Subtype VERSATI AIO G2 4-6kW

Certificate Holder	Gree Electric Appliances, Inc. of Zhuhai
Address	West Jinji Rd
ZIP	519070
City	Qianshan, Zhuhai, Guangdong
Country	CN
Certification Body	BRE Global Limited
Subtype title	VERSATI AIO G2 4-6kW
Registration number	041-K004-10
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
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

Model GRS-CQ4.0PdG/NhH2-E	
Model name	GRS-CQ4.0PdG/NhH2-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	116 %
COP	2.76
Heating up time	3:54 h:min
Standby power input	34.8 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	226 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	91 %
COP	2.18
Heating up time	4:10 h:min
Standby power input	39.2 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	226 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	122 %
COP	2.92
Heating up time	3:39 h:min
Standby power input	31.9 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	228 l
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.00 kW	3.60 kW
El input	0.77 kW	1.31 kW
COP	5.19	2.75

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	184 %	128 %
Prated	5.00 kW	5.00 kW
SCOP	4.67	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.60 kW	4.00 kW
COP Tj = -7°C	3.23	2.03
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	2.90 kW	2.60 kW
COP Tj = +2°C	4.59	3.27
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	6.39	4.30
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.37	6.00
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	4.60 kW	4.00 kW
COP Tj = Tbiv	3.23	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.20 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.38
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	0.80 kW	1.20 kW
Annual energy consumption Qhe	2216 kWh	3152 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	145 %	95 %
Prated	4.00 kW	3.00 kW
SCOP	3.70	2.45
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.40 kW	1.90 kW
COP Tj = -7°C	2.68	1.72
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.30 kW	1.90 kW
COP Tj = +2°C	5.34	3.41
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = +7°C	2.70 kW	2.60 kW
COP Tj = +7°C	7.04	5.29
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	2.60 kW	2.90 kW
COP Tj = 12°C	6.90	6.71
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	3.10 kW	2.70 kW
COP Tj = Tbiv	2.06	1.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.19	1.35
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	1.27 kW	0.70 kW
Annual energy consumption Qhe	2662 kWh	3015 kWh
Pdh Tj = -15°C (if TOL	3.10	2.70

COP Tj = -15°C (if TOL	2.03	1.35
Cdh Tj = -15 °C	0.980	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	232 %	154 %
Prated	5.00 kW	4.00 kW
SCOP	5.87	3.92
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.80 kW	4.20 kW
COP Tj = +2°C	3.46	2.10
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.30 kW	2.60 kW
COP Tj = +7°C	5.57	3.40
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.90 kW	2.70 kW
COP Tj = 12°C	7.60	5.55
Cdh Tj = +12 °C	0.930	0.950
Pdh Tj = Tbiv	4.80 kW	4.20 kW
COP Tj = Tbiv	3.46	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.80 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.46	2.10
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	1137 kWh	1365 kWh

Model GRS-CQ6.0PdG/NhH2-E	
Model name	GRS-CQ6.0PdG/NhH2-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	116 %
COP	2.76
Heating up time	3:54 h:min
Standby power input	34.8 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	226 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	91 %
COP	2.18
Heating up time	4:10 h:min
Standby power input	39.2 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	226 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	122 %
COP	2.92
Heating up time	3:39 h:min
Standby power input	31.9 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	228 l
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

Defrost test	passed	
Starting and operating test	passed	

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	6.00 kW	5.61 kW
El input	1.23 kW	1.93 kW
COP	4.88	2.90

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	182 %	128 %
Prated	6.00 kW	5.00 kW
SCOP	4.62	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.30 kW	4.00 kW
COP Tj = -7°C	2.81	2.03
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.30 kW	2.60 kW
COP Tj = +2°C	4.68	3.27
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.60 kW	2.30 kW
COP Tj = +7°C	6.47	4.30
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.39	6.00
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	5.30 kW	4.00 kW
COP Tj = Tbiv	2.81	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.20 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.38
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	1.80 kW	1.20 kW
Annual energy consumption Qhe	2685 kWh	3152 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	145 %	104 %
Prated	4.00 kW	4.00 kW
SCOP	3.70	2.67
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.60 kW	2.40 kW
COP Tj = -7°C	2.69	1.83
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.30 kW	2.10 kW
COP Tj = +2°C	5.34	3.87
Cdh Tj = +2 °C	0.940	0.950
Pdh Tj = +7°C	2.70 kW	2.50 kW
COP Tj = +7°C	7.04	5.31
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	2.60 kW	2.90 kW
COP Tj = 12°C	6.90	6.73
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	3.40 kW	3.10 kW
COP Tj = Tbiv	1.98	1.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.70 kW	2.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.58	1.10
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	1.30 kW	1.70 kW
Annual energy consumption Qhe	2674 kWh	3701 kWh
Pdh Tj = -15°C (if TOL	3.40	3.10

COP Tj = -15°C (if TOL	1.98	1.38
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	232 %	160 %
Prated	5.00 kW	5.00 kW
SCOP	5.87	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.20 kW	5.10 kW
COP Tj = +2°C	3.53	2.14
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.30 kW	3.30 kW
COP Tj = +7°C	5.57	3.49
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.90 kW	2.70 kW
COP Tj = 12°C	7.60	5.67
Cdh Tj = +12 °C	0.930	0.950
Pdh Tj = Tbiv	5.20 kW	5.10 kW
COP Tj = Tbiv	3.53	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.20 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.53	2.14
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	1136 kWh	1643 kWh