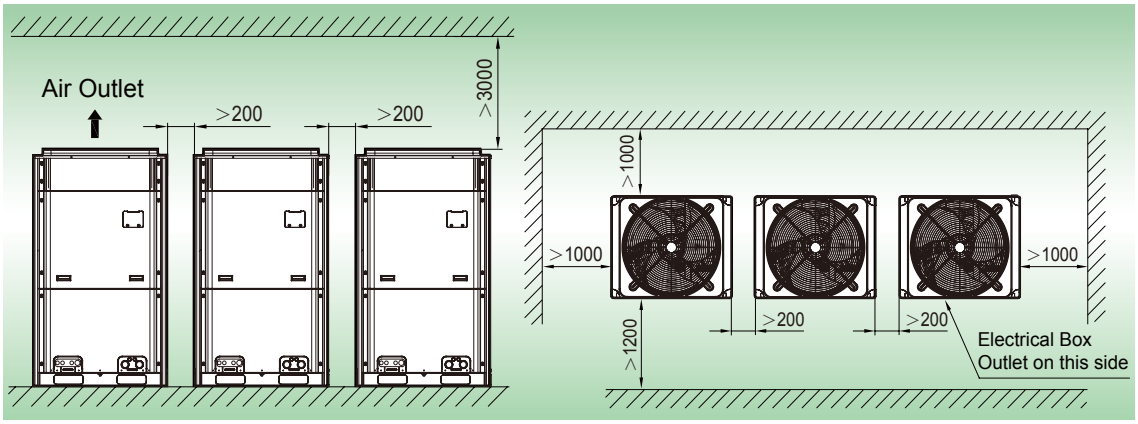
Installation space requirements for the single-module unit



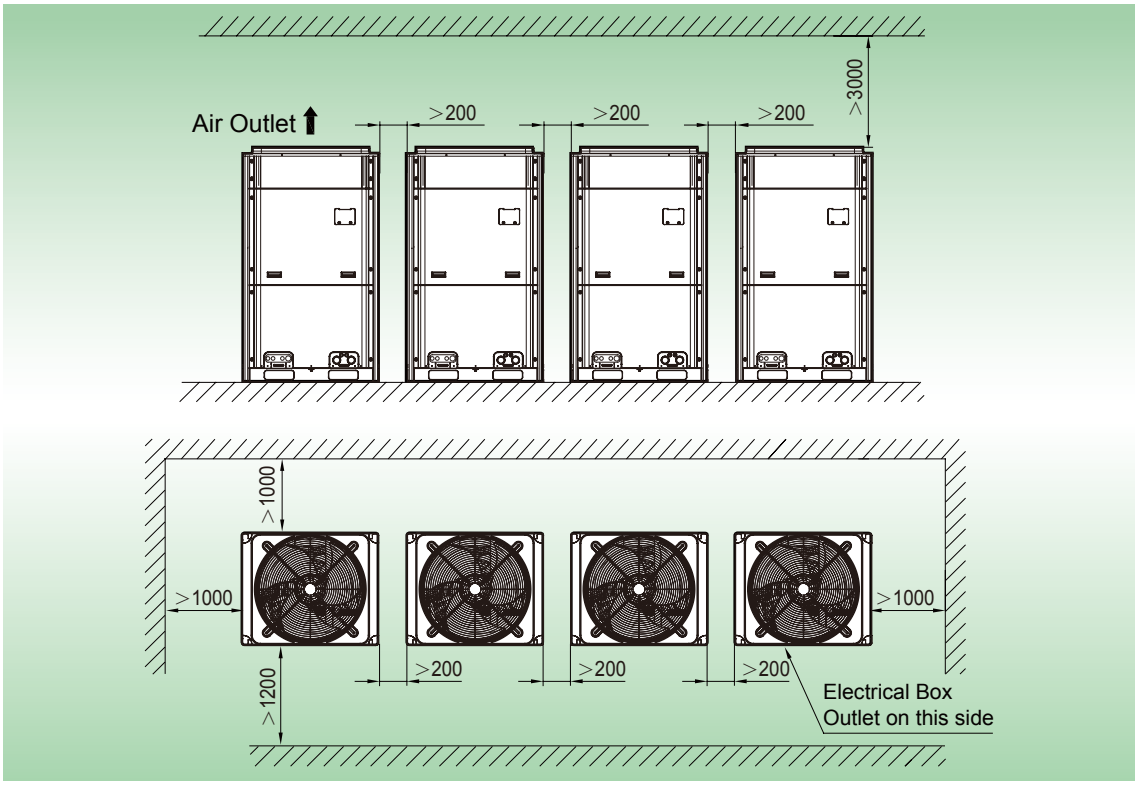
Installation space requirements for the dual-module unit



Installation space requirements for triple-module unit



Installation space requirements for quad-module unit



2) When there is wall (or similar obstruction) above the unit, keep the distance between the unit top and the wall at least 3000mm or above. When the unit is located in a totally open space with no obstructions in four directions, keep the distance between the unit top and wall at least 1500mm or above (See Figure (a)). When space is limited within 1500mm or the unit is not set in an open space, air return pipe is required to be installed in order to keep good ventilation (See Figure (b)).

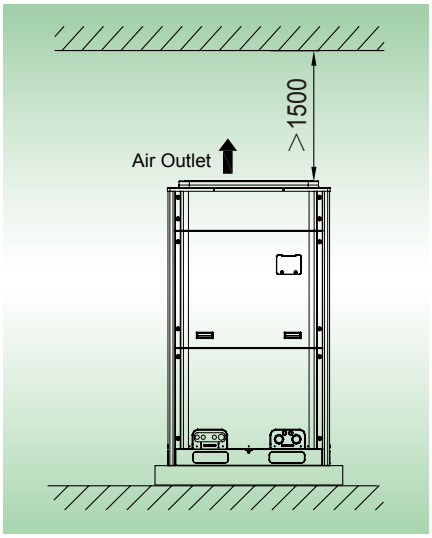


Figure (a)

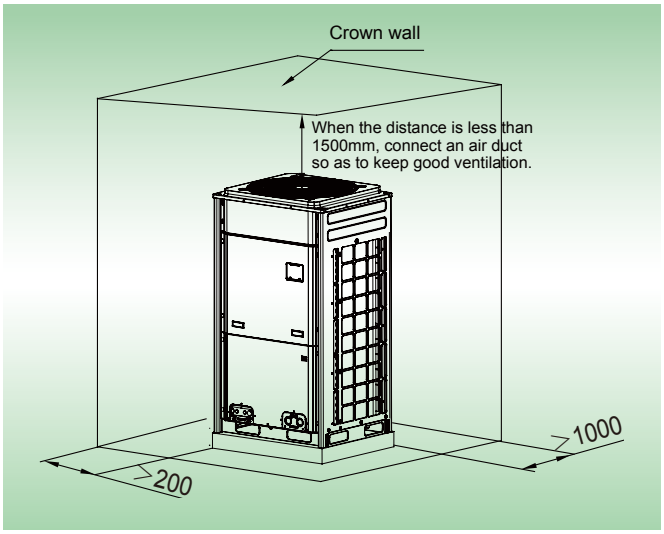
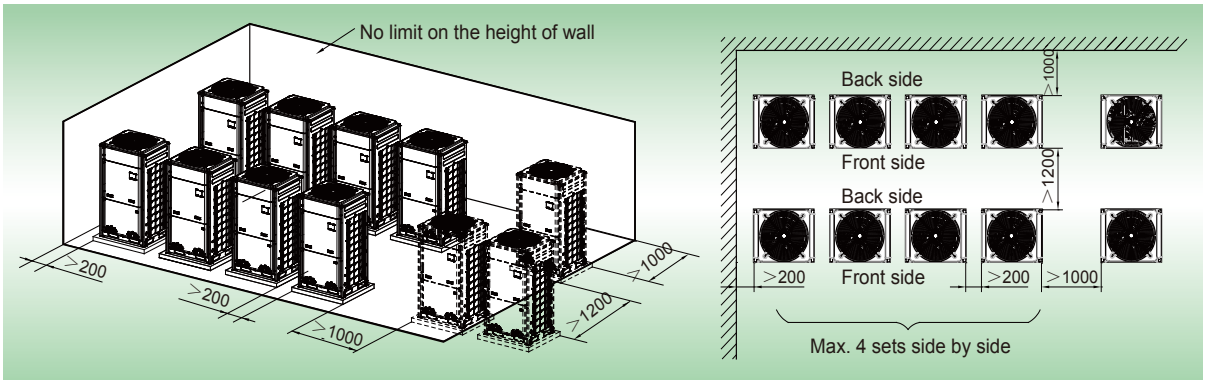


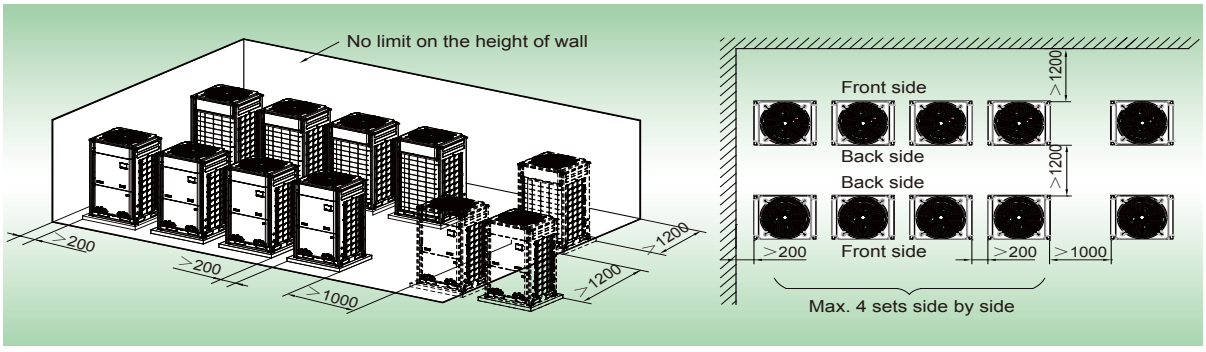
Figure (b)

Installation space requirements of multiple outdoor units

To ensure smooth ventilation, an open space must be ensured above the unit top, and there is no barrier against wind.

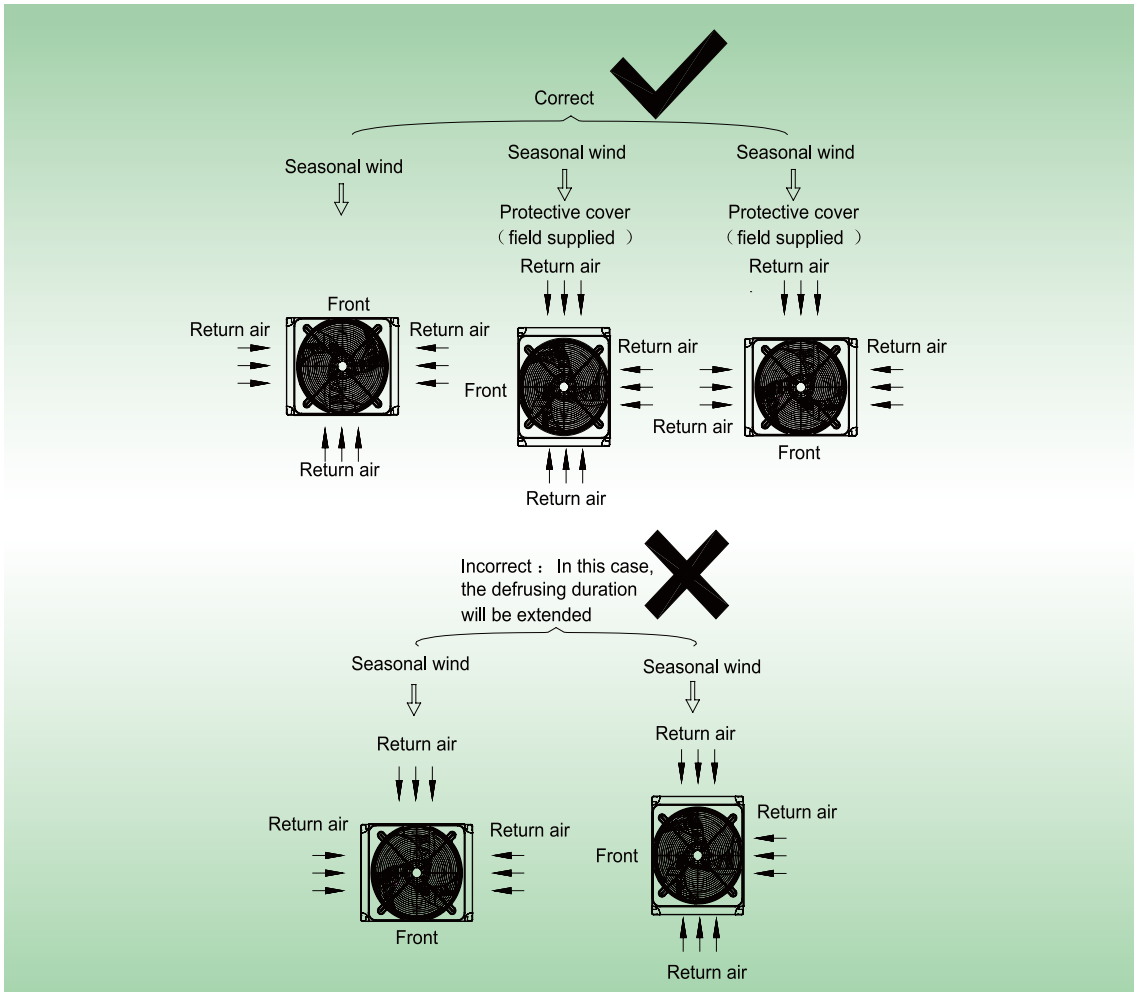
If there is an open space at the front side and left side (or right side) of the outdoor unit, the units should be installed towards the same direction or reverse direction.



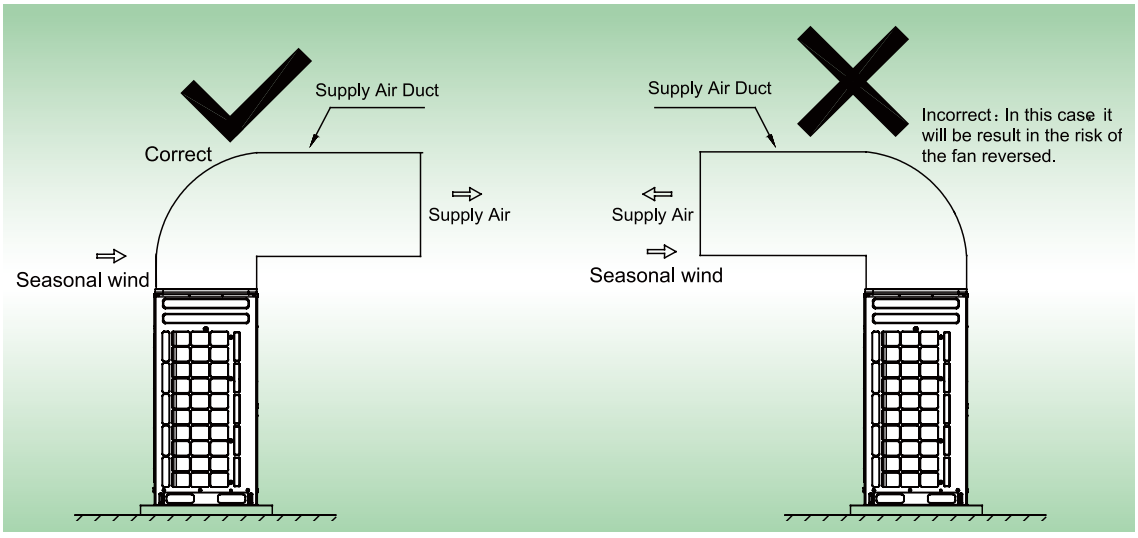


3) Considering the seasonal wind in outdoor unit installation

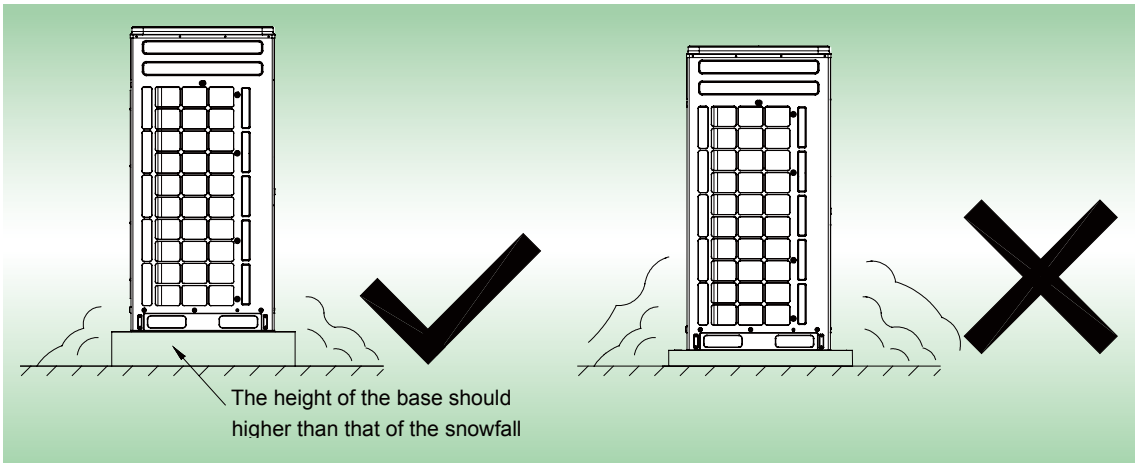
Anti-monsoon installation requirement for unit not connecting exhaust duct



Anti-monsoon installation requirements for unit connecting exhaust duct:



4) Considering snow in outdoor unit installation



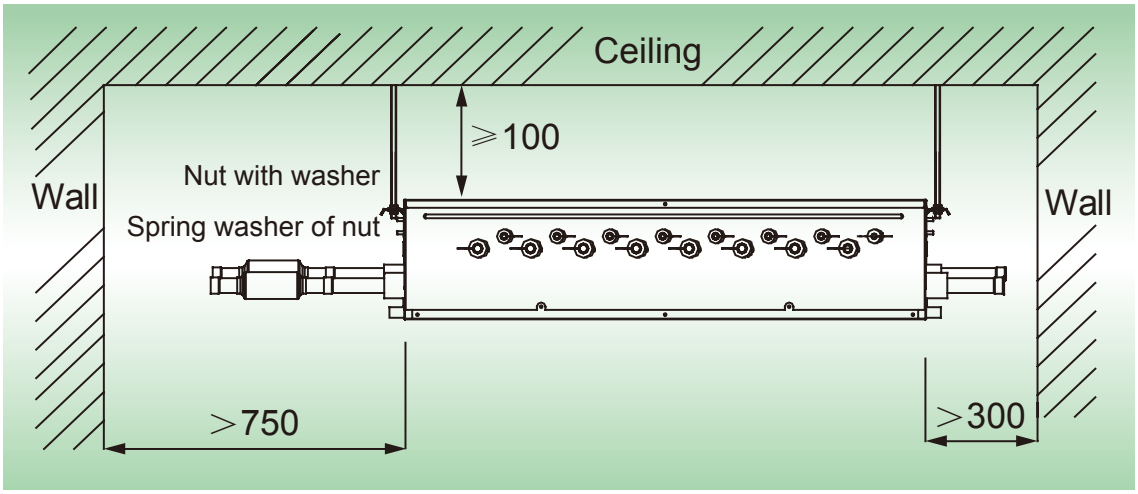
5) When the outdoor unit is installed on equipment, an air exhaust pipe should be connected, the aperture opening ratio of the louver cannot be smaller than 80%, and the included angle between the louver and the horizontal plane should be smaller than 20°.

10.4 Installation space requirement for mode exchanger

10.4.1 Installation Site

(1) Make sure the hanging parts can hold the weight of unit.
(2) Water can be drained out from the drainage hose conveniently.
(3) No obstacles at outlet and inlets. Keep the air ventilation in good condition.
(4) Connect either left or right side of converter to outdoor unit for piping according to installation space, the space used for maintenance should be ensured.
(5) Please keep the unit away from those positions where there's thermal source, inflammable gas and smog.
(6) The unit is the cassette type (concealed type).
(7) Indoor unit, outdoor unit, mode exchanger and connection cord should be kept 1m above away from TV and radio for preventing graphic interference and noise. （Even the distance is 1m, if there's strong electric wave, there's still noise）.

Unit: mm

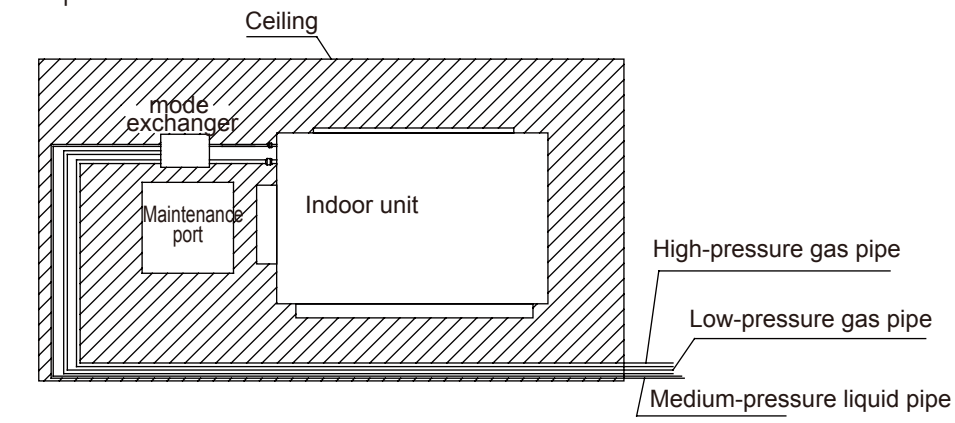


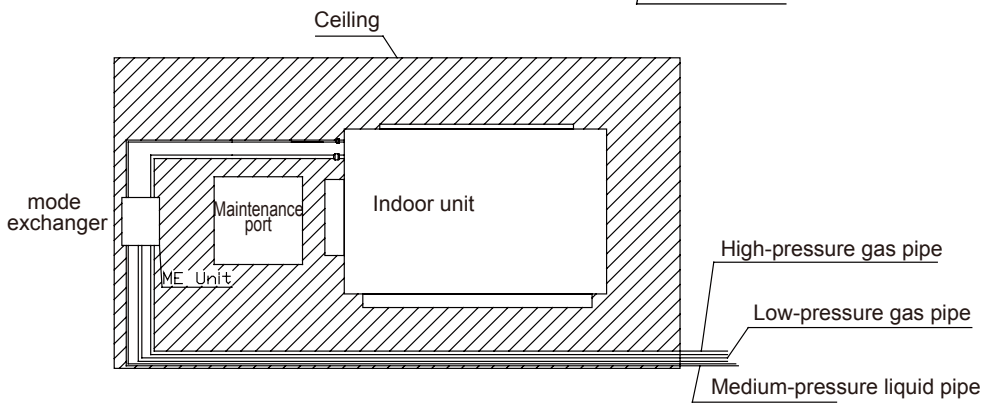
10.4.2 Installation Instruction

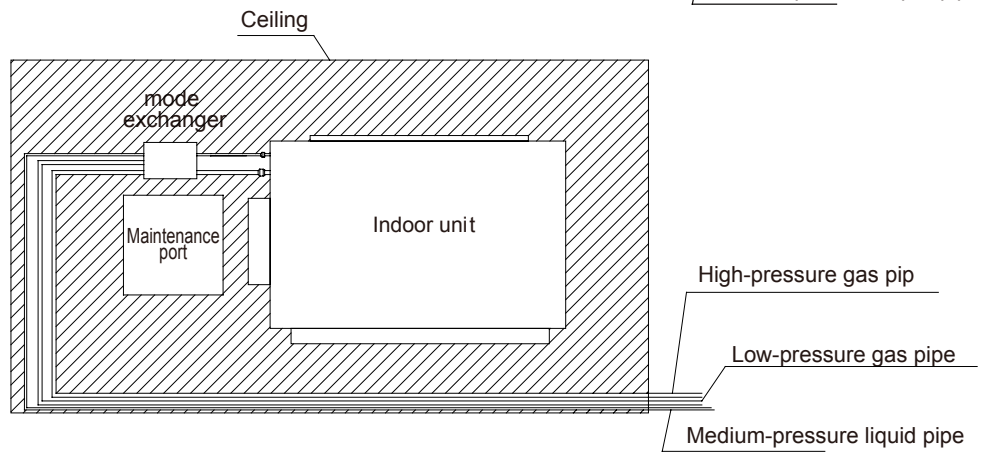
After the unit is installed, a maintenance port should be reserved at the electric box side of unit for maintenance. The position of maintenance port should be lower than the lower size of unit.
Mode exchanger should be installed at the position where is closing to the service port or the air return outlet of indoor unit.

NOTES:

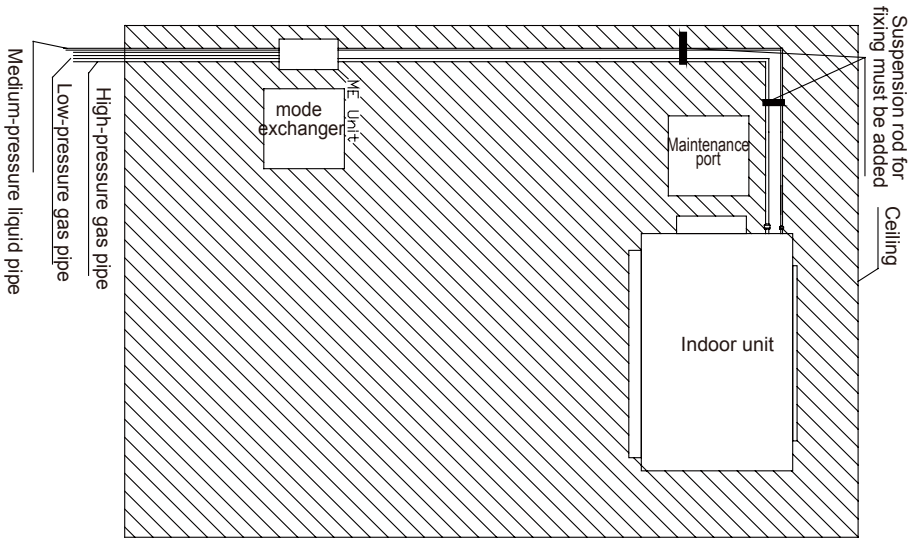
When installing it closing to the air return outlet, please make sure it won't affect the air return and it should be convenient for maintenance.
The service port and the installation of mode converter is described in detailed in below fig:







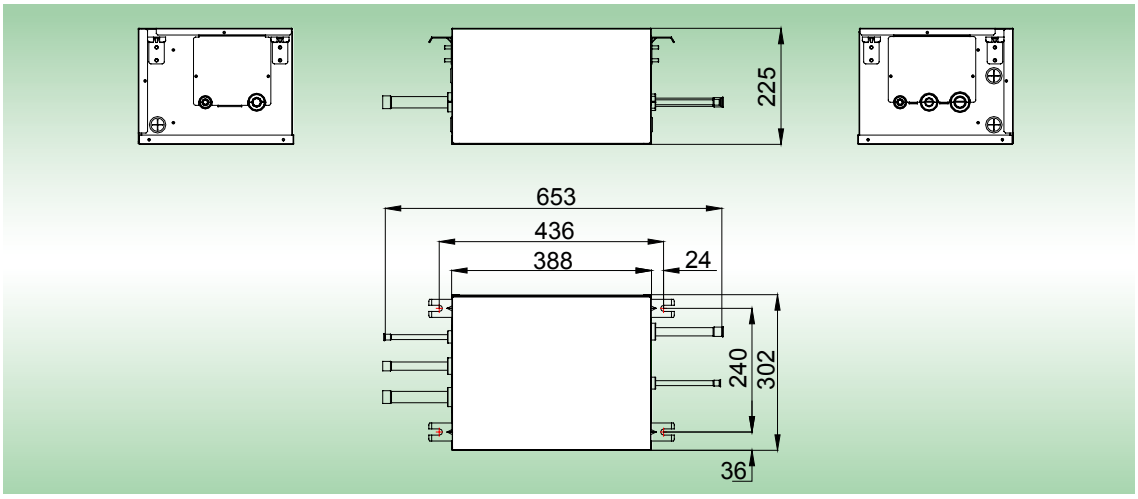
If the mode exchanger is far away from the service port of indoor unit because of the installation space structure, it needs to add a service port for the mode exchanger.



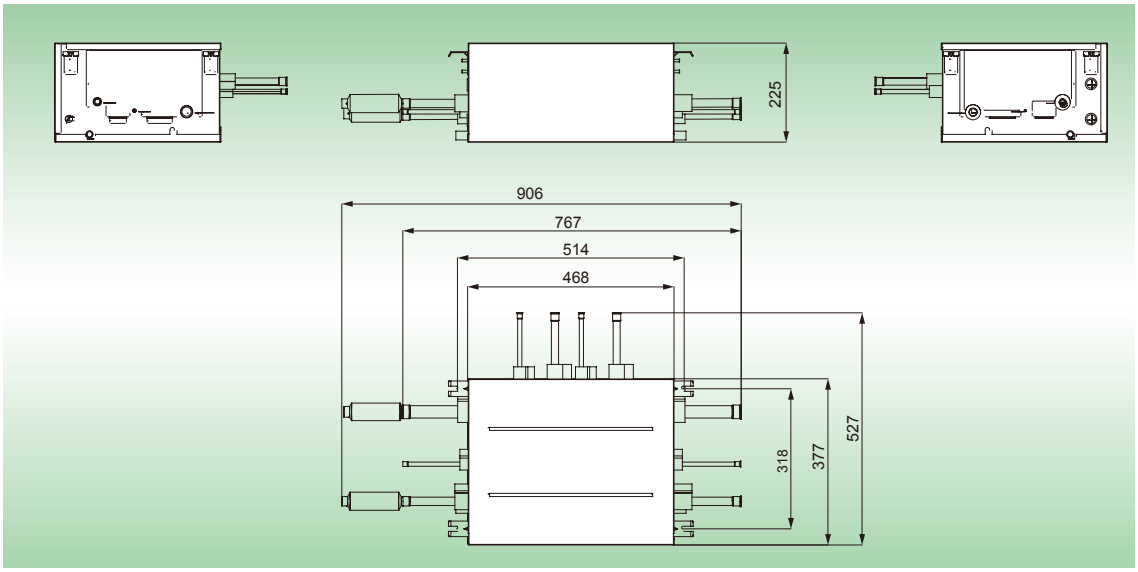
10.4.3 Dimension of Outdoor Unit and Mounting Hole Position。

Unit: mm

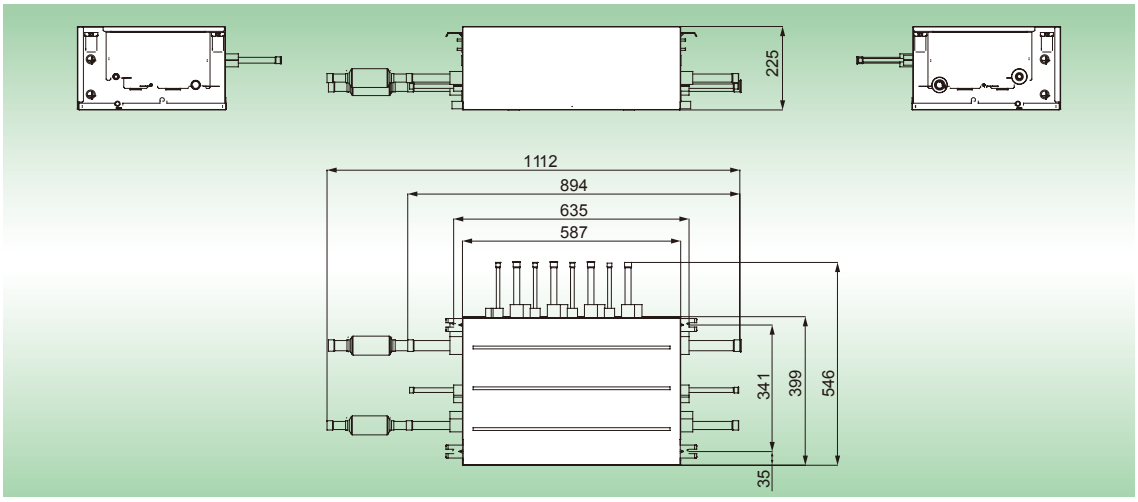
NCHS1C outline and installation dimension



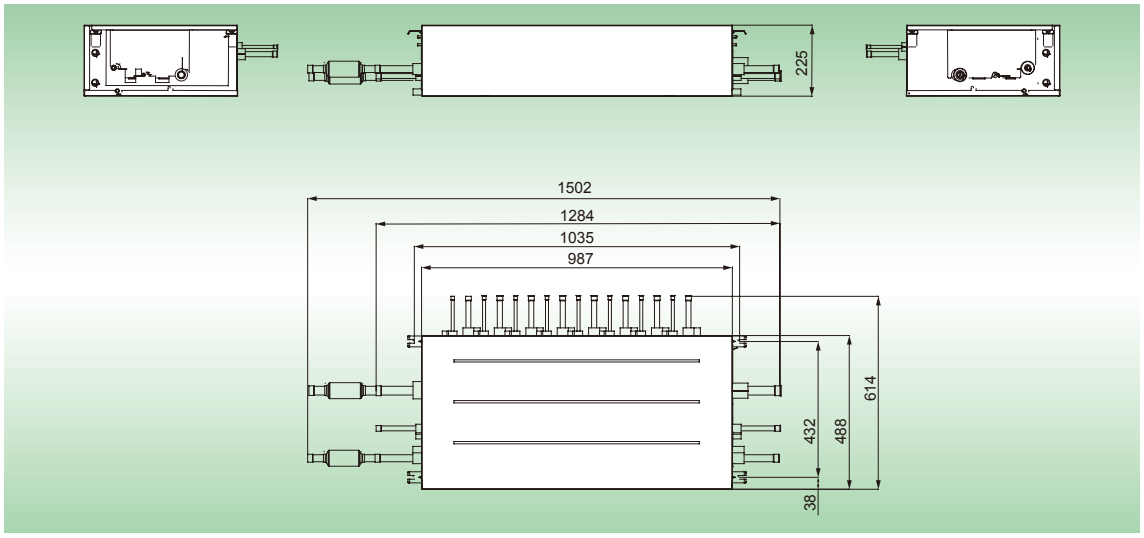
NCHS2C outline and installation dimension



NCHS4C outline and installation dimension

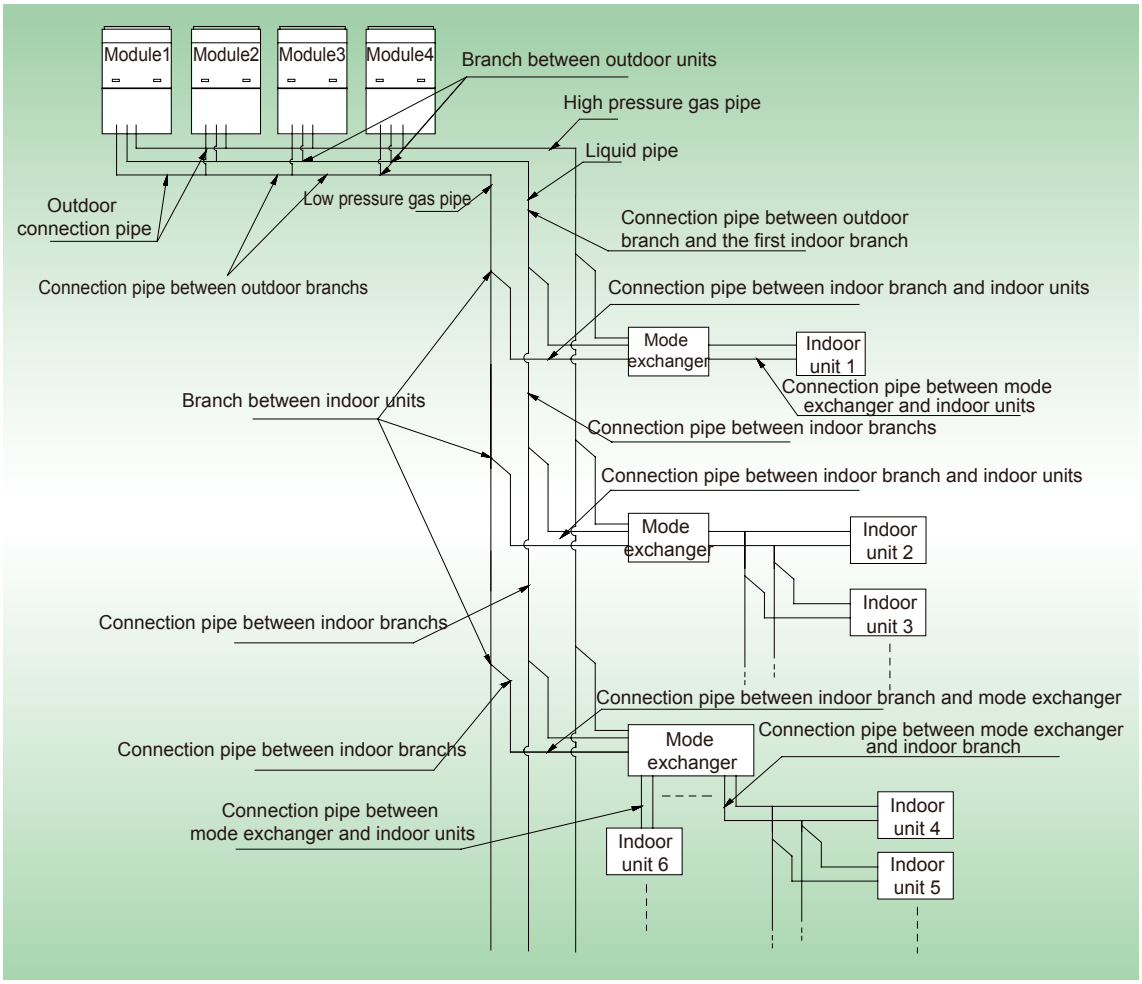


NCHS8C outline and installation dimension

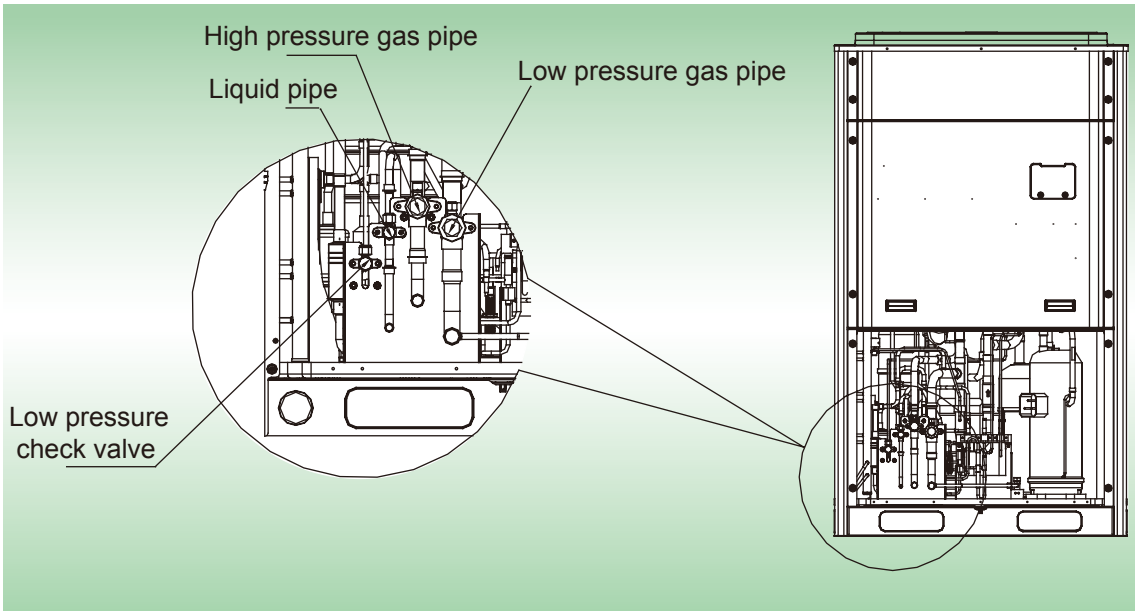


11 MODEL SELECTION FOR UNIT PIPING

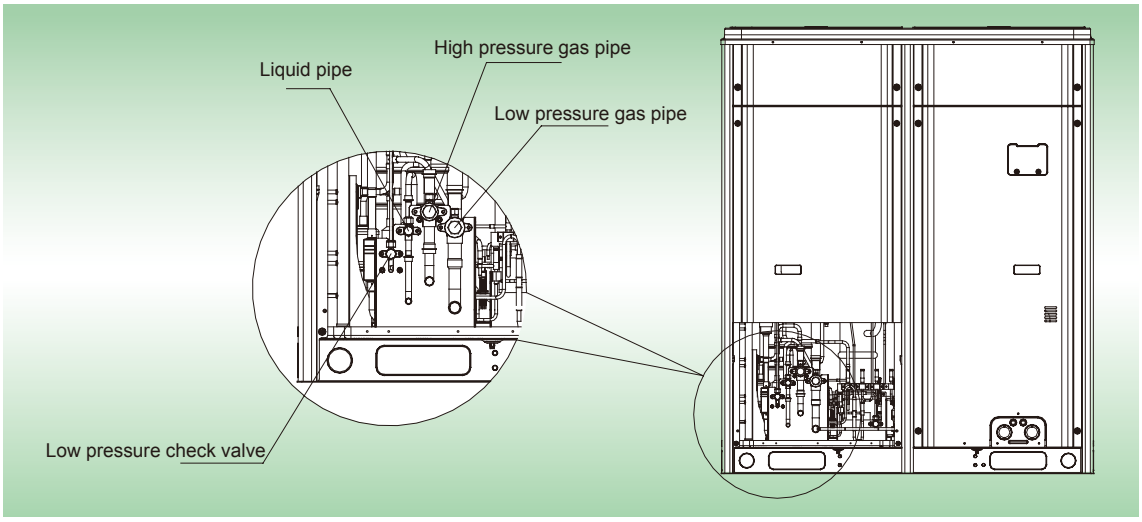
11.1 Schematic Diagram of Piping Connection



Schematic Diagram of Piping Sequence
GMV-Q224WM/E-X and GMV-Q280WM/E-X



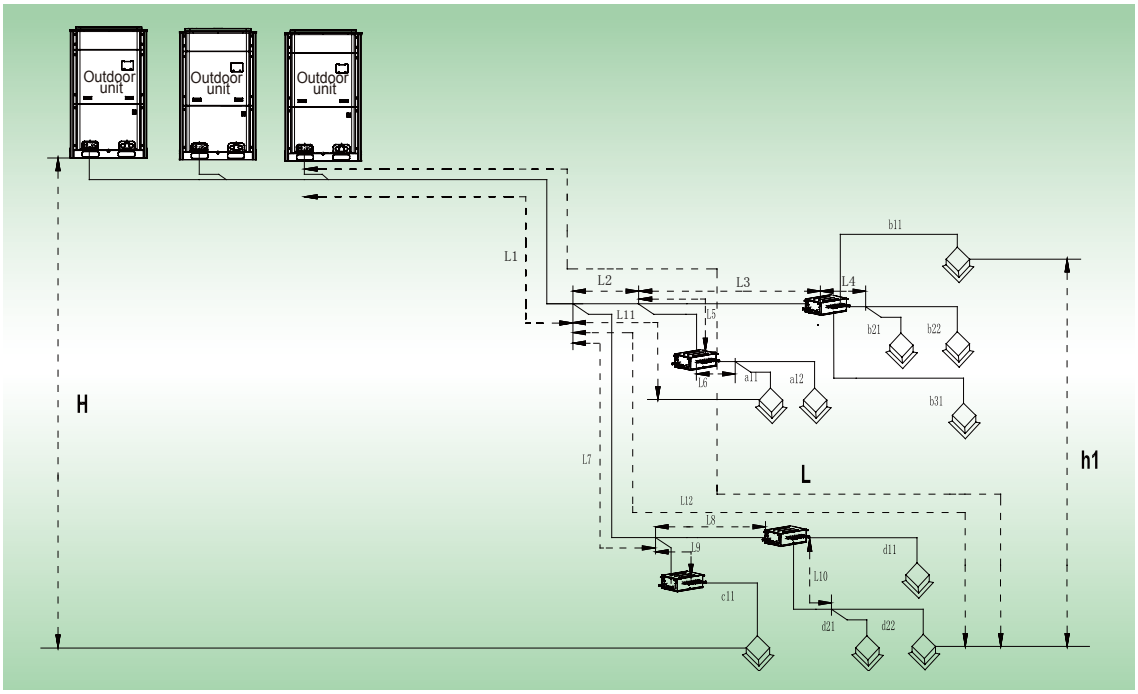
GMV-Q335WM/E-X ,GMV-Q400WM/E-X and GMV-Q450WM/E-X



11.2 Allowable pipe length and drop height among indoor and outdoor units

Y type branch joint is adopted to connected indoor and outdoor units. Connecting method is shown in the figure below

Remark Equivalent length of one Y-type manifold is about 0.5m.



H: Height difference between indoor unit and outdoor unit;

L12: Distance from the first branch to the farthest indoor unit;

L11: Distance from the first branch to the nearest indoor unit;

Equivalent length of one Y-type manifold pipe is 0.5m.

Equivalent length of mode exchanger depends on the using situation, for example, when using one branch, the length is 1m, when using N branches, the length is N meters.

		Length（m）	Remarks
Total length (actual length) of connection pipe		≤ 1000	L1+L2+L3+L4+…+L12+a11+b12+…+d21+d22
Length between outdoor unit and the farthest indoor unit	Actual length	≤ 165	L
	Equivalent length	≤ 190	——
Difference between the pipe length from the first indoor branch to the farthest indoor unit and the pipe length from the first indoor branch to the nearest indoor unit		≤ 40	L12-L11
Length from the first indoor branch to the farthest indoor unit (1)		≤ 40	L7+L8+L10+d22
Maximum height difference between indoor and outdoor units: H	Outdoor unit at upper side	≤ 90	——
	Outdoor unit at lower side	≤ 90	——
Maximum height difference between indoor units		≤ 30	h1
Maximum length of Main pipe (2)		< 90	L1
From IDU to its nearest branch (3)		≤ 40	a11、a12、b11、b21、b22、b31、c11、d11、d21、d22

NOTES:

(1). Normally, the pipe length from the first branch of IDU to the farthest IDU is 40m. Under the following conditions, the length can reach 90m:

① Actual length of pipe in total:L1+L2×2+L3×2+L4×2+…+L9×2+a11+b11+…

+d21+d22≤1000m;

② Length between each indoor unit and its nearest branch a11、a12、b11、b21、b22、b31、c11、d11、d21、d22≤40m;

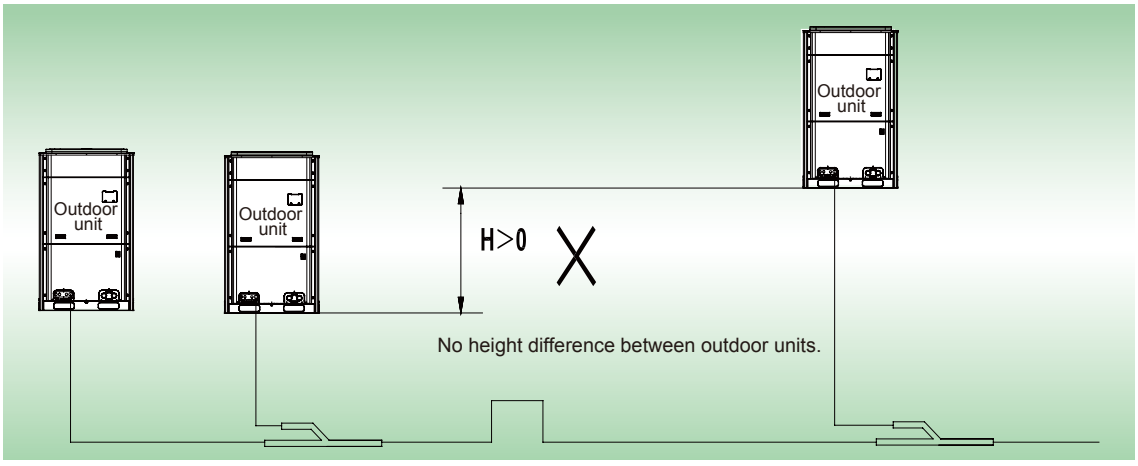
③ Difference between the pipe length from the first indoor branch to the farthest indoor unit and the pipe length from the first indoor branch to the nearest indoor unit: L12-L11≤40m.

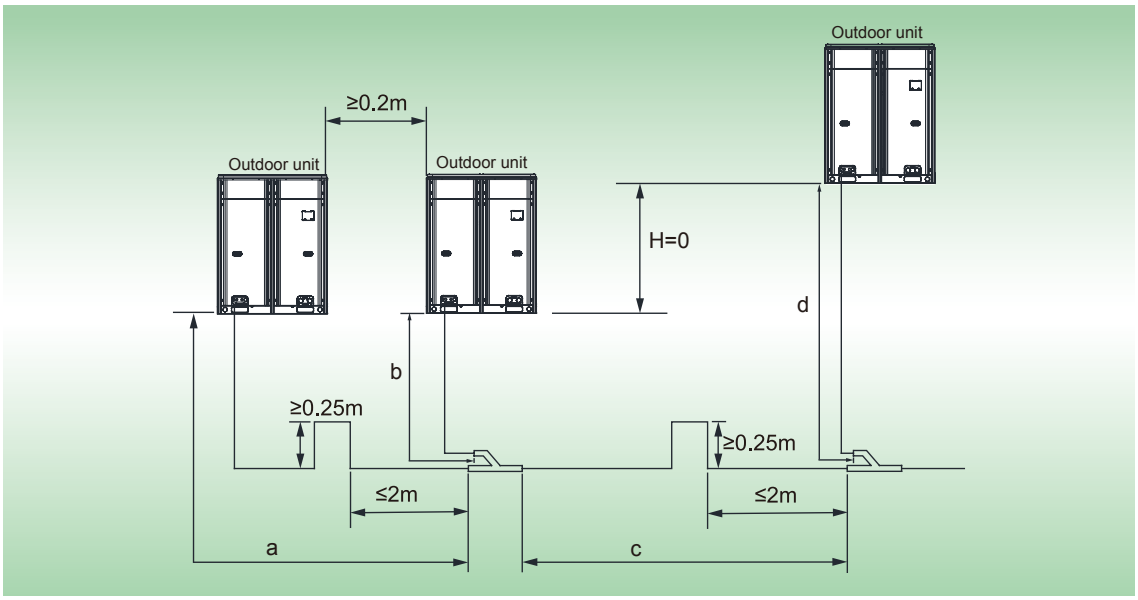
(2).When the maximum length of the main pipe from outdoor unit to the first indoor branch ≥90m, then adjust the size of high pressure gas pipe, gas pipe and liquid pipe of main pipe according to the following table.

Outdoor model	Diameter of low pressure gas pipe (mm)	Diameter of liquid pipe (mm)	Diameter of high pressure gas pipe (mm)
GMV-Q224WM/E-X	No need to enlarge pipe size	No need to enlarge pipe size	No need to enlarge pipe diameter
GMV-Q280WM/E-X	No need to enlarge pipe size	Φ12.7	Φ22.2
GMV-Q335WM/E-X	Φ28.6	Φ15.9	Φ22.2
GMV-Q400WM/E-X	Φ28.6	Φ15.9	No need to enlarge pipe diameter
GMV-Q450WM/E-X	Φ31.8	Φ15.9	Φ25.4
GMV-Q504WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q560WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q615WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q680WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q730WM/E-X	Φ38.1	Φ22.2	Φ31.8
GMV-Q785WM/E-X	Φ38.1	Φ22.2	Φ31.8
GMV-Q850WM/E-X	Φ38.1	Φ22.2	Φ31.8
GMV-Q900WM/E-X	Φ38.1	Φ22.2	Φ31.8
GMV-Q960WM/E-X	Φ38.1	Φ22.2	Φ31.8
GMV-Q1010WM/E-X	Φ41.3	Φ22.2	Φ34.9
GMV-Q1065WM/E-X	Φ41.3	Φ22.2	Φ34.9
GMV-Q1130WM/E-X	Φ41.3	Φ22.2	Φ34.9
GMV-Q1180WM/E-X	Φ41.3	Φ22.2	Φ34.9
GMV-Q1235WM/E-X	Φ41.3	Φ22.2	Φ34.9
GMV-Q1300WM/E-X	Φ41.3	Φ22.2	Φ34.9
GMV-Q1350WM/E-X	Φ41.3	Φ22.2	Φ34.9
GMV-Q1410WM/E-X	Φ44.5	Φ22.2	Φ41.3
GMV-Q1460WM/E-X	Φ44.5	Φ22.2	Φ41.3
GMV-Q1515WM/E-X	Φ44.5	Φ22.2	Φ41.3
GMV-Q1580WM/E-X	Φ44.5	Φ22.2	Φ41.3
GMV-Q1630WM/E-X	Φ44.5	Φ22.2	Φ41.3
GMV-Q1685WM/E-X	Φ44.5	Φ22.2	Φ41.3
GMV-Q1750WM/E-X	Φ44.5	Φ22.2	Φ41.3
GMV-Q1800WM/E-X	Φ44.5	Φ22.2	Φ41.3

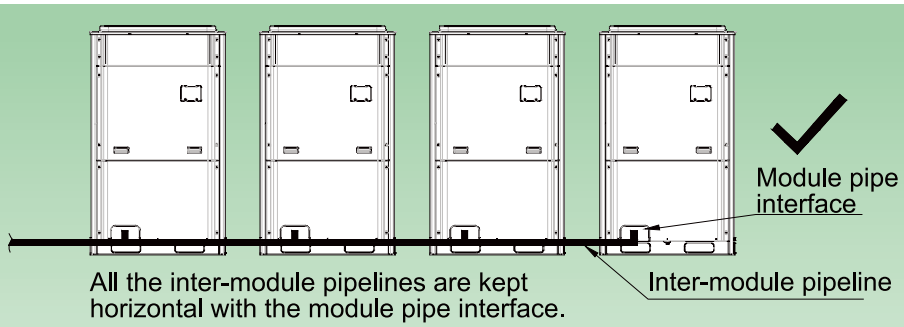
(3).If the length between an IDU and its nearest branch is above 10m, then increase the size of the liquid pipe of IDU (only for the pipe size that is≤6.35mm).

11.3 Connection Pipe among Outdoor Modules

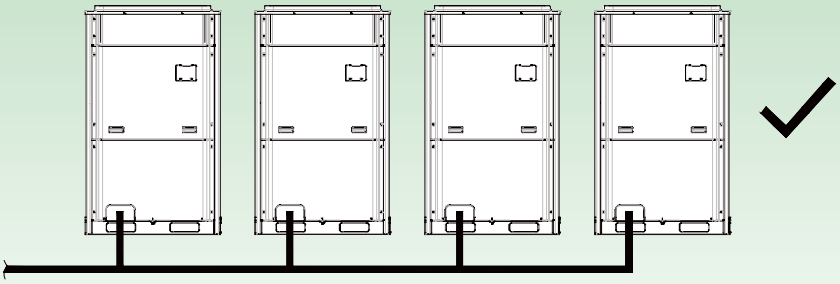




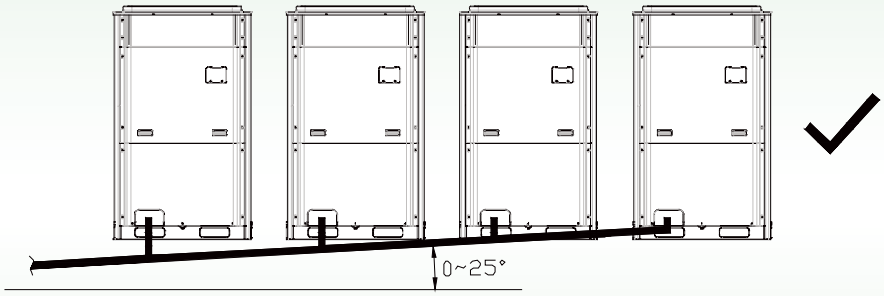
NOTES: When the distance between outdoor units exceeds 2m, U-type oil trap should be added at low-pressure gas pipe. a+c≤10m, b+c≤10m, d≤10m.
The pipeline between outdoor units should be installed as follows:



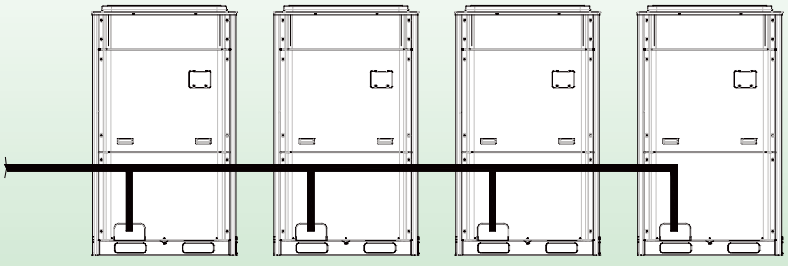
All the inter-module pipelines are kept horizontal with the module pipe interface.



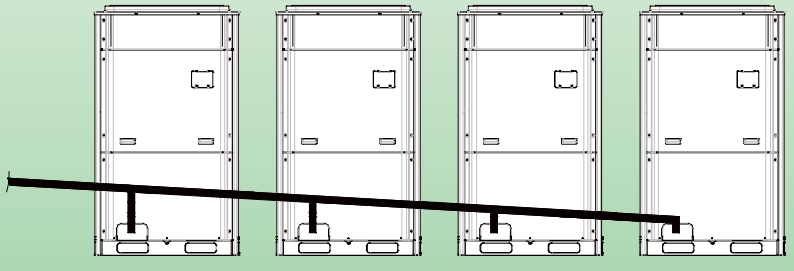
All the inter-module pipelines are located under the module pipe interface and kept horizontal.



All the inter- module pipelines are located under the module pipe interface and have an upward sloping of 0° to 25° .



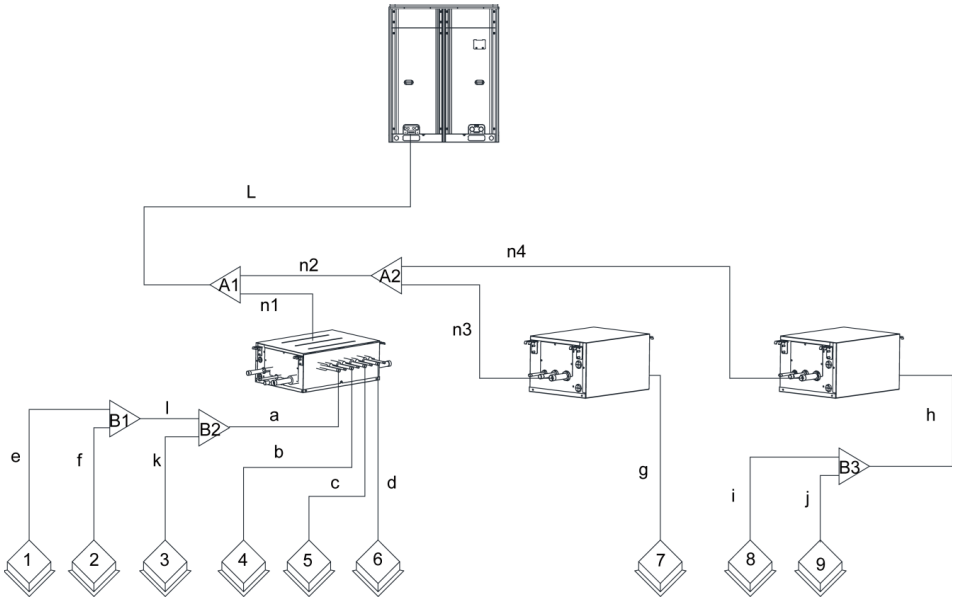
The inter-module pipeline is located above the module pipe interface



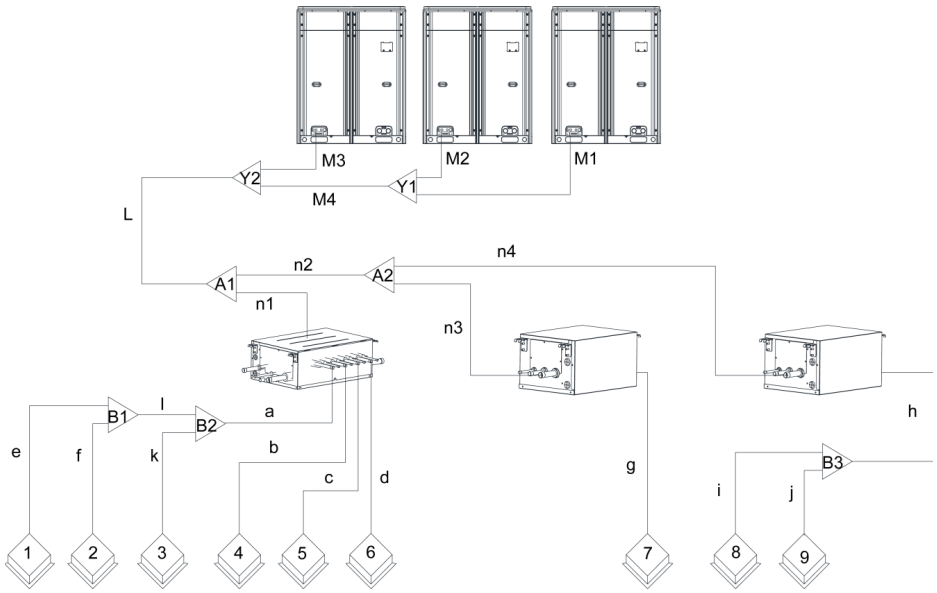
The inter-module pipeline is located above the module pipe interface

11.4 Fitting pipe between Outdoor Unit and the First Manifold

Connection sketch map of single-module system



Connection sketch map of multi-module system



1)Select appropriate pipe between outdoor unit and the first indoor branch ("L") as per the pipe size of outdoor unit. Pipe size of basic outdoor module is shown as follows:

Between outdoor unit and the first indoor branch

Basic Module	Pipe between ODU and the first branch of IDU		
	Low pressure gas pipe (mm)	Liquid Pipe(mm)	High pressure gas pipe (mm)
GMV-Q224WM/E-X	Φ19.05	Φ9.52	Φ15.9
GMV-Q280WM/E-X	Φ22.2	Φ9.52	Φ19.05
GMV-Q335WM/E-X	Φ25.4	Φ12.7	Φ19.05
GMV-Q400WM/E-X	Φ25.4	Φ12.7	Φ22.2
GMV-Q450WM/E-X	Φ28.6	Φ12.7	Φ22.2

2)For multi-module system, select appropriate branch ("M1、M2、M3")connected to outdoor module as per the pipe size of basic outdoor module. Pipe size of basic outdoor module is shown as follows:
Pipe between module and outdoor branch "M1、M2、M3"

Basic Module	Size of the pipe between module and outdoor branch		
	Low pressure gas pipe (mm)	Liquid Pipe(mm)	High pressure gas pipe (mm)
GMV-Q224WM/E-X	Φ19.05	Φ9.52	Φ15.9
GMV-Q280WM/E-X	Φ22.2	Φ9.52	Φ19.05
GMV-Q335WM/E-X	Φ25.4	Φ12.7	Φ19.05
GMV-Q400WM/E-X	Φ25.4	Φ12.7	Φ22.2
GMV-Q450WM/E-X	Φ28.6	Φ12.7	Φ22.2

Selection of branch "Y1,Y2"of outdoor modules:

	Module's capacity (C)	Model
Select the branch of outdoor module	45.0≤C≤96.0	ML01R
	96.0≤C	ML02R

3)Size of connection pipe "M4" between branches of each basic module
Size of connection pipe between branches of each basic module is determined by the total rated capacity of upstream modules.
Connection pipe "M4" between branches of outdoor module

Total capacity of upstream modules Q(kW)	Pipe size between manifolds		
	Low pressure gas pipe (mm)	Liquid Pipe(mm)	High pressure gas pipe (mm)
22.4 ≥ Q	Φ19.05	Φ9.52	Φ15.9
28.0 ≥ Q > 22.4	Φ22.2	Φ9.52	Φ19.05
33.5 ≥ Q > 28.0	Φ25.4	Φ12.7	Φ19.05
40.0 ≥ Q >33.5	Φ25.4	Φ12.7	Φ22.2
45.0 ≥ Q >40.0	Φ28.6	Φ12.7	Φ22.2
68.0 ≥ Q > 45.0	Φ28.6	Φ15.9	Φ25.4
96.0 ≥ Q > 68.0	Φ31.8	Φ19.05	Φ28.6
135.0 ≥ Q > 96.0	Φ38.1	Φ19.05	Φ31.8
Q > 135.0	Φ41.3	Φ19.05	Φ38.1

4) Size of connection pipe "L" between the terminal outdoor branch and the first indoor branch
Connection pipe "L" between outdoor unit and the first indoor branch

Basic module (single-module system)	Size of connection between outdoor unit and the first indoor branch		
	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
GMV-Q224WM/E-X	Φ19.05	Φ9.52	Φ15.9
GMV-Q280WM/E-X	Φ22.2	Φ9.52	Φ19.05
GMV-Q335WM/E-X	Φ25.4	Φ12.7	Φ19.05
GMV-Q400WM/E-X	Φ25.4	Φ12.7	Φ22.2

Basic module (single-module system)	Size of connection between outdoor unit and the first indoor branch		
	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
GMV-Q450WM/E-X	Φ28.6	Φ12.7	Φ22.2
GMV-Q504WM/E-X	Φ28.6	Φ15.9	Φ25.4
GMV-Q560WM/E-X	Φ28.6	Φ15.9	Φ25.4
GMV-Q615WM/E-X	Φ28.6	Φ15.9	Φ25.4
GMV-Q680WM/E-X	Φ28.6	Φ15.9	Φ25.4
GMV-Q730WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q785WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q850WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q900WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q960WM/E-X	Φ31.8	Φ19.05	Φ28.6
GMV-Q1010WM/E-X	Φ38.1	Φ19.05	Φ31.8
GMV-Q1065WM/E-X	Φ38.1	Φ19.05	Φ31.8
GMV-Q1130WM/E-X	Φ38.1	Φ19.05	Φ31.8
GMV-Q1180WM/E-X	Φ38.1	Φ19.05	Φ31.8
GMV-Q1235WM/E-X	Φ38.1	Φ19.05	Φ31.8
GMV-Q1300WM/E-X	Φ38.1	Φ19.05	Φ31.8
GMV-Q1350WM/E-X	Φ38.1	Φ19.05	Φ31.8
GMV-Q1410WM/E-X	Φ41.3	Φ19.05	Φ38.1
GMV-Q1460WM/E-X	Φ41.3	Φ19.05	Φ38.1
GMV-Q1515WM/E-X	Φ41.3	Φ19.05	Φ38.1
GMV-Q1580WM/E-X	Φ41.3	Φ19.05	Φ38.1
GMV-Q1630WM/E-X	Φ41.3	Φ19.05	Φ38.1
GMV-Q1685WM/E-X	Φ41.3	Φ19.05	Φ38.1
GMV-Q1750WM/E-X	Φ41.3	Φ19.05	Φ38.1
GMV-Q1800WM/E-X	Φ41.3	Φ19.05	Φ38.1

5) Branch selection of mode exchanger ("A1, A2")

Select branch of mode exchanger as per total capacity of downstream indoor unit(s). Please refer to the following table.

Model selection for branch "A1、A2" of mode exchanger

R410A Refrigerant System	Total capacity of downstream indoor unit(s) X(kW)	Model
Y-type Manifold	X≤5.0	FQ01Na/A
	5.0＜X≤22.4	FQ02Na/A
	22.4＜X≤28.0	FQ03Na/A
	28.0＜X≤68.0	FQ04Na/A
	68.0＜X≤96.0	FQ05Na/A
	96.0＜X≤135.0	FQ06Na/A
	135.0＜X	FQ07Na/A

6) Piping size among upstream branches of heat pump mode exchanger ("n1、n2、n3、n4")

Piping requirement among upstream branches of heat pump mode exchanger ("n1、n2、n3、n4")

Total rated capacity of downstream indoor units: X (kW)	Size of connection pipe between branches of mode exchanger		
	Low pressure gas pipe (mm)	Liquid pipe (mm)	High pressure gas pipe (mm)
X≤5.0	Φ12.7	Φ6.35	Φ12.7
5.0 < X≤14.2	Φ15.9	Φ9.52	Φ12.7
14.2 < X≤22.4	Φ19.05	Φ9.52	Φ15.9
22.4 < X≤28.0	Φ22.2	Φ9.52	Φ19.05
28.0 < X≤33.5	Φ25.4	Φ12.7	Φ19.05
33.5 < X≤40.0	Φ25.4	Φ12.7	Φ22.2
40.0 < X≤45.0	Φ28.6	Φ12.7	Φ22.2
45.0 < X≤68.0	Φ28.6	Φ15.9	Φ25.4
68.0 < X≤96.0	Φ31.8	Φ19.05	Φ28.6
96 < X≤135	Φ38.1	Φ19.05	Φ31.8
135 < X	Φ41.3	Φ19.05	Φ38.1

7) Piping size among downstream branches of heat pump mode exchanger "a、h"

Total rated capacity of downsteam indoor units: X (kW)	Piping size among downstream branches of mode exchanger	
	Gas pipe (mm)	Liquid pipe (mm)
X≤2.8	Φ9.52	Φ6.35
2.8 < X≤5.0	Φ12.7	Φ6.35
5.6 < X≤14.2	Φ15.9	Φ9.52

8) Branch selection of downstream indoor unit of mode exchanger ("B1、B2、B3")

R410A refrigerant system	Total rated capacity of downstream indoor units: X (kW)	Model
Y-type branch	X≤14.2	FQ01A/A

9) Piping size between mode exchanger and downstream indoor unit ("b、c、d、g")

Total rated capacity of downstream indoor units: X (kW)	Piping size between mode exchanger and downstream indoor unit	
	Gas pipe (mm)	Liquid pipe (mm)
X≤2.8	Φ9.52	Φ6.35
2.8 < X≤5.0	Φ12.7	Φ6.35
5.6 < X≤14.2	Φ15.9	Φ9.52

10) Piping between indoor branch and indoor unit ("e、f、i、j、k")

Size of connection pipe between indoor branch and indoor unit should be consistent with the connection pipe of indoor unit.

Piping between indoor branch and indoor unit "e、f、i、j、k"

Rated capacity of indoor units C(kW)	Size of connection pipe between indoor branch and indoor unit	
	Gas pipe (mm)	Liquid pipe (mm)
C≤2.8	Φ9.52	Φ6.35
2.8 < C≤5.0	Φ12.7	Φ6.35
5.0 < C≤14.2	Φ15.9	Φ9.52

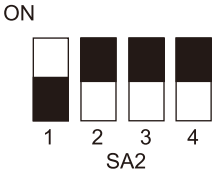
11) Piping between indoor branchs ("l")

Rated capacity of the downstream indoor units C(kW)	Size of connection pipe between indoor branchs	
	Gas pipe (mm)	Liquid pipe (mm)
C≤2.8	Φ9.52	Φ6.35
2.8 < C≤5.0	Φ12.7	Φ6.35
5.0 < C≤14.2	Φ15.9	Φ9.52

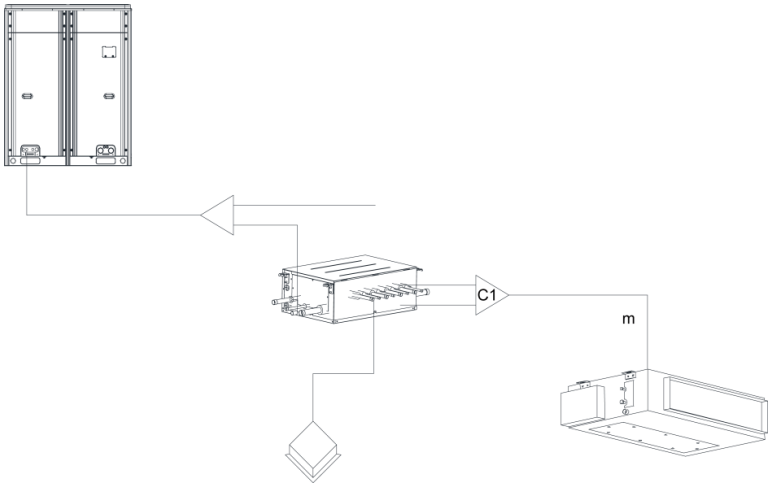
12) Connecting method for indoor unit with capacity of over 14.2kW

When connecting to the indoor unit with capacity of over 14.2kW, it is not allowed to connect with only one branch; it must use two branches controlled by the same mainboard for parallel connection.

Parallel connection	Indoor unit Communication connection for mode exchanger	Remarks
Indoor unit No.1 and No.2	"1D1 1D2"	Parallel connection can be conducted only as the combination of this table, it is not allowed to otherwise connect. Note that after the connection, manually set the SA2 dial code of corresponding mainboard, and dial the code in the first place to number end.
Indoor unit No.3 and No.4	"3D1 3D2"	
Indoor unit No.5 and No.6	"5D1 5D2"	
Indoor unit No.7 and No.8	"7D1 7D2"	



Connecting method is as shown in the picture:



13) Branch selection of indoor unit of mode exchanger ("C1")

R410A refrigerant system	capacity of downsteam indoor units: X (kW)	Model
Y-type branch	14.2 < X≤28.0	FQ01B/A

14) Piping size between mode exchanger and downstream indoor unit ("m")

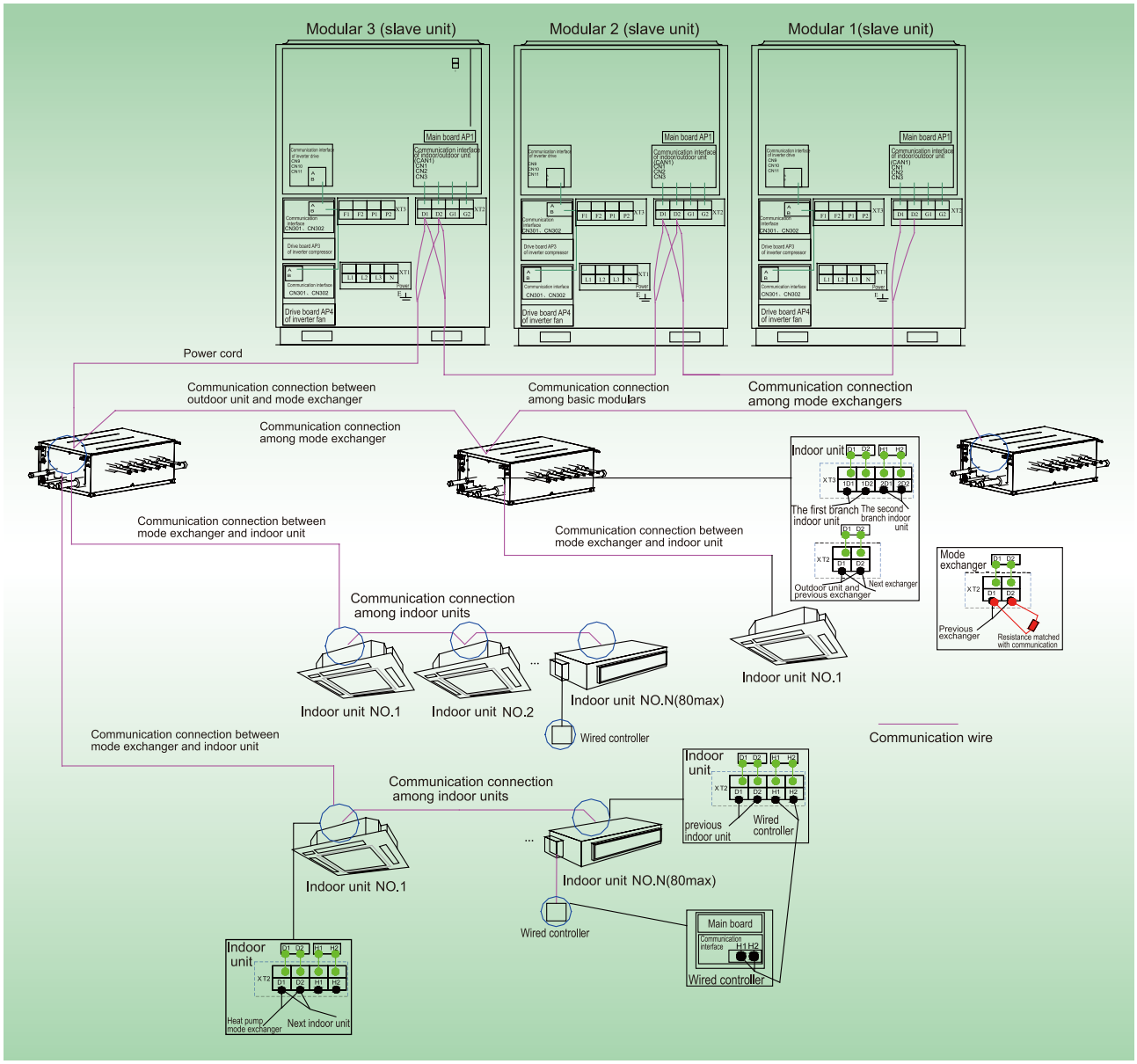
Size of connection pipe between indoor branch and indoor unit should be consistent with the connection pipe of indoor unit.

Piping between indoor branch and indoor unit "m"

Rated capacity of indoor units C(kW)	Size of connection pipe between indoor branch and indoor unit	
	Gas pipe (mm)	Liquid pipe (mm)
14.2 < C≤22.4	Φ19.05	Φ9.52
22.4 < C ≤28.0	Φ22.2	Φ9.52

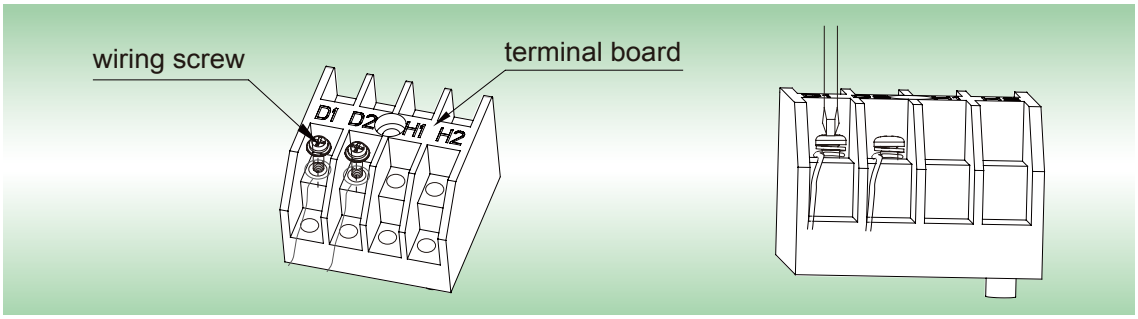
12 REQUIREMENTS FOR COMMUNICATION MODE

The GMV5 HR VRF unit air conditioning system adopts the CAN communication network. Manual dialling and differentiation of the communication cable polarity are not required for the indoor unit, and only functional dialling should be set for the indoor unit.



12.1 Connection Mode of Connection Line Terminals

All the communication connections of GMV5 are in the screw fastening mode.



12.2 Communication Cable Material and Wring Mode

12.2.1 Communication Material

NOTES: If the air conditioning units are installed at a place with strong electromagnetic interference, a shielded cable must be used as the communication cable between the indoor unit and wired controller, and a shielded twisted pair must be used as the communication cable between the indoor unit and indoor (outdoor) unit. （1）Selection of communication wire between indoor unit and wired controller

Type of wire	Total length of communication wire between indoor unit and wired controller: L(m)	Wire diameter (mm^2)	Material standard	Remarks
Light/Ordinary polyvinyl chloride sheathed cord (60227 IEC 52/60227 IEC 53)	L≤250	2×0.75~2×1.25	IEC 60227-5:2007	1.Total length of communication wire cannot exceed 250m. 2.The cord shall be circular cord(the cores shall be twisted together). 3. If unit is installed in places with intense magnetic field or strong interference, it's necessary to use shielded wire.

Selection of communication wire between outdoor unit and mode exchanger, among mode exchangers, and mode exchanger and indoor unit respectively.

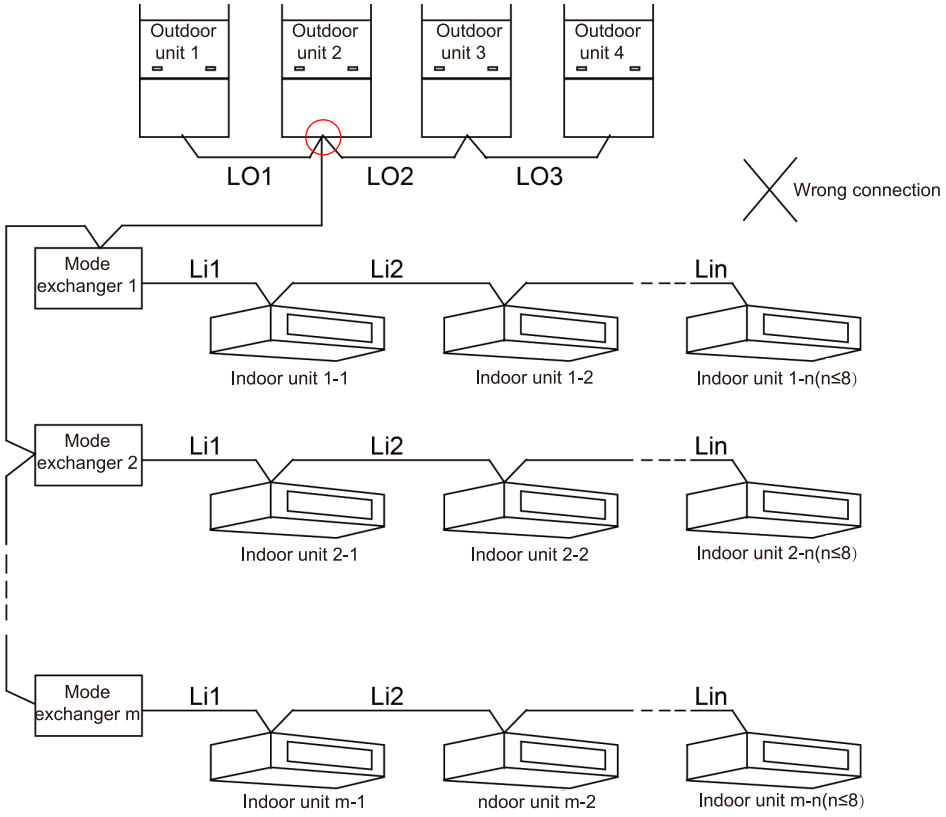
Type of wire	Total length of communication wire between indoor unit and another indoor/outdoor unit: L(m)	Wire diameter (mm^2)	Material standard	Remarks
Light/Ordinary polyvinyl chloride sheathed cord (60227 IEC 52/60227 IEC 53)	L≤1000	≥2×0.75	IEC 60227-5:2007	1.if the wire diameter is enlarged to 2×1mm^2,the total communication length can reach 1500m. 2.The cord shall be circular cord(the cores shall be twisted together). Communication wire can be longer if wire diameter is 2×1mm^2. But the total length cannot exceed 1500m. 3. If unit is installed in places with intense magnetic field or strong interference, it's necessary to use shielded wire.

NOTES: All of the selected communication wire must be consistent with local laws and regulations.

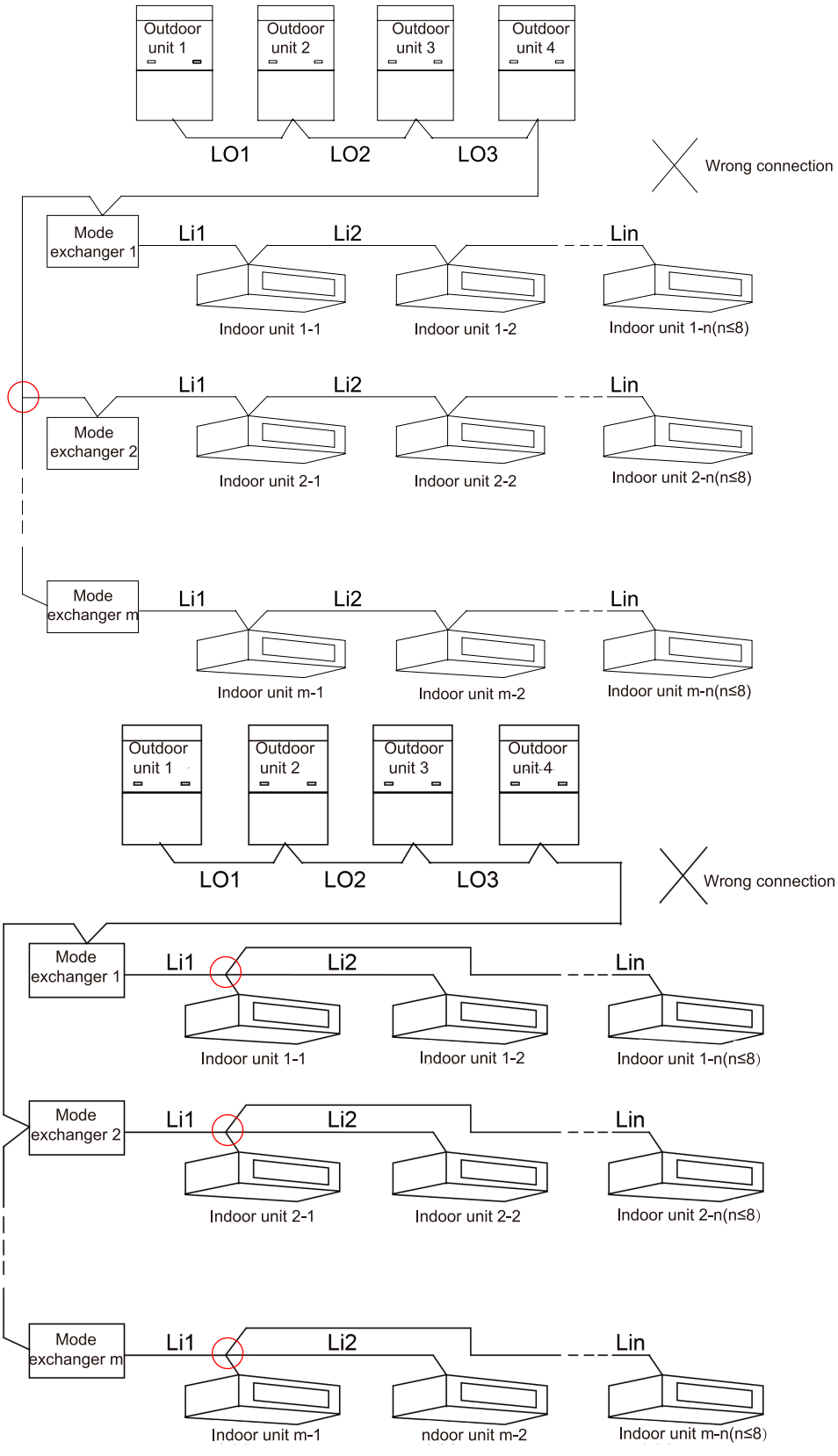
12.2.2 Communication Access Mode

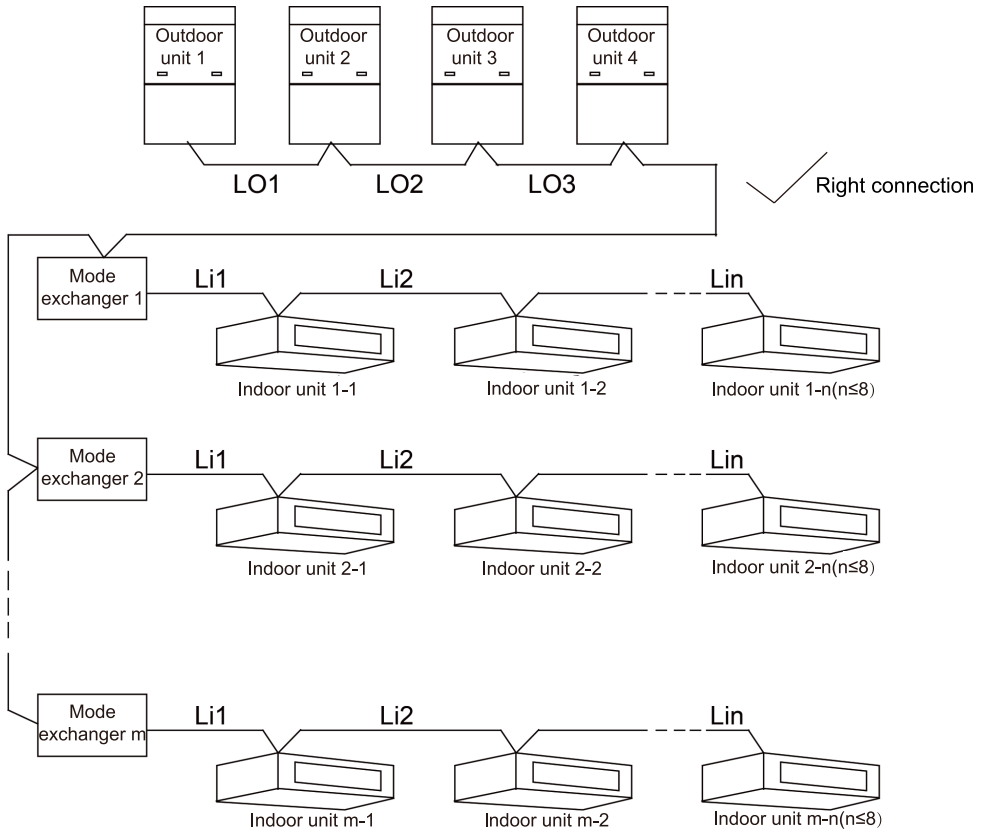
The communication bus of GMV5 HR indoor and outdoor units must be connected in series, and star connection is forbidden. The indoor unit at the end of the communication bus for the indoor units and outdoor units must be connected to a communication matching resistor (which is contained in the packing bag of the outdoor unit).

Right Connection:



Wrong Connection:



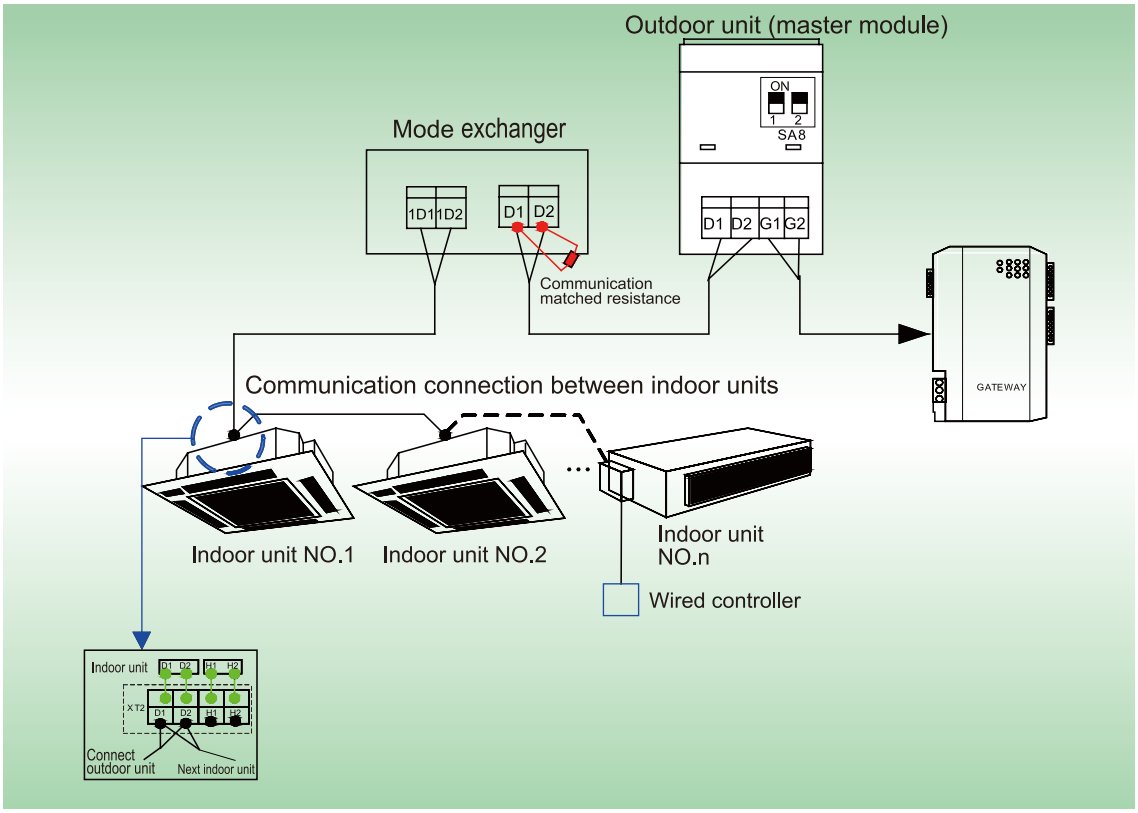


12.3 Connection Method and Procedure of Communication Cable

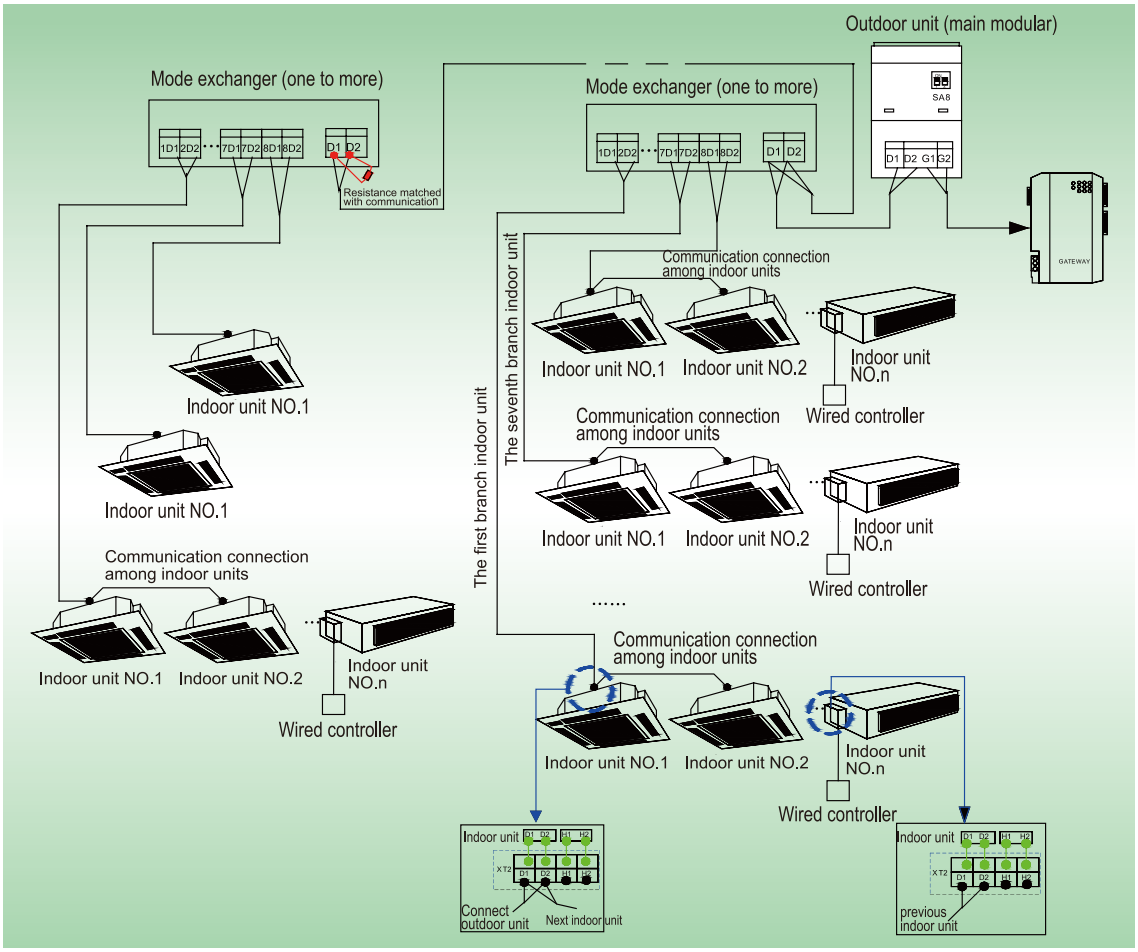
12.3.1 Communication connection between the indoor unit and outdoor unit

The indoor unit is connected to the outdoor unit through the D1/D2 port of the terminal plate XT2. The figures below show the connection method of the single outdoor unit and connection method of the modular outdoor unit.

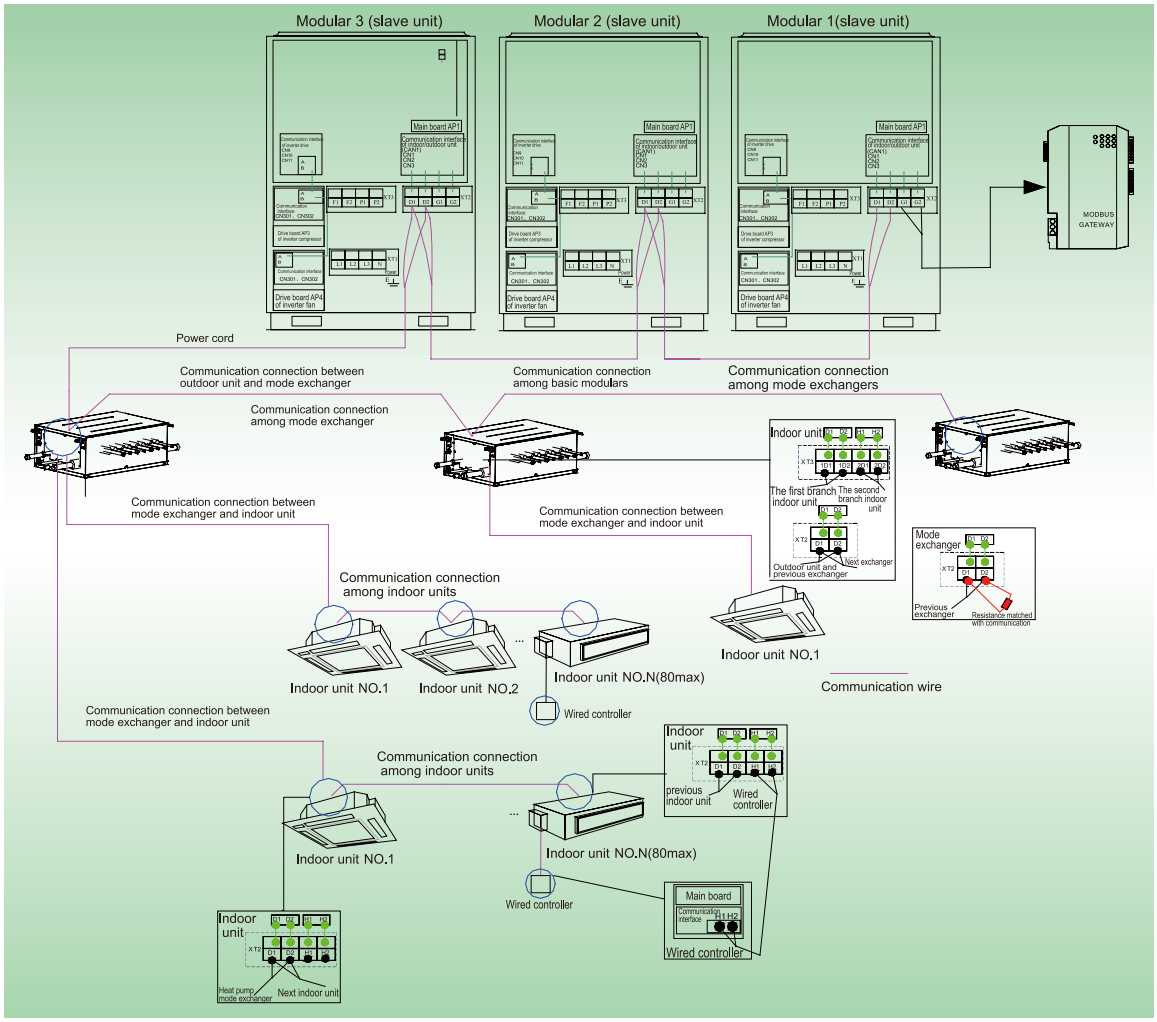
Communication connection mode of the single module system



Connection of communication for single-module system and single-moudle converter system



Connection of communication for multi-module system and multi-module converter system



Connection of communication for multi-module system and multi-module converter system

NOTES:

a. For the modular outdoor unit, if multiple outdoor unit modules are available, the master unit must be the first outdoor unit module on the communication line and cannot be connected to any indoor unit (the master unit is set by SA8 of the main board for outdoor unit).

b. For the modular outdoor unit, if multiple outdoor unit modules are available, the indoor unit must be connected to the last slave module of outdoor unit (the slave unit is set by SA8 of the main board for outdoor unit).

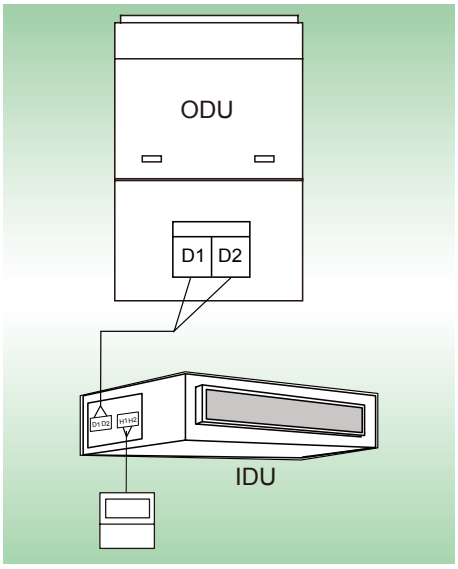
c. The communication cable must be wired separately from the power cable to avoid interference.

d. A proper length of communication cable must be selected, and no joint is allowed.

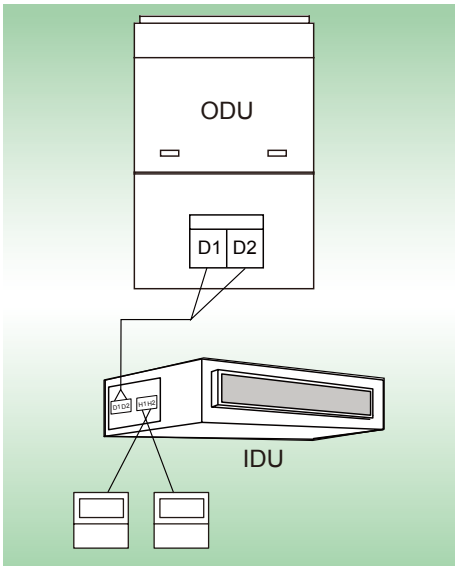
e. The indoor units must be connected in series, and the last indoor unit must be connected to a communication matching resistor (which is provided in the list of outdoor unit accessories).

12.3.2 Communication connection mode between the indoor unit and wired controller

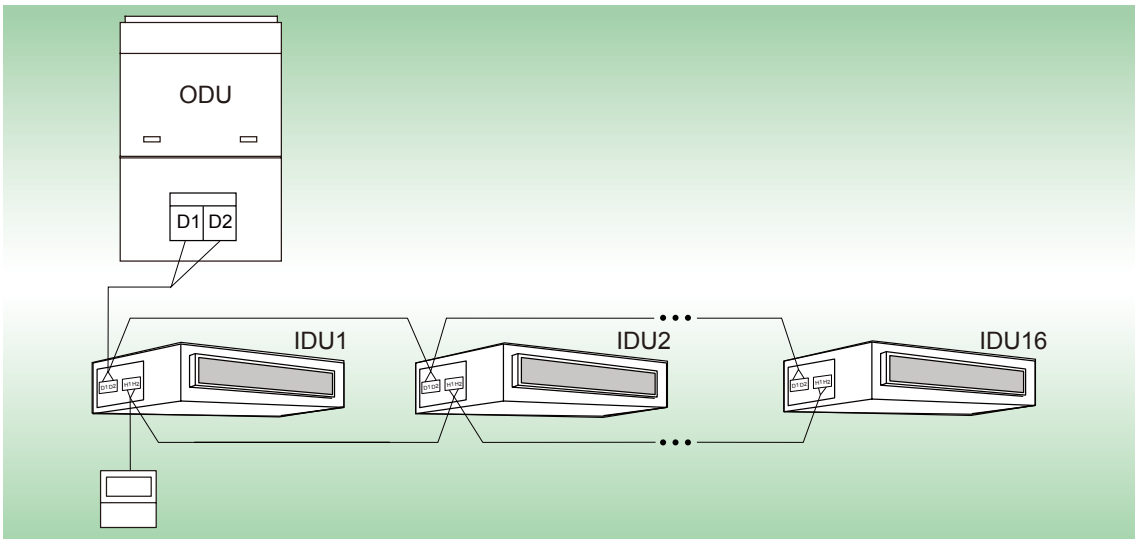
The indoor unit and the wired controller are connected in one of the following four modes, which are respectively shown in Figure below:



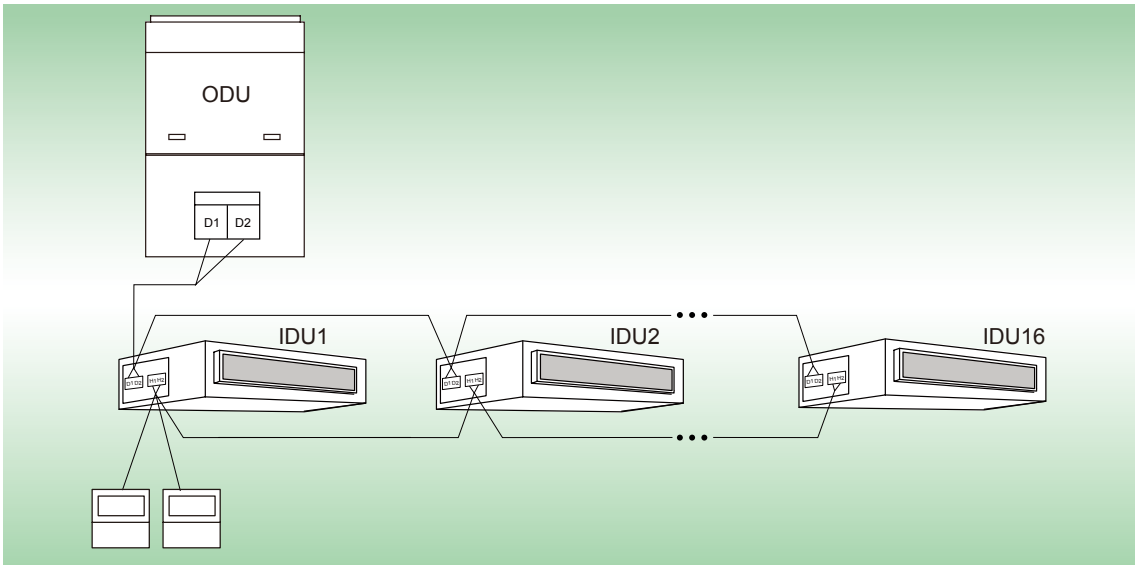
One wire controller controls one indoor unit



Two wire controllers control one indoor unit



One wire controller controls multiple indoor units



Two wire controllers control multiple indoor units

When two wired controllers control multiple indoor units at the same time, the wired controller can be connected to any indoor unit, the connected indoor units must belong to the same series, and only one wired controller must be set to a slave wired controller. The number of indoor units controlled by the wired controllers is not more than 16, and the connected indoor units must be on the same indoor unit network.

The slave wired controller can be set in the power-on or power-off status:

(1) Press and hold the "FUNCTION" button on the wired controller to be set to a slave wired controller for five seconds. The temperature area displays "C00". Continue holding the "FUNCTION" button for five seconds to enter the wired controller parameter setting interface. The temperature area displays "P00" by default.

(2) Select a P13 parameter code by pressing "∧" or "∨". Press the "MODE" button to switch to parameter value settings. The parameter value blinks. Press "∧" or "∨" to select "02", and then press the "ENTER/CANCEL" button to complete settings.

(3) Press the "ENTER/CANCEL" button to return to the upper-level menu till quitting parameter settings.

The user parameter setting list is as follows:

Parameter Code	Parameter Name	Parameter Range	Default Value	Remarks
P13	Wired controller address settings	01: master wired controller 02: slave wired controller	01	When two wired controllers simultaneously control one or more indoor units, the two wired controllers must use different addresses. The slave wired controller (address: 02) does not have the unit parameter setting function except its own address settings.

NOTES:

a. The default factory setting of all the wired controllers is the master wired controller status.

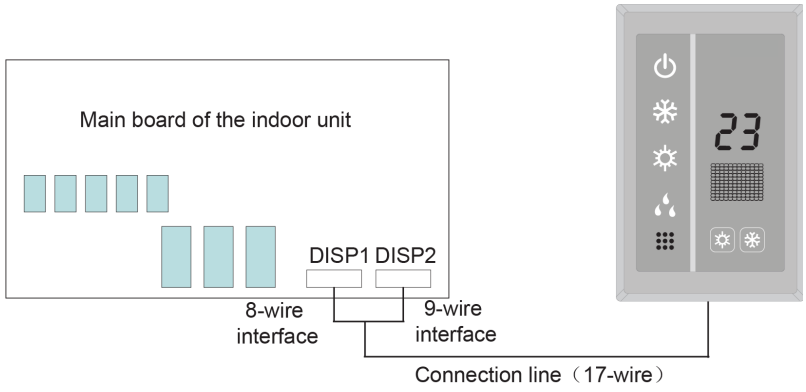
b. In the parameter setting status, the "FAN", "Timer", "SLEEP", and "SWING" buttons are invalid. By pressing "ON/OFF", you can return to the main interface but will not power on/off the unit.

c. In the parameter setting status, signals of the remote controller are invalid.

12.3.3 Connection mode between the air duct-type indoor unit and receiving LED panel

If remote dash receiver is needed for the duct type IDU, it shall be connected through DISP1 and DISP2 in the master board of IDU.

IDU type	Model of remote dash receiver	Model of connection wire	Corresponding to the interface of IDU main board
Duct type IDU	JS05	Connection wire among plates (17-core)	DISP1 (connect to 8-core interface) DISP2 (connect to 9-core interface)



NOTES:

a. The wired controller and remote receiving LED panel can be used at the same time.
b. Note to select a remote controller when a remote receiving LED panel is used.

13 ELECTRICAL CONNECTION

13.1 External Connection Interfaces

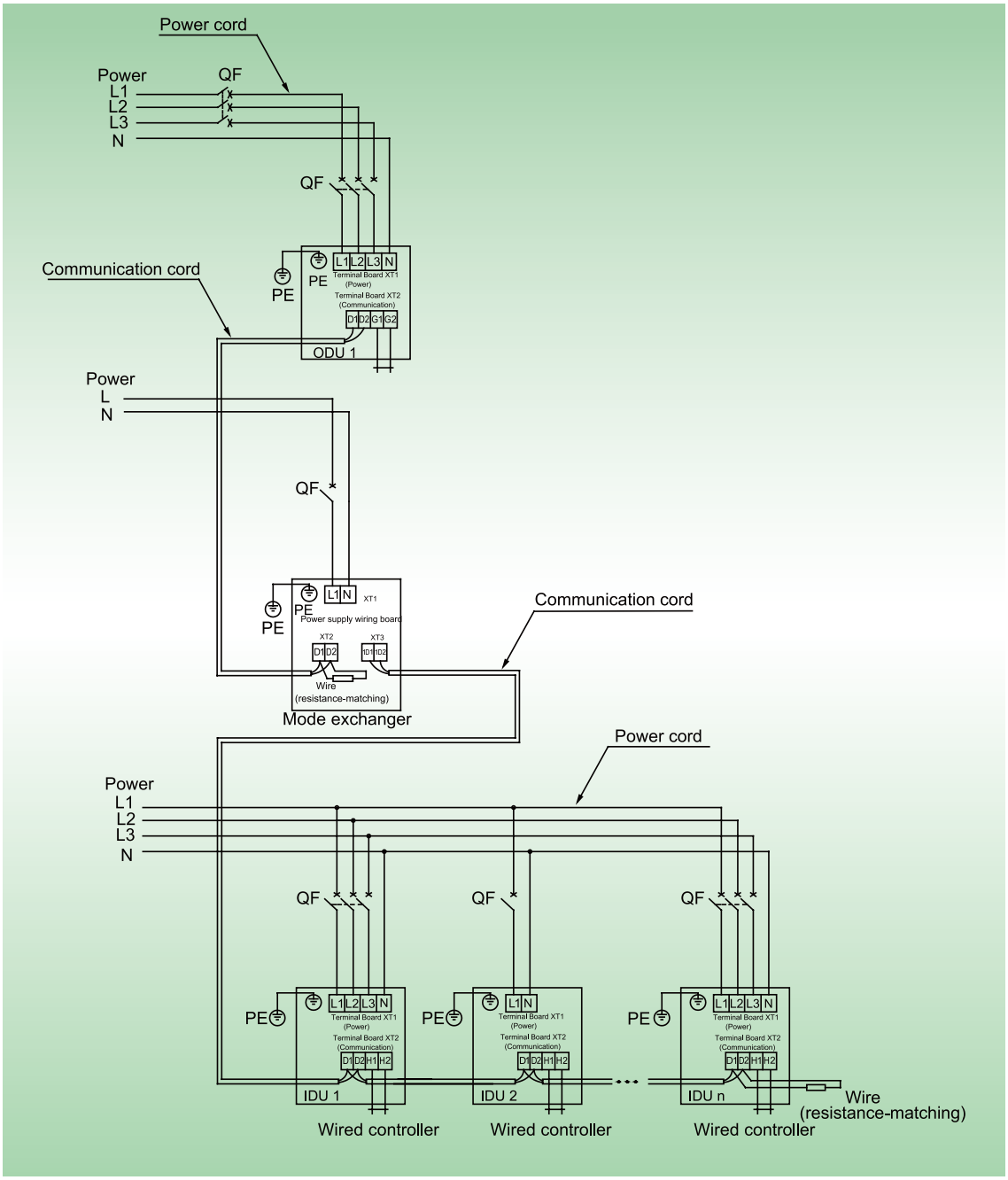
External connection interfaces	Power supply	Quantity	5
		Label	L1 L2 L3 N PE
	Indoor/outdoor unit communication	Quantity	2
		Label	D1 D2
	Centralized control	Quantity	2
		Label	G1 G2

13.2 External Connection

Every unit should be equipped with a circuit breaker for short-circuit and overload protection. In general, circuit breaker is at OFF status.

During operation, all indoor units and outdoor units belonging to the same system must be kept energized status. Otherwise, the unit can't operate normally.

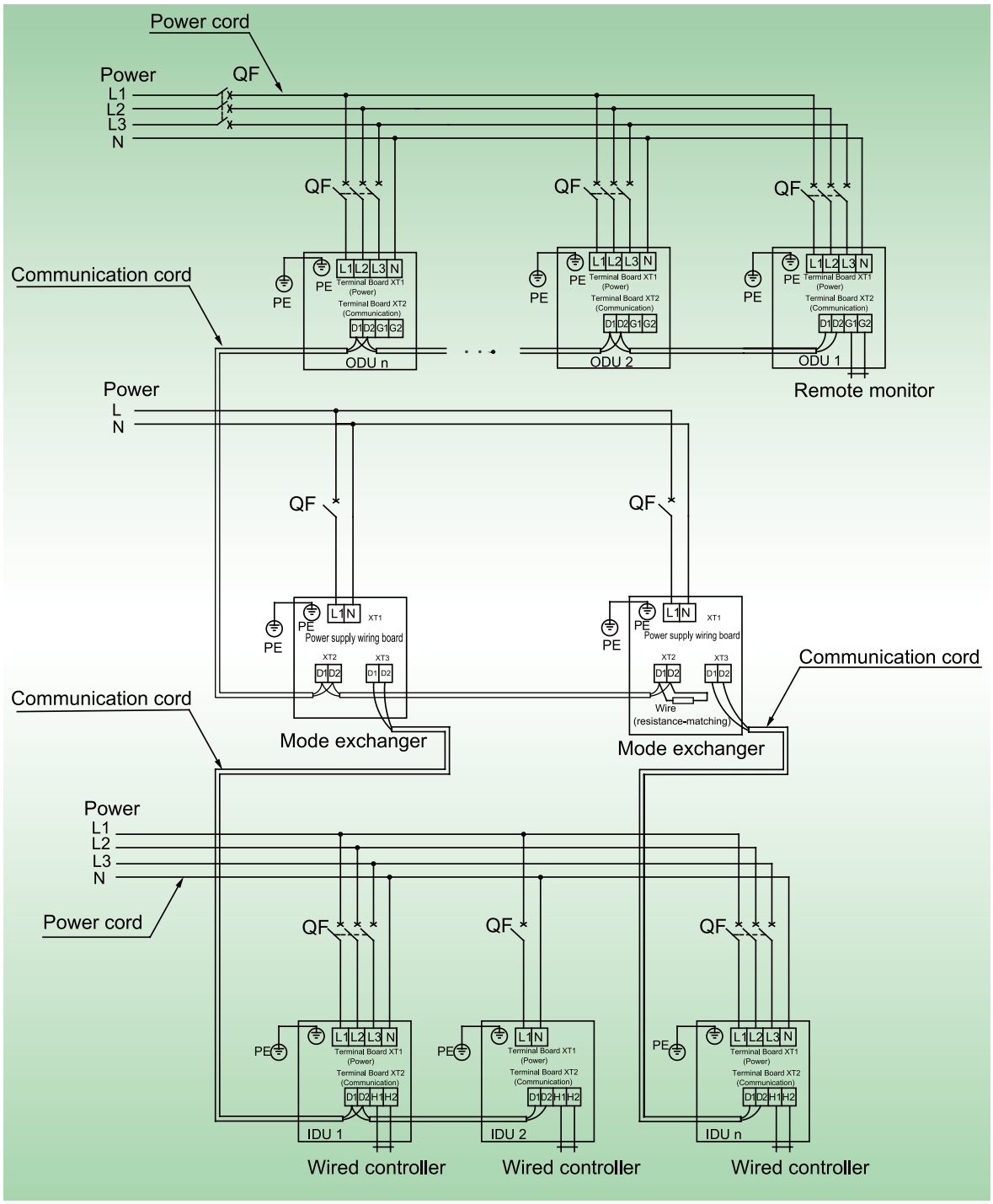
1) External connection diagram of a single unit



NOTES:

The maximum number (n) of connectable indoor units is dependent on the capacity of outdoor units. For details, please refer to sections of combination of units.

2) External connection diagram of modular connection



NOTES:

The maximum number (N) of connectable outdoor units and the maximum number (n) of connectable indoor units are dependent on the combination way of outdoor units. For details, please refer to sections of combination of units.

14 CALCULATION METHOD OF REFRIGERANT ADDED FOR ENGINEERING PIPING

R (Quantity of added refrigerant) = A (Quantity of refrigerant added to connection pipe) + ∑B (Quantity of refrigerant added to each module)1) Added refrigerant quantity A for piping is calculated as follows:

1) A (Quantity of refrigerant added to connection pipe) is calculated as below:

A (Quantity of refrigerant added to connection pipe) = ∑ Length of liquid pipe x Quantity of refrigerant added to liquid pipe per meter)

Diameter of liquid pipe (mm)	Φ28.6	Φ25.4	Φ22.2	Φ19.05	Φ15.9	Φ12.7	Φ9.52	Φ6.35
kg/m	0.680	0.520	0.350	0.250	0.170	0.110	0.054	0.022

2) ∑B (Quantity of refrigerant added to each module) is calculated as below:

Quantity of refrigerant added to each module (kg) ②		Module capacity (kW)				
Indoor/outdoor unit rated capacity allocation ratio: C ①	Sets of allocated indoor unit	22.4	28.0	33.5	40.0	45.0
50%≤C≤70%	< 4 sets	0	0	0	0	0
	≥4 sets	0.5	0.5	0.5	0.5	0.5
70%≤C≤90%	< 4 sets	0.5	0.5	1.0	1.5	1.5
	≥4 sets	1.0	1.0	1.5	2.0	2.0
90% < C≤105%	< 4 sets	1.0	1.0	1.5	2.0	2.0
	≥4 sets	2.0	2.0	3.0	3.5	3.5
105% < C≤135%	< 4 sets	2.0	2.0	2.5	3.0	3.0
	≥4 sets	3.5	3.5	4.0	5.0	5.0

NOTES:

a. Indoor/outdoor unit rated capacity allocation ratio C = Sum of rated cooling capacity of indoor unit / Sum of rated cooling capacity of outdoor unit

b. If all of the indoor units are fresh air indoor units, the quantity of refrigerant added to each module is 0kg.

c. If fresh air indoor unit is connected with normal VRF indoor unit, adopt the perfusion method for normal indoor unit for perfusion.

For example1:

Outdoor unit consists of one 28.0kW module and one 45.0kW module. Five 14.0kW duct type units are used as indoor units.

IDU/ODU rated capacity collocation ratio C= 14.0×5/(28.0+45.0)=96%. The quantity of included IDUs is more than 4 sets. Please refer to the above table.

Additional refrigerant quantity B for 28kW module is 2.0kg.

Additional refrigerant quantity B for 45.0kw module is 3.5kg.

So, ∑Refrigerant charging amount B of every module=2.0+3.5=5.5kg.

Suppose the Pipeline charging amount A=∑Liquid pipe length×refrigerant charging amount of every 1m liquid pipe=20kg.

Total refrigerant charging amount R=20+5.5=25.5kg.

For example 2:

Outdoor unit is a 28kW module and the indoor unit is a 28kW fresh air unit. The quantity (B) of refrigerant added to this module is 0kg.

So, ∑B (Quantity of refrigerant added to each module) = 0kg.

Suppose that A (Quantity of refrigerant added to connection pipe) = ∑ Length of liquid pipe x Quantity of refrigerant added to liquid pipe per meter) = 5kg.

R (Quantity of added refrigerant in total) = 5+0=5kg.

Modular combination of outdoor unit subjects to combinations that is currently available.
After confirming that there is no leakage from the system, when the compressor is not in operation, charge additional R410A with specified amount to the unit through the filling opening of the liquid pipe valve of the outdoor unit. If required additional refrigerant cannot be quickly filled for increase of pressure in the pipe, set the unit at cooling startup and then fill the refrigerant from gas valve of outdoor unit. If ambient temperature is low, the unit can't be set to cooling mode but heating mode.

15 OPTIONAL COMPONENTS

The GMV5 HR series VRF units provide the following options:

—		Model	Remarks
Manifold	Outdoor unit	ML01/A	For the model selection method, see the part of pipeline selection.
	Indoor unit	FQ01A/A, FQ01B/A, FQ02/A, FQ03/A, FQ04/A	-
Remote controller		YAP1F	Duct-type indoor unit Optional (Wall-Mounted indoor unit, the air Cassette, Floor Ceiling Standard)
Remote controller for debugging		YV1L1	With the debugging function, used to set functions of the indoor unit
Classic wired controller		Wired controller XK46	Applicable to the air Cassette, Floor Ceiling, Wall-Mounted indoor unit Optional (Duct-type, Concealed Floor Standing Type indoor unit Standard)
Wired controller		Wired controller XK79	With the access control function
Wired controller		Wired controller XE70-33/H	-
Centralized controller		CE52-24/F(C)	-
E-Smart Zone controller		CE54-24/F(C)	-
Debugging software		DE40-33/A(C)	Applicable to the unit of CAN bus communication technology
Remote monitoring system	Software	FE30-24/DF(B)	Applicable to the unit of CAN bus communication technology
	Controller	GBM-LCG200E	
Remote receiving LED panel		JS05	Applicable to the air duct-type indoor unit (Not suitable for GMV-ND80~140PLS/C-T)

NOTE:

If you need the above optional components, please consult your local sales company.

16 UNIT OPERATING RANGE

Cooling	Outdoor temperature:-5°C~52°C
Heating	Outdoor temperature:-20°C~24°C
Heat recovery operation	Outdoor temperature:-10°C ~ 20°C

When the indoor units are all VRF fresh air processor, the unit operating range is as follows:

Cooling	Outdoor temperature:16°C~45°C
Heating	Outdoor temperature:-7°C~16°C

NOTES:

Out of the working Temperature Range may damage this product and will invalidate the warranty.

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