

1.5 Technical Data

1.5.1 Parameter List

Model			GRS-CQ4.0Pd/ NhH-E	GRS-CQ6.0Pd /NhH-E	GRS-CQ8.0Pd /NhH-E	GRS-CQ10Pd/ NhH-E
Product Code			ER01001510	ER01001500	ER01001480	ER01001750
Capacity* ¹	Cooling(floor cooling)	kW	3.8	5.8	7.0	8.5
	Heating(floor heating)	kW	4.0	6.0	8.0	9.5
Power Input* ¹	Cooling(floor cooling)	kW	0.80	1.32	1.75	2.24
	Heating(floor heating)	kW	0.78	1.20	1.70	2.07
EER* ¹ (floor cooling)		W/W	4.75	4.4	4.0	3.8
COP* ¹ (floor heating)		W/W	5.1	5.0	4.7	4.6
Capacity* ²	Cooling(for Fan coil)	kW	3.15	4.09	5.3	6.5
	Heating(Fan coil or Radiator)	kW	4	5.9	8	9.5
Power Input* ²	Cooling(for Fan coil)	kW	0.92	1.28	1.73	2.27
	Heating(Fan coil or Radiator)	kW	1.02	1.51	2.14	2.64
EER* ² (for Fan coil)		W/W	3.4	3.2	3.0	2.9
COP* ² (Fan coil or Radiator)		W/W	3.9	3.9	3.7	3.6
Refrigerant charge volume		kg	1.0	1.0	1.6	1.6
Sanitary water Temperature		°C	40~80°C			

Model			GRS-CQ4.0Pd/ NhH-E(O)	GRS-CQ6.0Pd /NhH-E(O)	GRS-CQ8.0Pd /NhH-E(O)	GRS-CQ10Pd/ NhH-E(O)
Product Code			ER010W1510	ER010W1500	ER010W1480	ER010W1730
Sound Pressure Level	cooling	dB(A)	52	52	55	55
	heating	dB(A)	52	52	55	55
Dimensions (W×D×H)	Outline	mm	975×396×702	975×396×702	982×427×787	982×427×787
	Packaged	mm	1028×458×830	1028×458×830	1097×478×937	1094×478×937
Net weight/Gross weight		kg	55/65	55/65	82/92	82/92

Model			GRS-CQ4.0Pd/ NhH-E(I)	GRS-CQ6.0Pd /NhH-E(I)	GRS-CQ8.0Pd /NhH-E(I)	GRS-CQ10Pd/ NhH-E(I)
Product Code			ER010N1510	ER010N1500	ER010N1480	ER010N1750
Sound Pressure Level	cooling	dB(A)	29	29	29	29
	heating	dB(A)	29	29	29	29

Engineering Data

Dimensions	Outline	mm	460×318×860	460×318×860	460×318×860	460×318×860
(W×D×H)	Packaged	mm	565×375×1130	565×375×1130	565×375×1130	565×375×1130
Net weight/Gross weight		kg	62/71	62/71	62/71	62/71

Notes

“*1” indicates the capacity and power input are tested based on the conditions below:

(1) Cooling

Indoor Water Temperature: 23°C/18°C; Outdoor Temperature: 35°CDB/24°CWB

(2) Heating

Indoor Water Temperature: 30°C/35°C; Outdoor Temperature: 7°CDB/6°CWB

“*2” indicates the capacity and power input are tested based on the conditions below:

(1) Cooling

Indoor Water Temperature: 12°C/7°C; Outdoor Temperature: 35°CDB/24°CWB

(2) Heating

Indoor Water Temperature: 40°C/45°C; Outdoor Temperature: 7°CDB/6°CWB

1.5.2 Nominal Working Conditions

Item	Water Side		Heat Source/User Side	
	Entering Water Temp (°C)	Leaving Water Temperature (°C)	Dry Bulb Temperature (°C)	Wet Bulb Temperature (°C)
FCU Cooling	12	7	35	—
FCU Heating	40	45	7	6
Floor Cooling	23	18	35	—
Floor Heating	30	35	7	6
Water Heating	53	-	7	6

1.5.3 Operation Range

Item	Water Side	Heat Source/User Side
	Leaving Water Temperature (°C)	Environment Dry Bulb Temperature (°C)
Cooling	7~25	10~48
Heating	20~60	-25~35
Water Heating	40~80 (Water Tank Temperature)	-25~45

Note: when operating conditions are out of the range listed above, please contact GREE.

1.5.4 Temperature sensor parameter

Displayed Name	inspection range(°C)	Nominal working datas			Remark
		Cooling	Heating	Hot water	
T-outdoor	-30~150	8~50	-27~37	-27~45	temperature sensor resistance 15K
T-suction	-30~150	5~30	-25~20	-25~30	temperature sensor resistance 20K
T-discharge	-30~150	30~102	35~102	35~102	temperature sensor resistance 50K
T-defrost	-30~150	20~57	-25~30	-25~40	temperature sensor resistance 20K
T-water in PE	-30~150	10~30	20~55	20~55	temperature sensor resistance 20K
T-water out PE	-30~150	5~25	25~60	25~60	temperature sensor resistance 20K
T-optional water Sen.	-30~150	5~25	25~60	25~60	temperature sensor resistance 50K

Engineering Data

T-tank ctrl.	-30~150	/	/	10~80	temperature sensor resistance 50K
T-floor debug	-30~150	/	25~45	/	/
Debug time	-30~150	/	12~72	/	/
T-liquid pipe	-30~150	5~25	20~57	20~57	temperature sensor resistance 20K
T-gas pipe	-30~150	30~102	35~102	35~102	temperature sensor resistance 20K
T-economizer in	-30~150	no EVI under cooling	-20~55	-20~55	temperature sensor resistance 20K
T-economizer out	-30~150	no EVI under cooling	-20~55	-20~55	temperature sensor resistance 20K
T-remote room	-30~150	18~30	18~30	18~30	/
Dis. Pressure	-40~70	25~60	25~62	25~62	/
T-weather depend	-30~150	7~25	25~60	/	based on calculation

1.5.5 Electric Data

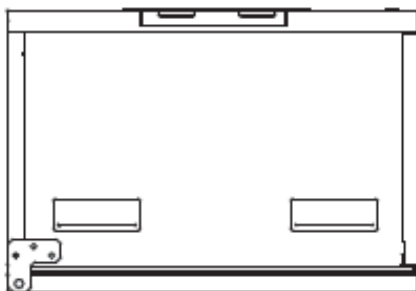
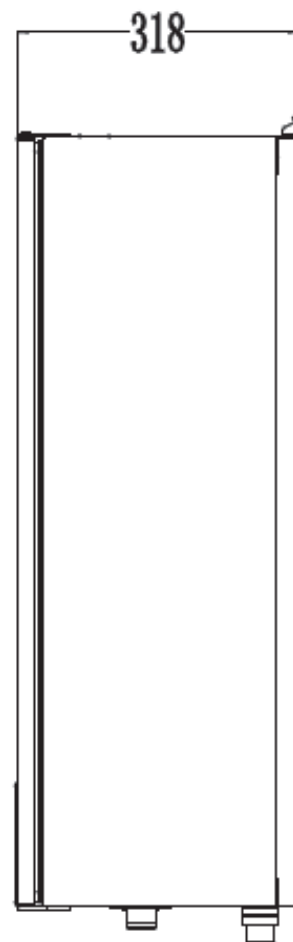
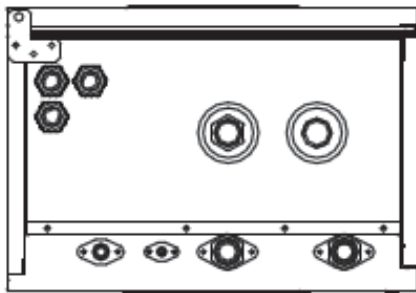
Model	Power Supply	Air Break Switch	Minimum Section Area of Earth Wire	Minimum Section Area of Power Wire
	V, Ph, Hz	A	mm ²	mm ²
GRS-CQ4.0Pd/NhH-E(I)	230VAC, 1Ph, 50Hz	20	4.0	2*4.0
GRS-CQ6.0Pd/NhH-E(I)		20	4.0	2*4.0
GRS-CQ8.0Pd/NhH-E(I)		40	6.0	2*6.0
GRS-CQ10Pd/NhH-E(I)		40	6.0	2*6.0
GRS-CQ4.0Pd/NhH-E(O)	230VAC, 1Ph, 50Hz	16	1.5	2*1.5
GRS-CQ6.0Pd/NhH-E(O)		16	1.5	2*1.5
GRS-CQ8.0Pd/NhH-E(O)		25	4.0	2*4.0
GRS-CQ10Pd/NhH-E(O)		25	4.0	2*4.0

Notes

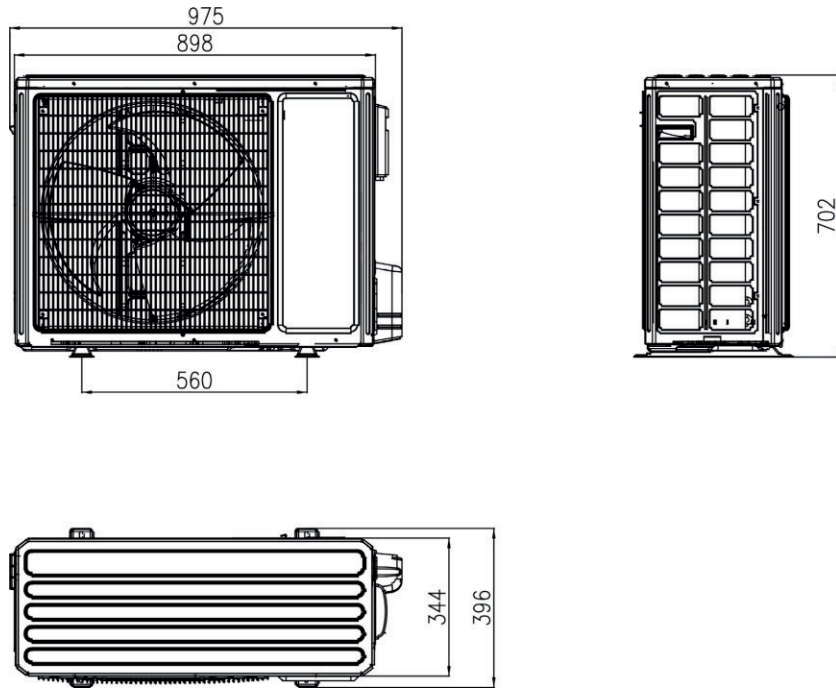
- ① Leakage Switch is necessary for additional installation. If circuit breakers with leakage protection are in use, action response time must be less than 0.1 second, leakage circuit must be 30mA.
- ② The above selected power cable diameters are determined based on assumption of distance from the distribution cabinet to the unit less than 75m. If cables are laid out in a distance of 75m to 150m, diameter of power cable must be increased to a further grade.
- ③ The power supply must be of rated voltage of the unit and special electrical line for air-conditioning.
- ④ All electrical installation shall be carried out by professional technicians in accordance with the local laws and regulations.
- ⑤ Ensure safe grounding and the grounding wire shall be connected with the special grounding equipment of the building and must be installed by professional technicians.
- ⑥ The specifications of the breaker and power cable listed in the table above are determined based on the maximum power (maximum amps) of the unit.
- ⑦ The specifications of the power cable listed in the table above are applied to the conduit-guarded multi-wire copper cable (like, YJV XLPE insulated power cable) used at 40°C

2 Outline Dimensions

- ◆ GRS-CQ4.0Pd/NhH-E(I), GRS-CQ6.0Pd/NhH-E(I), GRS-CQ8.0Pd/NhH-E(I), GRS-CQ10Pd/NhH-E(I)



- ◆ GRS-CQ4.0Pd/NhH-E(O), GRS-CQ6.0Pd/NhH-E(O)



◆ GRS-CQ8.0Pd/NhH-E(O),GRS-CQ10Pd/NhH-E(O)

