Login

Summary of	VERSATI AIO G2 8-10kW	Reg. No.	041-K004-11
Certificate Holder			
Name	Gree Electric Appliances, Inc. of Zhuhai		
Address	West Jinji Rd	Zip	519070
City	Qianshan, Zhuhai, Guangdong	Country	China
Certification Body	BRE Global Limited		
Subtype title	VERSATI AIO G2 8-10kW		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.1 kg		
Certification Date	18.01.2022		
Testing basis	Heat Pump Keymark Scheme Rules Rev 09		

Model: GRS-CQ8.0PdG/NhH2-E

Configure model	
Model name	GRS-CQ8.0PdG/NhH2-E
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.00 kW	7.98 kW
El input	1.61 kW	2.60 kW
COP	4.97	3.06

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	181 %	129 %
Prated	7.00 kW	7.00 kW
SCOP	4.60	3.30
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.20 kW	6.30 kW
COP Tj = -7°C	2.94	2.24
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.90 kW	4.10 kW
COP Tj = +2°C	4.39	3.18
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	3.00 kW	4.30 kW
COP Tj = +7°C	6.29	4.26
Cdh Tj = +7 °C	0.950	0.970

Pdh Tj = 12°C	3.60 kW	5.00 kW
COP Tj = 12°C	8.43	5.93
Cdh Tj = +12 °C	0.940	0.970
Pdh Tj = Tbiv	6.20 kW	6.30 kW
COP Tj = Tbiv	2.94	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.90 kW	6.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.10 kW	0.70 kW
Annual energy consumption Qhe	3149 kWh	4371 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	217 %	159 %
Prated	8.00 kW	8.00 kW
SCOP	5.50	4.05
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.20 kW	8.10 kW
COP Tj = +2°C	3.58	2.52
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.40 kW	5.30 kW
COP Tj = +7°C	4.84	3.38
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.10 kW	5.20 kW
COP Tj = 12°C	7.08	5.42
Cdh Tj = +12 °C	0.960	0.970

Pdh Tj = Tbiv	8.20 kW	8.10 kW
COP Tj = Tbiv	3.58	2.52
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.20 kW	8.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.58	2.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1947 kWh	2645 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825

	Low temperature	**Medium temperature**
η_s	146 %	112 %
Prated	7.00 kW	7.00 kW
SCOP	3.72	2.87
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.50 kW	4.60 kW
COP Tj = -7°C	3.26	2.64
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	3.30 kW	3.30 kW
COP Tj = +2°C	4.26	3.24
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	4.30 kW	4.20 kW
COP Tj = +7°C	6.04	4.76
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.90 kW	4.70 kW
COP Tj = 12°C	7.26	5.86
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	5.80 kW	5.90 kW
COP Tj = Tbiv	2.63	1.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.50 kW	2.90 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.52	1.26
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.50 kW	4.10 kW
Annual energy consumption Qhe	4628 kWh	5982 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.90
COP Tj = -15°C (if TOL<-20°C)	2.63	1.77
Cdh Tj = -15 °C	0.990	0.990

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	123 %
COP	2.92
Heating up time	1:47 h:min
Standby power input	36.1 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	226 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	143 %
COP	3.40
Heating up time	1:33 h:min
Standby power input	30.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	226 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	94 %
COP	2.25
Heating up time	1:58 h:min
Standby power input	38.2 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	226 l

Model: GRS-CQ10PdG/NhH2-E

Configure model	
Model name	GRS-CQ10PdG/NhH2-E
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	10.00 kW	9.47 kW
El input	2.10 kW	3.12 kW
COP	4.76	3.04

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	181 %	127 %
Prated	9.00 kW	8.00 kW
SCOP	4.60	3.25
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.70 kW	6.90 kW
COP Tj = -7°C	2.87	2.12
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.80 kW	4.20 kW
COP Tj = +2°C	4.34	3.09
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.10 kW	4.30 kW
COP Tj = +7°C	6.58	4.34
Cdh Tj = +7 °C	0.950	0.970

Pdh Tj = 12°C	3.70 kW	4.90 kW
COP Tj = 12°C	8.37	5.91
Cdh Tj = +12 °C	0.940	0.970
Pdh Tj = Tbiv	7.70 kW	6.90 kW
COP Tj = Tbiv	2.87	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	1.20 kW
Annual energy consumption Qhe	4038 kWh	5091 kWh

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	217 %	161 %
Prated	9.00 kW	9.00 kW
SCOP	5.50	4.10
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.80 kW	9.00 kW
COP Tj = +2°C	3.15	2.48
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.80 kW	5.90 kW
COP Tj = +7°C	4.86	3.56
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.10 kW	5.20 kW
COP Tj = 12°C	7.18	5.30
Cdh Tj = +12 °C	0.960	0.970

Pdh Tj = Tbiv	8.80 kW	9.00 kW
COP Tj = Tbiv	3.15	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	2.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2183 kWh	2927 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825

	Low temperature	**Medium temperature**
η_s	149 %	110 %
Prated	8.00 kW	8.00 kW
SCOP	3.80	2.82
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.20 kW	5.30 kW
COP Tj = -7°C	3.25	2.42
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	3.20 kW	3.10 kW
COP Tj = +2°C	4.31	3.23
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	4.30 kW	4.20 kW
COP Tj = +7°C	6.11	4.78
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.90 kW	4.80 kW
COP Tj = 12°C	7.30	5.91
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	6.40 kW	6.70 kW
COP Tj = Tbiv	2.69	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.60 kW	3.30 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.67	1.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.40 kW	4.70 kW
Annual energy consumption Qhe	5201 kWh	6985 kWh
Pdh Tj = -15°C (if TOL<-20°C)	6.40	6.70
COP Tj = -15°C (if TOL<-20°C)	2.69	1.83
Cdh Tj = -15 °C	0.990	0.990

Domestic Hot Water (DHW)

Average Climate

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Declared load profile	L
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COP	2.92
Heating up time	1:47 h:min
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COP	3.40
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Reference hot water temperature	53.2 °C
Mixed water at 40°C	226 l

Colder Climate

EN 16147

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Reference hot water temperature	53.0 °C
Mixed water at 40°C	226 l