Subtype Versati Split G3(1) 12/14/16kW	
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 Split G3(1) 12/14/16kW
Registration number	041-K004-28
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.84 kg
Certification Date	26.07.2024
Testing basis	Heat Pump KEYMARK certification Scheme rules v14
Testing laboratory	Intertek Testing Services Shenzhen LTD. Guangzhou Branch, CN

Model GRS-CQ12Pd/NhH3-E1+SXTVD300LC/B-E	
Model name	GRS-CQ12Pd/NhH3-E1+SXTVD300LC/B-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	XL
Efficiency ηDHW	110 %
COP	2.59
Heating up time	1:30 h:min
Standby power input	78.4 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	338 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	104 %
COP	2.46
Heating up time	1:48 h:min
Standby power input	82.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	335 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	120 %
COP	2.86
Heating up time	1:14 h:min
Standby power input	60.7 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	342 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	12.20 kW	12.00 kW
El input	2.40 kW	3.87 kW
COP	5.08	3.10

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	186 %	139 %
Prated	12.00 kW	12.00 kW
SCOP	4.73	3.55
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.56 kW	10.50 kW
COP Tj = -7°C	3.20	2.35
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.70 kW	6.82 kW
COP Tj = +2°C	4.49	3.53
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.11 kW	4.31 kW
COP Tj = +7°C	6.35	4.25
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.45 kW	4.67 kW
COP Tj = 12°C	7.38	6.05
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	10.56 kW	10.50 kW
COP Tj = Tbiv	3.20	2.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.94 kW	10.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.06 kW	1.95 kW
Annual energy consumption Qhe	5201 kWh	6882 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	166 %	121 %
Prated	11.00 kW	11.00 kW
SCOP	4.23	3.10
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.69 kW	6.53 kW
COP Tj = -7°C	3.41	2.49
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	4.20 kW	4.00 kW
COP Tj = +2°C	5.38	3.77
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	3.82 kW	3.73 kW
COP Tj = +7°C	5.62	4.34
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.61 kW	4.64 kW
COP Tj = 12°C	7.19	6.21
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	9.16 kW	8.97 kW
COP Tj = Tbiv	2.75	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	8.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.41
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	2.75 kW
Annual energy consumption Qhe	6517 kWh	8728 kWh
Pdh Tj = -15°C (if TOL	9.16	8.97
COP Tj = -15°C (if TOL	2.75	2.07
Cdh Tj = -15 °C		

EN 14825 | Warmer Climate

	Low temperature	Medium temperature

ηs	240 %	170 %
Prated	13.00 kW	13.00 kW
SCOP	6.08	4.33
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.85 kW	13.20 kW
COP Tj = +2°C	3.56	2.49
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	8.55 kW	8.40 kW
COP Tj = +7°C	5.54	3.90
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	4.45 kW	4.39 kW
COP Tj = 12°C	7.28	5.22
Cdh Tj = +12 °C	0.950	0.970
Pdh Tj = Tbiv	12.85 kW	13.20 kW
COP Tj = Tbiv	3.56	2.49
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.85 kW	13.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.56	2.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2825 kWh	4069 kWh

Model GRS-CQ12Pd/NhH3-M1+SXTVD300LC/B-M	
Model name	GRS-CQ12Pd/NhH3-M1+SXTVD300LC/B-M
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	3x400V 50Hz
Off-peak product	n/a
Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	110 %
COP	2.59
Heating up time	1:30 h:min
Standby power input	78.4 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	338 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	104 %
COP	2.46
Heating up time	1:48 h:min
Standby power input	82.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	335 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	120 %
COP	2.86
Heating up time	1:14 h:min
Standby power input	60.7 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	342 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	12.20 kW	12.00 kW
El input	2.42 kW	4.21 kW
COP	5.04	2.85

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	177 %	129 %
Prated	11.00 kW	11.00 kW
SCOP	4.50	3.30
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.14 kW	9.97 kW
COP Tj = -7°C	3.04	2.18
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.43 kW	6.48 kW
COP Tj = +2°C	4.27	3.29
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.94 kW	4.09 kW
COP Tj = +7°C	6.03	3.95
Cdh Tj = +7 °C	0.960	0.980
Pdh Tj = 12°C	4.27 kW	4.43 kW
COP Tj = 12°C	7.00	5.62
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	10.14 kW	9.97 kW
COP Tj = Tbiv	3.04	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.54 kW	9.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	1.92
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.46 kW	1.46 kW
Annual energy consumption Qhe	5252 kWh	7026 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	158 %	116 %
Prated	11.00 kW	11.00 kW
SCOP	4.03	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.36 kW	6.27 kW
COP Tj = -7°C	3.23	2.39
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.99 kW	3.84 kW
COP Tj = +2°C	5.11	3.62
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	3.63 kW	3.58 kW
COP Tj = +7°C	5.31	4.17
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.38 kW	4.46 kW
COP Tj = 12°C	6.83	5.96
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	8.70 kW	8.61 kW
COP Tj = Tbiv	2.61	1.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.92	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.64 kW	3.08 kW
Annual energy consumption Qhe	6519 kWh	8722 kWh
Pdh Tj = -15°C (if TOL	8.70	8.61
COP Tj = -15°C (if TOL	2.61	1.99
Cdh Tj = -15 °C		

EN 14825 | Warmer Climate

	Low temperature	Medium temperature

ηs	235 %	168 %
Prated	13.00 kW	13.00 kW
SCOP	5.95	4.28
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.60 kW	13.06 kW
COP Tj = +2°C	3.48	2.46
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	8.37 kW	8.28 kW
COP Tj = +7°C	5.43	3.85
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	4.36 kW	4.35 kW
COP Tj = 12°C	7.14	5.16
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	12.60 kW	13.06 kW
COP Tj = Tbiv	3.48	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.60 kW	13.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.48	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2825 kWh	4076 kWh

Model GRS-CQ14Pd/NhH3-E1+SXTVD300LC/B-E	
Model name	GRS-CQ14Pd/NhH3-E1+SXTVD300LC/B-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	XL
Efficiency ηDHW	110 %
COP	2.59
Heating up time	1:30 h:min
Standby power input	78.4 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	338 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	104 %
COP	2.46
Heating up time	1:48 h:min
Standby power input	82.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	335 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	120 %
COP	2.86
Heating up time	1:14 h:min
Standby power input	60.7 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	342 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	14.60 kW	14.00 kW
El input	3.01 kW	4.59 kW
COP	4.85	3.05

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	186 %	140 %
Prated	13.00 kW	13.00 kW
SCOP	4.73	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.57 kW	11.70 kW
COP Tj = -7°C	3.09	2.33
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	7.05 kW	6.82 kW
COP Tj = +2°C	4.51	3.53
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.65 kW	4.75 kW
COP Tj = +7°C	6.33	4.34
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.57 kW	4.64 kW
COP Tj = 12°C	7.65	6.30
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	11.57 kW	11.70 kW
COP Tj = Tbiv	3.09	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.04 kW	11.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.96 kW	1.83 kW
Annual energy consumption Qhe	5718 kWh	7620 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	169 %	121 %
Prated	12.00 kW	12.00 kW
SCOP	4.30	3.10
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.37 kW	7.29 kW
COP Tj = -7°C	3.45	2.45
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	4.54 kW	4.37 kW
COP Tj = +2°C	5.48	3.76
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	3.83 kW	3.74 kW
COP Tj = +7°C	5.81	4.54
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.62 kW	4.64 kW
COP Tj = 12°C	7.42	6.21
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	9.56 kW	9.77 kW
COP Tj = Tbiv	2.81	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	8.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.41
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.20 kW	3.75 kW
Annual energy consumption Qhe	6690 kWh	9511 kWh
Pdh Tj = -15°C (if TOL	9.56	9.77
COP Tj = -15°C (if TOL	2.81	2.10
Cdh Tj = -15 °C		

EN 14825 | Warmer Climate

	Low temperature	Medium temperature

ηs	242 %	172 %
Prated	14.00 kW	14.00 kW
SCOP	6.13	4.38
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.00 kW	14.16 kW
COP Tj = +2°C	3.60	2.45
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	9.70 kW	9.57 kW
COP Tj = +7°C	5.57	4.01
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	4.50 kW	4.38 kW
COP Tj = 12°C	7.32	5.23
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	14.00 kW	14.16 kW
COP Tj = Tbiv	3.60	2.45
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	14.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.60	2.45
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3054 kWh	4305 kWh

Model GRS-CQ14Pd/NhH3-M1+SXTVD300LC/B-M	
Model name	GRS-CQ14Pd/NhH3-M1+SXTVD300LC/B-M
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	3x400V 50Hz
Off-peak product	n/a
Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	110 %
COP	2.59
Heating up time	1:30 h:min
Standby power input	78.4 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	338 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	104 %
COP	2.46
Heating up time	1:48 h:min
Standby power input	82.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	335 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	120 %
COP	2.86
Heating up time	1:14 h:min
Standby power input	60.7 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	342 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	14.60 kW	14.00 kW
El input	3.04 kW	4.52 kW
COP	4.80	3.10

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	175 %	134 %
Prated	14.00 kW	14.00 kW
SCOP	4.45	3.43
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.46 kW	11.95 kW
COP Tj = -7°C	3.06	2.37
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	7.67 kW	6.88 kW
COP Tj = +2°C	4.32	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.86 kW	4.65 kW
COP Tj = +7°C	5.61	4.02
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	4.28 kW	4.51 kW
COP Tj = 12°C	6.45	5.50
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	12.46 kW	11.95 kW
COP Tj = Tbiv	3.06	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.34 kW	11.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.66 kW	2.83 kW
Annual energy consumption Qhe	6533 kWh	8147 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	153 %	134 %
Prated	12.00 kW	13.00 kW
SCOP	3.90	3.43
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.02 kW	7.74 kW
COP Tj = -7°C	3.42	2.92
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.74 kW	4.90 kW
COP Tj = +2°C	4.56	3.98
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.61 kW	3.76 kW
COP Tj = +7°C	4.92	4.78
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	4.42 kW	4.64 kW
COP Tj = 12°C	6.39	5.67
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	10.15 kW	10.55 kW
COP Tj = Tbiv	2.68	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.02 kW	10.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.15	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.98 kW	2.21 kW
Annual energy consumption Qhe	7822 kWh	9300 kWh
Pdh Tj = -15°C (if TOL	10.15	10.55
COP Tj = -15°C (if TOL	2.68	2.29
Cdh Tj = -15 °C		

EN 14825 | Warmer Climate

	Low temperature	Medium temperature

ηs	233 %	171 %
Prated	14.00 kW	14.00 kW
SCOP	5.90	4.35
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.11 kW	14.10 kW
COP Tj = +2°C	3.54	2.43
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	9.22 kW	9.20 kW
COP Tj = +7°C	5.37	3.78
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.27 kW	4.36 kW
COP Tj = 12°C	7.04	5.45
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	14.11 kW	14.10 kW
COP Tj = Tbiv	3.54	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.11 kW	14.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.54	2.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3182 kWh	4317 kWh

Model GRS-CQ16Pd/NhH3-E1+SXTVD300LC/B-E	
Model name	GRS-CQ16Pd/NhH3-E1+SXTVD300LC/B-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	XL
Efficiency ηDHW	110 %
COP	2.59
Heating up time	1:30 h:min
Standby power input	78.4 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	338 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	104 %
COP	2.46
Heating up time	1:48 h:min
Standby power input	82.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	335 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	120 %
COP	2.86
Heating up time	1:14 h:min
Standby power input	60.7 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	342 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	16.00 kW	15.70 kW
El input	3.52 kW	5.23 kW
COP	4.55	3.00

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	182 %	140 %
Prated	14.00 kW	14.00 kW
SCOP	4.63	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.58 kW	12.24 kW
COP Tj = -7°C	3.05	2.30
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	7.45 kW	6.82 kW
COP Tj = +2°C	4.39	3.53
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.65 kW	4.75 kW
COP Tj = +7°C	6.33	4.34
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.57 kW	4.64 kW
COP Tj = 12°C	7.65	6.30
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	12.58 kW	12.24 kW
COP Tj = Tbiv	3.05	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.04 kW	11.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.96 kW	2.83 kW
Annual energy consumption Qhe	6330 kWh	8001 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	164 %	118 %
Prated	13.00 kW	13.00 kW
SCOP	4.18	3.03
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.99 kW	7.29 kW
COP Tj = -7°C	3.31	2.45
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.95 kW	4.83 kW
COP Tj = +2°C	5.31	3.61
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	3.83 kW	3.74 kW
COP Tj = +7°C	5.81	4.54
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.62 kW	4.64 kW
COP Tj = 12°C	7.42	6.23
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	10.66 kW	10.45 kW
COP Tj = Tbiv	2.74	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	8.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.41
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.20 kW	4.75 kW
Annual energy consumption Qhe	7697 kWh	10405 kWh
Pdh Tj = -15°C (if TOL	10.66	10.45
COP Tj = -15°C (if TOL	2.74	2.03
Cdh Tj = -15 °C		

EN 14825 | Warmer Climate

	Low temperature	Medium temperature

ηs	248 %	172 %
Prated	15.00 kW	14.00 kW
SCOP	6.28	4.38
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.01 kW	14.16 kW
COP Tj = +2°C	3.59	2.45
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	9.70 kW	9.57 kW
COP Tj = +7°C	5.57	4.01
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	4.58 kW	4.38 kW
COP Tj = 12°C	7.69	5.23
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	15.01 kW	14.16 kW
COP Tj = Tbiv	3.59	2.45
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.01 kW	14.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.59	2.45
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3189 kWh	4305 kWh

Model GRS-CQ16Pd/NhH3-M1+SXTVD300LC/B-M	
Model name	GRS-CQ16Pd/NhH3-M1+SXTVD300LC/B-M
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	3x400V 50Hz
Off-peak product	n/a
Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	110 %
COP	2.59
Heating up time	1:30 h:min
Standby power input	78.4 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	338 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	104 %
COP	2.46
Heating up time	1:48 h:min
Standby power input	82.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	335 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	120 %
COP	2.86
Heating up time	1:14 h:min
Standby power input	60.7 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	342 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	16.00 kW	16.00 kW
El input	3.48 kW	5.33 kW
COP	4.60	3.00

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	175 %	134 %
Prated	14.00 kW	14.00 kW
SCOP	4.45	3.43
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.46 kW	11.95 kW
COP Tj = -7°C	3.06	2.37
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	7.67 kW	6.88 kW
COP Tj = +2°C	4.32	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.86 kW	4.65 kW
COP Tj = +7°C	5.61	4.02
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	4.28 kW	4.51 kW
COP Tj = 12°C	6.45	5.50
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	12.46 kW	11.95 kW
COP Tj = Tbiv	3.06	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.34 kW	11.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.66 kW	2.83 kW
Annual energy consumption Qhe	6533 kWh	8147 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	153 %	134 %
Prated	12.00 kW	13.00 kW
SCOP	3.90	3.43
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.02 kW	7.74 kW
COP Tj = -7°C	3.42	2.92
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.74 kW	4.90 kW
COP Tj = +2°C	4.56	3.98
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.61 kW	3.76 kW
COP Tj = +7°C	4.92	4.78
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	4.42 kW	4.64 kW
COP Tj = 12°C	6.39	5.67
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	10.15 kW	10.55 kW
COP Tj = Tbiv	2.68	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.02 kW	10.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.15	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.98 kW	2.21 kW
Annual energy consumption Qhe	7822 kWh	9300 kWh
Pdh Tj = -15°C (if TOL	10.15	10.55
COP Tj = -15°C (if TOL	2.68	2.29
Cdh Tj = -15 °C		

EN 14825 | Warmer Climate

	Low temperature	Medium temperature

ηs	233 %	171 %
Prated	14.00 kW	14.00 kW
SCOP	5.90	4.35
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.11 kW	14.10 kW
COP Tj = +2°C	3.54	2.43
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	9.22 kW	9.20 kW
COP Tj = +7°C	5.37	3.78
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.27 kW	4.36 kW
COP Tj = 12°C	7.04	5.45
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	14.11 kW	14.10 kW
COP Tj = Tbiv	3.54	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.11 kW	14.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.54	2.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3182 kWh	4317 kWh