Subtype Versati split G1 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 G1 16kW
Registration number	041-K004-19
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.84 kg
Certification Date	11.11.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09
Testing laboratory	SGS-CSTC Standards Technical Services Co., Ltd. Shunde Branch, CN

Model GRS-CQ16Pd/NhH-M+SXTVD300LC/B-M	
Model name	GRS-CQ16Pd/NhH-M+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	108 %
COP	2.58
Heating up time	1:28 h:min
Standby power input	67.1 W
Reference hot water temperature	52 °C
Mixed water at 40°C	336 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	85 %
COP	2.05
Heating up time	1:54 h:min
Standby power input	70 W
Reference hot water temperature	52 °C
Mixed water at 40°C	333 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	115 %
COP	2.73
Heating up time	1:28 h:min
Standby power input	68.2 W
Reference hot water temperature	52 °C
Mixed water at 40°C	332 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	15.5 kW	16 kW
El input	3.44 kW	5.52 kW
COP	4.51	2.9

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	175 %	131 %
Prated	13 kW	13 kW
SCOP	4.45	3.35
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.6 kW
COP Tj = -7°C	2.68	1.96
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	6.5 kW	7.3 kW
COP Tj = +2°C	4.35	3.33
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	4.2 kW	4.2 kW
COP Tj = +7°C	6.05	4.48
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	3.3 kW	3.1 kW
COP Tj = 12°C	7.34	5.65
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	11.1 kW	11.6 kW
COP Tj = Tbiv	2.68	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.7 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	1.81
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	2.3 kW	2 kW
Annual energy consumption Qhe	6027 kWh	7958 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	156 %	119 %
Prated	12 kW	13 kW
SCOP	3.98	3.05
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.6 kW	8.6 kW
COP Tj = -7°C	3.29	2.63
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.5 kW	4.7 kW
COP Tj = +2°C	4.85	3.69
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.8 kW	3 kW
COP Tj = +7°C	5.83	4.58
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	3.4 kW	3.2 kW
COP Tj = 12°C	7.17	5.97
Cdh Tj = +12 °C	0.95	0.95
Pdh Tj = Tbiv	10.1 kW	10.5 kW
COP Tj = Tbiv	2.57	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.8 kW	4 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.75	1.08
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	4.2 kW	9 kW
Annual energy consumption Qhe	7442 kWh	10476 kWh
Pdh Tj = -15°C (if TOL	10.1	10.5
COP Tj = -15°C (if TOL	2.57	1.83

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	236 %	171 %
Prated	13 kW	14 kW
SCOP	5.98	4.35
Tbiv	2 °C	2 °C

TOL	2 °C	2 °C
Pdh Tj = +2°C	13 kW	13.7 kW
COP Tj = +2°C	3	2.29
Cdh Tj = +2 °C	0.99	1
Pdh Tj = +7°C	8.1 kW	9.3 kW
COP Tj = +7°C	5.14	3.59
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.7 kW	4.2 kW
COP Tj = 12°C	7.84	5.84
Cdh Tj = +12 °C	0.95	0.97
Pdh Tj = Tbiv	13 kW	13.7 kW
COP Tj = Tbiv	3	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13 kW	13.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3	2.29
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 kW	0 kW
Annual energy consumption Qhe	2903 kWh	4292 kWh

Model GRS-CQ16Pd/NhH-E+SXTVD300LC/B-E	
Model name	GRS-CQ16Pd/NhH-E+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	105 %
COP	2.52
Heating up time	1:28 h:min
Standby power input	67.1 W
Reference hot water temperature	52 °C
Mixed water at 40°C	336 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	84 %
COP	2.04
Heating up time	1:54 h:min
Standby power input	70 W
Reference hot water temperature	52 °C
Mixed water at 40°C	333 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	108 %
COP	2.59
Heating up time	1:28 h:min
Standby power input	68.2 W
Reference hot water temperature	52 °C
Mixed water at 40°C	332 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	15.5 kW	16 kW
El input	3.44 kW	5.42 kW
COP	4.51	2.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	181 %	137 %
Prated	13 kW	13 kW
SCOP	4.6	3.5
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.6 kW	12 kW
COP Tj = -7°C	2.76	2.23
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	6.5 kW	7.2 kW
COP Tj = +2°C	4.4	3.33
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	4.5 kW	4.5 kW
COP Tj = +7°C	6.63	4.72
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	3.3 kW	3.1 kW
COP Tj = 12°C	7.34	5.65
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	11.6 kW	12 kW
COP Tj = Tbiv	2.76	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.7 kW	11.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2
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	2.3 kW	1.2 kW
Annual energy consumption Qhe	5886 kWh	8045 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	165 %	122 %
Prated	12 kW	13 kW
SCOP	4.2	3.13
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.6 kW	8.3 kW
COP Tj = -7°C	3.33	2.62
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	5.1 kW
COP Tj = +2°C	5.49	3.84
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.8 kW	3 kW
COP Tj = +7°C	5.83	4.58
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	3.2 kW	3.2 kW
COP Tj = 12°C	7.02	5.97
Cdh Tj = +12 °C	0.95	0.95
Pdh Tj = Tbiv	9.5 kW	11 kW
COP Tj = Tbiv	2.64	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.8 kW	4 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.83	1.08
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	4.2 kW	9 kW
Annual energy consumption Qhe	6908 kWh	10672 kWh
Pdh Tj = -15°C (if TOL	9.5	11
COP Tj = -15°C (if TOL	2.64	2.05

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	266 %	178 %
Prated	13 kW	14 kW
SCOP	6.73	4.53
Tbiv	2 °C	2 °C

TOL	2 °C	2 °C
Pdh Tj = +2°C	13.1 kW	13.7 kW
COP Tj = +2°C	3.19	2.32
Cdh Tj = +2 °C	0.99	1
Pdh Tj = +7°C	8.4 kW	8.9 kW
COP Tj = +7°C	5.6	3.65
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.7 kW	4 kW
COP Tj = 12°C	9.24	6.3
Cdh Tj = +12 °C	0.94	0.96
Pdh Tj = Tbiv	13.1 kW	13.7 kW
COP Tj = Tbiv	3.19	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.1 kW	13.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.19	2.32
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 kW	0 kW
Annual energy consumption Qhe	2610 kWh	4055 kWh

Model GRS-CQ16Pd/NhH-M	
Model name	GRS-CQ16Pd/NhH-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	108 %
COP	2.58
Heating up time	1:28 h:min
Standby power input	67.1 W
Reference hot water temperature	52 °C
Mixed water at 40°C	336 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	85 %
COP	2.05
Heating up time	1:54 h:min
Standby power input	70 W
Reference hot water temperature	52 °C
Mixed water at 40°C	333 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	115 %
COP	2.73
Heating up time	1:28 h:min
Standby power input	68.2 W
Reference hot water temperature	52 °C
Mixed water at 40°C	332 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	15.5 kW	16 kW
El input	3.44 kW	5.52 kW
COP	4.51	2.9

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	175 %	131 %
Prated	13 kW	13 kW
SCOP	4.45	3.35
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.6 kW
COP Tj = -7°C	2.68	1.96
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	6.5 kW	7.3 kW
COP Tj = +2°C	4.35	3.33
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	4.2 kW	4.2 kW
COP Tj = +7°C	6.05	4.48
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	3.3 kW	3.1 kW
COP Tj = 12°C	7.34	5.65
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	11.1 kW	11.6 kW
COP Tj = Tbiv	2.68	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.7 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	1.81
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	2.3 kW	2 kW
Annual energy consumption Qhe	6027 kWh	7958 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	156 %	119 %
Prated	12 kW	13 kW
SCOP	3.98	3.05
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	6.6 kW	8.6 kW
COP Tj = -7°C	3.29	2.63
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.5 kW	4.7 kW
COP Tj = +2°C	4.85	3.69
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	2.8 kW	3 kW
COP Tj = +7°C	5.83	4.58
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	3.4 kW	3.2 kW
COP Tj = 12°C	7.17	5.97
Cdh Tj = +12 °C	0.95	0.95
Pdh Tj = Tbiv	10.1 kW	10.5 kW
COP Tj = Tbiv	2.57	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.8 kW	4 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.75	1.08
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	4.2 kW	9 kW
Annual energy consumption Qhe	7442 kWh	10476 kWh
Pdh Tj = -15°C (if TOL	10.1	10.5
COP Tj = -15°C (if TOL	2.57	1.83

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	236 %	171 %
Prated	13 kW	14 kW
SCOP	5.98	4.35
Tbiv	2 °C	2 °C

TOL	2 °C	2 °C
Pdh Tj = +2°C	13 kW	13.7 kW
COP Tj = +2°C	3	2.29
Cdh Tj = +2 °C	0.99	1
Pdh Tj = +7°C	8.1 kW	9.3 kW
COP Tj = +7°C	5.14	3.59
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.7 kW	4.2 kW
COP Tj = 12°C	7.84	5.84
Cdh Tj = +12 °C	0.95	0.97
Pdh Tj = Tbiv	13 kW	13.7 kW
COP Tj = Tbiv	3	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13 kW	13.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3	2.29
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 kW	0 kW
Annual energy consumption Qhe	2903 kWh	4292 kWh