



## Product Data


### 1 Product Data


#### 1.1 Lineup

##### 1.1.1 Main Unit

Series	Model	Product Code	Cooling Capacity (kW)	Heating Capacity (kW)	Power Supply	Refrigerant	Appearance	
VERSATI III	GRS-CQ4.0Pd/ NhH-E	ER01001510	3.8	4	230VAC, 50Hz	R32		
	GRS-CQ6.0Pd/ NhH-E	ER01001500	5.8	6				
	GRS-CQ8.0Pd/ NhH-E	ER01001480	7	8				
	GRS-CQ8.0Pd/ NhH5-E	ER01002230	7	8				
	GRS-CQ10.0Pd/ NhH-E	ER01001750	8.5	9.5				
	GRS-CQ10.0Pd/ NhH5-E	ER01002200	8.5	9.5				
	GRS-CQ12Pd/ NhH-E	ER01002000	11	12				
	GRS-CQ14Pd/ NhH-E	ER01002020	12.6	14				
	GRS-CQ16Pd/ NhH-E	ER01002010	13	15.5				
	GRS-CQ8Pd/ NhH-M	ER01001810	8.5	8	400VAC, 50Hz			
	GRS-CQ10Pd/ NhH-M	ER01001840	10	10				
	GRS-CQ12Pd/ NhH-M	ER01001980	11	12				
	GRS-CQ14Pd/ NhH-M	ER01001990	12.6	14				
	GRS-CQ16Pd/ NhH-M	ER01002030	13	15.5				

##### 1.1.2 Water Tank

Model	Product Code	Nominal Cubage(L)	Appearance
SXTVD300LCJ2/A-K	ER20000350	300	

Model	Product Code	Nominal Cubage(L)	Appearance
SXTVD300LC/B-M	ER01002460	300	
SXTVD300LC/B-E	ER20000370		

## 1.2 Nomenclature

### 1.2.1 Main Unit

G	RS	-	C	Q	10	Pd	/	Nh	H	-	E	(O)
1	2		3	4	5	6		7	8		9	10

NO.	Description	Options
1	GREE	G-GREE Air to water heat pump
2	Heat Pump Water Heater	RS
3	Heating Mode	S= Static; C=Circulating
4	Function	Q=Multi-function; Omit=Single-function
5	Nominal Heating Capacity	6.0=6.0kW; 8.0=8.0kW;10=10kW;
6	Compressor Type	Pd=DC Inverter; Omit=On/Off
7	Refrigerant	Nh=R32
8	Design Serial Number	B,C,D.....
9	Power Supply	E=230V,~,50Hz
10	Indoor and Outdoor Unit Code	I=Indoor unit; O=Outdoor unit

### 1.2.2 Water Tank

SX	T	V	D	300	L	C	J2	/	A	-	K
1	2	3	4	5	6	7	8		9		10

NO.	Description	Options
1	Heat pump water tank	SX
2	Water tank material	Default- stainless steel; T- Enamel steel.
3	Tank Type	Default-Common heat pump water tank; V-Heat pump water tank for multi VRF system
4	Function Code	Default-No electric heating function; D-Electric heating function available
5	Nominal Water Tank Volume	200=200L,300=300L
6	Structure Type	B-Wall mounted type; L-Floor standing type
7	Bearing	Default-Non-bearing water tank; C-Bearing water tank
8	Type of Heat Exchange Tube	Default-No heat exchanger; J-Inner coil static heating(J-Single coil; J2-Double coils); JW-Outer coil static heating
9	Serial Number	A,B,C.....
10	Power Supply	K=220-240V,~,50Hz; M=380-415V,3N~,50Hz; H=380V,3N~,60Hz

## 1.5 Technical Data

### 1.5.1 Parameter List

GRS-CQ_Pd/NhH(5)-E			4.0	6.0	8.0	8.0(H5)	10	10 (H5)	
Product Code (ER010__)			01510	01500	01480	02230	01750	02200	
Capacity*1	Cooling (floor cooling)	kW	3.8	5.8	7.0	7.0	8.5	8.5	
	Heating (floor heating)	kW	4.0	6.0	8.0	8.0	9.5	9.5	
Power Input*1	Cooling (floor cooling)	kW	0.80	1.32	1.75	1.75	2.24	2.24	
	Heating (floor heating)	kW	0.78	1.20	1.70	1.70	2.07	2.07	
EER*1(floor cooling)		W/W	4.75	4.4	4.0	4.0	3.8	3.8	
COP*1(floor heating)		W/W	5.1	5.0	4.7	4.7	4.6	4.6	
Capacity*2	Cooling (for Fan coil)	kW	3.15	4.09	5.3	5.3	6.5	6.5	
	Heating (Fan coil or Radiator)	kW	4	5.9	8	8	9.5	9.5	
Power Input*2	Cooling (for Fan coil)	kW	0.92	1.28	1.73	1.73	2.27	2.27	
	Heating (Fan coil or Radiator)	kW	1.02	1.51	2.14	2.14	2.64	2.64	
EER*2(for Fan coil)		W/W	3.4	3.2	3.0	3.0	2.9	2.9	
COP*2(Fan coil or Radiator)		W/W	3.9	3.9	3.7	3.7	3.6	3.6	
Refrigerant charge volume		kg	1.0	1.0	1.6	1.6	1.6	1.6	
Sanitary water temperature		°C	40~80°C						

Model GRS-CQ_Pd/NhH-E			12	14	16
Product Code (ER010__)			02000	02020	02010
Capacity*1	Cooling (floor cooling)	kW	11	12.6	13
	Heating (floor heating)	kW	12	14	15.5
Power Input*1	Cooling (floor cooling)	kW	2.5	3.41	3.60
	Heating (floor heating)	kW	2.4	2.98	3.44
EER*1(floor cooling)		W/W	4.4	3.7	3.6
COP*1(floor heating)		W/W	5	4.7	4.5
Capacity*2	Cooling(for Fan coil)	kW	10.59	11.07	11.51
	Heating (Fan coil or Radiator)	kW	12.4	14.48	16.09
Power Input*2	Cooling(for Fan coil)	kW	3.79	4.18	4.49
	Heating (Fan coil or Radiator)	kW	3.29	3.93	4.44
EER*2(for Fan coil)		W/W	2.79	2.65	2.57
COP*2(Fan coil or Radiator)		W/W	3.77	3.68	3.62
Refrigerant charge volume		kg	1.84	1.84	1.84
Sanitary water Temperature		°C	40~80		

GRS-CQ_Pd/NhH-M			12	14	16	8.0	10
Product Code (ER010__)			01980	01990	02030	01810	01840
Capacity*1	Cooling (floor cooling)	kW	11	12.6	13	8.5	10
	Heating (floor heating)	kW	12	14	15.5	8	10
Power Input*1	Cooling (floor cooling)	kW	2.5	3.41	3.6	1.74	2.33
	Heating (floor heating)	kW	2.4	2.98	3.44	1.55	2.06
EER*1(floor cooling)		W/W	4.4	3.7	3.6	/	4.9
COP*1(floor heating)		W/W	5	4.7	4.51	/	5.2
Capacity*2	Cooling(for Fan coil)	kW	10.65	11.24	11.52	7.6	8.2
	Heating (Fan coil or Radiator)	kW	12.29	14.44	16.13	8.0	10.2
Power Input*2	Cooling(for Fan coil)	kW	3.74	4.13	4.38	1.52	1.91
	Heating (Fan coil or Radiator)	kW	3.09	3.63	4.16	1.92	2.55
EER*2(for Fan coil)		W/W	2.85	2.72	2.63	5.0	4.3
COP*2(Fan coil or Radiator)		W/W	3.98	3.98	3.88	4.16	4
Refrigerant charge volume		kg	1.84	1.84	1.84	1.84	1.84
Sanitary water Temperature		°C	40~80				

GRS-CQ_Pd/NhH-E(0)			4.0	6.0	8.0	10
Product Code (ER010__)			W1510	W1500	W1480	W1730
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

GRS-CQ_Pd/NhH-M(0)			12	14	16	12
Product Code (ER010__)			W2000	W2020	W2010	W1980
Sound Pressure Level	Cooling	dB(A)	68	68	68	68
	Heating	dB(A)	68	68	68	68
Dimensions (W×D×H)	Outline	mm	940×460×820	940×460×820	940×460×820	940×460×820
	Packaged	mm	1073×563×868	1073×563×868	1073×563×868	1073×563×868
Net weight/Gross weight		kg	58/67	58/67	58/67	58/67

GRS-CQ_Pd/NhH-M(0)			14	16	8.0	10
Product Code (ER010__)			W1990	W2030	W1810	W1840
Sound Pressure Level	Cooling	dB(A)	68	68	55	55
	Heating	dB(A)	68	68	55	55
Dimensions (W×D×H)	Outline	mm	940×460×820	940×460×820	982×395×787	982×395×787
	Packaged	mm	1073×563×868	1073×563×868	478×1097×937	478×1094×937
Net weight/Gross weight		kg	58/67	58/67	88/98	88/98

GRS-CQ_Pd/NhH(5)-E(I)			4.0	6.0	8.0	8.0(H5)	10	10(H5)	
Product Code (ER010__)			N1510	N1500	N1480	N2230	N1750	N2200	
Sound Pressure Level	Cooling	dB(A)	29	29	29	29	29	29	
	Heating	dB(A)	29	29	29	29	29	29	
Dimensions (W×D×H)	Outline	mm	460(W) 318(D) 860(H)	460(W) 318(D) 860(H)	460(W) 318(D) 860(H)	460(W) 318(D) 860(H)	460(W) 318(D) 860(H)	460(W) 318(D) 860(H)	
		Packaged	mm	565(W) 375(D) 113(H)	565(W) 375(D) 1130(H)	565(W) 375(D) 1130(H)	565(W) 375(D) 1130(H)	565(W) 375(D) 1130(H)	565(W) 375(D) 1130(H)
			kg	62/71	62/71	62/71	62/71	62/71	62/71

GRS-CQ_Pd/NhH-E(I)			12	14	16
Product Code (ER010__)			N2000	N2020	N2010
Sound Pressure Level	Cooling	dB(A)	42	42	42
	Heating	dB(A)	42	42	42
Dimensions (W×D×H)	Outline	mm	860×460×318	860×460×318	860×460×318
	Packaged	mm	568×1133×390	568×1133×390	568×1133×390
Net weight/Gross weight		kg	62/71	62/71	62/71

GRS-CQ_Pd/NhH-M(I)			8.0	10	12	14	16
Product Code (ER010__)			N1810	N1840	N1980	N1990	N2030
Sound Pressure Level	Cooling	dB(A)	42	42	42	42	42
	Heating	dB(A)	42	42	42	42	42
Dimensions (W×D×H)	Outline	mm	915×460×318	915×460×318	860×460×318	860×460×318	860×460×318
	Packaged	mm	568×1133×390	568×1133×390	568×1133×390	568×1133×390	568×1133×390
Net weight/Gross weight		kg	60/69	60/69	62/71	62/71	62/71

#### Notes

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

Cooling:

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

Heating:

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

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

Cooling:

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

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
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 Leakage	Leakage Switch	Minimum Sectional Area of Earth Wire	Minimum Sectional Area of Power Supply Wire
	V,Ph,Hz	(A)	(mm <sup>2</sup> )	(mm <sup>2</sup> )
GRS-CQ4.0Pd/NhH-E(O)	230VAC, 1Ph, 50Hz	16	1.5	1.5
GRS-CQ6.0Pd/NhH-E(O)		16	1.5	1.5
GRS-CQ4.0Pd/NhH-E(I)		20	6.0	6.0
GRS-CQ6.0Pd/NhH-E(I)		20	6.0	6.0
GRS-CQ8.0Pd/NhH-E(O)	230VAC, 1Ph, 50Hz	25	4.0	4.0
GRS-CQ10Pd/NhH-E(O)		25	4.0	4.0
GRS-CQ8.0Pd/NhH-E(I)		40	6.0	6.0
GRS-CQ8.0Pd/NhH5-E(I)		20	6.0	6.0
GRS-CQ10Pd/NhH-E(I)		40	6.0	6.0
GRS-CQ10Pd/NhH5-E(I)		20	6.0	6.0

Model	Power Supply Leakage	Leakage Switch	Minimum Sectional Area of Earth Wire	Minimum Sectional Area of Power Supply Wire
	V,Ph,Hz	(A)	(mm <sup>2</sup> )	(mm <sup>2</sup> )
GRS-CQ8.0Pd/NhH-M(O)	400V,3N~,50Hz	16	2.5	2.5
GRS-CQ10Pd/NhH-M(O)		16	2.5	2.5
GRS-CQ8.0Pd/NhH-M(I)		20	4.0	4.0
GRS-CQ10Pd/NhH-M(I)		20	4.0	4.0
GRS-CQ12Pd/NhH-M(O)		16	2.5	2.5
GRS-CQ14Pd/NhH-M(O)		16	2.5	2.5
GRS-CQ16Pd/NhH-M(O)		16	2.5	2.5
GRS-CQ12Pd/NhH-M(I)		20	4.0	4.0
GRS-CQ14Pd/NhH-M(I)		20	4.0	4.0
GRS-CQ16Pd/NhH-M(I)		20	4.0	4.0
GRS-CQ12Pd/NhH-E(O)		230VAC,1Ph,50Hz	32	6.0
GRS-CQ14Pd/NhH-E(O)	40		6.0	6.0
GRS-CQ16Pd/NhH-E(O)	40		6.0	6.0
GRS-CQ12Pd/NhH-E(I)	40		6.0	6.0
GRS-CQ14Pd/NhH-E(I)	40		6.0	6.0
GRS-CQ16Pd/NhH-E(I)	40		6.0	6.0

**Notes**

- (a) 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.
- (b) 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.
- (c) The power supply must be of rated voltage of the unit and special electrical line for air-conditioning.
- (d) All electrical installation shall be carried out by professional technicians in accordance with the local laws and regulations.
- (e) 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.
- (f) 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.
- (g) 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 and resistible to 90°C (see IEC 60364-5-52). If the working condition changes, they should be modified according to the related national standard.
- (h) The specifications of the breaker listed in the table above are applied to the breaker with the working temperature at 40°C. If the working condition changes, they should be modified according to the related national standard.
- (i) A circuit breaker must be added to the fixed line. The circuit breaker is all-pole disconnected and the breaking distance of the contact is at least 3mm.