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Summary of	VERSATI AIO G2 4-6kW	Reg. No.	041-K004-10	
Certificate Holder	<u> </u>	-		
Name	Gree Electric Appliances, Inc. of Zhuha	Gree Electric Appliances, Inc. of Zhuhai		
Address	West Jinji Rd	Zip	519070	
City	Qianshan, Zhuhai, Guangdong	Country	China	
Certification Body	BRE Global Limited	BRE Global Limited		
Subtype title	VERSATI AIO G2 4-6kW	VERSATI AIO G2 4-6kW		
Heat Pump Type	Outdoor Air/Water	Outdoor Air/Water		
Refrigerant	R32			
Mass of Refrigerant	1.1 kg	1.1 kg		
Certification Date	18.01.2022	18.01.2022		
Testing basis	Heat Pump Keymark Scheme Rules Rev 09			



# Model: GRS-CQ4.0PdG/NhH2-E

Configure model			
Model name	GRS-CQ4.0PdG/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	4.00 kW	3.60 kW		
El input	0.77 kW	1.31 kW		
СОР	5.19	2.75		

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



EN 12102-1			
	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			
	Low temperature	Medium temperature	
$\eta_{s}$	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	

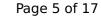




Pdh Tj = Tbiv	4.80 kW	4.20 kW
COP Tj = Tbiv	3.46	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.80 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.46	2.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	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

### Colder Climate

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





	Low temperature	Medium temperature
ης	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 = $-7^{\circ}$ C	2.40 kW	1.90 kW
COP Tj = $-7^{\circ}$ C	2.68	1.72
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = $+2$ °C	2.30 kW	1.90 kW
$COP Tj = +2^{\circ}C$	5.34	3.41
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	2.70 kW	2.60 kW
$COP Tj = +7^{\circ}C$	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
РТО	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	0.70 kW
Annual energy consumption Qhe	2662 kWh	3015 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.10	2.70
COP Tj = -15°C (if TOL $<$ -20°C)	2.03	1.35
Cdh Tj = -15 °C	0.980	0.990

# **Average Climate**

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





	Low temperature	Medium temperature
$\eta_{s}$	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
$COPTj = -7^{\circ}C$	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 = $+7^{\circ}$ C	2.60 kW	2.30 kW
$COP Tj = +7^{\circ}C$	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

# Domestic Hot Water (DHW)

EN 16147		
Declared load profile	L	
Efficiency ηDHW	122 %	
СОР	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 I	



### Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	91 %	
СОР	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	

# Average Climate

EN 16147		
Declared load profile	1	
Efficiency ηDHW	116 %	
СОР	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 I	



# Model: GRS-CQ6.0PdG/NhH2-E

Configure model		
Model name	GRS-CQ6.0PdG/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	6.00 kW	5.61 kW
El input	1.23 kW	1.93 kW
СОР	4.88	2.90

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



EN 12102-1		
	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		
	Low temperature	Medium temperature
$\eta_{s}$	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
$COP Tj = +2^{\circ}C$	3.53	2.14
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = $+7^{\circ}$ C	3.30 kW	3.30 kW
$COP Tj = +7^{\circ}C$	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





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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
РТО	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

### Colder Climate

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





	Low temperature	Medium temperature
$\eta_{s}$	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 = $-7^{\circ}$ C	2.69	1.83
Cdh Tj = -7 $^{\circ}$ 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
$COP Tj = +7^{\circ}C$	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

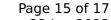




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.58	1.10
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	1.70 kW
Annual energy consumption Qhe	2674 kWh	3701 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.40	3.10
COP Tj = -15°C (if TOL $<$ -20°C)	1.98	1.38
Cdh Tj = -15 °C	0.990	0.990

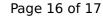
## **Average Climate**

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





<b>3</b>	Low temperature	Medium temperature
$\eta_{s}$	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
$COP Tj = +7^{\circ}C$	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
РТО	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

## Domestic Hot Water (DHW)

EN 16147		
Declared load profile	L	
Efficiency ηDHW	122 %	
СОР	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	



### Colder Climate

EN 16147		
Declared load profile		
	L	
Efficiency ηDHW	91 %	
СОР	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	

# Average Climate

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