

## Subtype Versati monobloc G3/G4 8k E1

|                     |                                          |
|---------------------|------------------------------------------|
| 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 monobloc G3/G4 8k E1             |
| Registration number | 041-K004-22                              |
| Heat Pump Type      | Outdoor Air/Water                        |
| Refrigerant         | R32                                      |
| Mass of Refrigerant | 1.23 kg                                  |
| Certification Date  | 08.12.2023                               |
| Testing basis       | Heat Pump Keymark Scheme Rules Rev 12    |

## Model GRS-CQ8.0Pd/NhG3-E1+SXTVD300LC/B-E

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Model name                          | GRS-CQ8.0Pd/NhG3-E1+SXTVD300LC/B-E |
| Application                         | Heating + DHW + low temp           |
| Units                               | Outdoor                            |
| Climate zone (for heating)          | 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 $\eta_{DHW}$         | 117 %      |
| COP                             | 2.77       |
| Heating up time                 | 2:54 h:min |
| Standby power input             | 64.5 W     |
| Reference hot water temperature | 51.4 °C    |
| Mixed water at 40°C             | 354 l      |

## EN 16147 | Colder Climate

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | XL         |
| Efficiency $\eta_{DHW}$         | 94 %       |
| COP                             | 2.24       |
| Heating up time                 | 3:42 h:min |
| Standby power input             | 78.5 W     |
| Reference hot water temperature | 50.7 °C    |
| Mixed water at 40°C             | 312 l      |

## EN 16147 | Warmer Climate

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | XL         |
| Efficiency $\eta_{DHW}$         | 130 %      |
| COP                             | 3.10       |
| Heating up time                 | 2:25 h:min |
| Standby power input             | 58.9 W     |
| Reference hot water temperature | 52.4 °C    |
| Mixed water at 40°C             | 345 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 | 8.00 kW         | 7.80 kW            |
| El input    | 1.63 kW         | 2.56 kW            |
| COP         | 4.90            | 3.05               |

#### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 64 dB(A)        | 64 dB(A)           |

#### EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 184 %           | 145 %              |
| Prated                                              | 7.00 kW         | 7.00 kW            |
| SCOP                                                | 4.68            | 3.70               |
| Tbiv                                                | -7 °C           | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 5.99 kW         | 6.33 kW            |
| COP Tj = -7°C                                       | 3.15            | 2.27               |
| Cdh Tj = -7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +2°C                                       | 3.96 kW         | 3.92 kW            |
| COP Tj = +2°C                                       | 4.31            | 3.45               |
| Cdh Tj = +2 °C                                      | 0.970           | 0.980              |
| Pdh Tj = +7°C                                       | 2.22 kW         | 2.46 kW            |
| COP Tj = +7°C                                       | 6.61            | 5.30               |
| Cdh Tj = +7 °C                                      | 0.930           | 0.950              |
| Pdh Tj = 12°C                                       | 1.96 kW         | 1.82 kW            |
| COP Tj = 12°C                                       | 7.84            | 6.70               |
| Cdh Tj = +12 °C                                     | 0.900           | 0.910              |
| Pdh Tj = Tbiv                                       | 5.99 kW         | 6.33 kW            |
| COP Tj = Tbiv                                       | 3.15            | 2.27               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.49 kW         | 6.54 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.85            | 1.98               |
| 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                                                 | 25 W            | 25 W               |

|                                            |             |             |
|--------------------------------------------|-------------|-------------|
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP                 | 0.51 kW     | 0.46 kW     |
| Annual energy consumption Q <sub>he</sub>  | 2979 kWh    | 3996 kWh    |

#### EN 14825 | Colder Climate

|                                                                                                                             | Low temperature | Medium temperature |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                                                                                                    | 160 %           | 116 %              |
| Prated                                                                                                                      | 7.00 kW         | 7.00 kW            |
| SCOP                                                                                                                        | 4.08            | 2.98               |
| T <sub>biv</sub>                                                                                                            | -15 °C          | -15 °C             |
| TOL                                                                                                                         | -22 °C          | -22 °C             |
| P <sub>dh</sub> T <sub>j</sub> = -7°C                                                                                       | 3.99 kW         | 4.34 kW            |
| COP T <sub>j</sub> = -7°C                                                                                                   | 3.41            | 2.45               |
| C <sub>dh</sub> T <sub>j</sub> = -7 °C                                                                                      | 0.980           | 0.990              |
| P <sub>dh</sub> T <sub>j</sub> = +2°C                                                                                       | 2.63 kW         | 2.63 kW            |
| COP T <sub>j</sub> = +2°C                                                                                                   | 4.93            | 3.61               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C                                                                                      | 0.950           | 0.970              |
| P <sub>dh</sub> T <sub>j</sub> = +7°C                                                                                       | 1.75 kW         | 1.63 kW            |
| COP T <sub>j</sub> = +7°C                                                                                                   | 5.90            | 4.09               |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C                                                                                      | 0.920           | 0.940              |
| P <sub>dh</sub> T <sub>j</sub> = 12°C                                                                                       | 1.95 kW         | 2.03 kW            |
| COP T <sub>j</sub> = 12°C                                                                                                   | 7.24            | 5.83               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C                                                                                     | 0.910           | 0.930              |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>                                                                           | 5.34 kW         | 5.57 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>                                                                                       | 2.75            | 2.00               |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 4.53 kW         | 5.20 kW            |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 2.09            | 1.22               |
| C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> |                 |                    |
| WTOL                                                                                                                        | 65 °C           | 65 °C              |
| P <sub>off</sub>                                                                                                            | 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                                                                                                  | 2.47 kW         | 1.80 kW            |
| Annual energy consumption Q <sub>he</sub>                                                                                   | 3937 kWh        | 5624 kWh           |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL                                                                              | 5.34            | 5.57               |
| COP T <sub>j</sub> = -15°C (if TOL                                                                                          | 2.75            | 2.00               |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C                                                                                     |                 |                    |

#### EN 14825 | Warmer Climate

|  | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

|                                                     |             |             |
|-----------------------------------------------------|-------------|-------------|
| $\eta_s$                                            | 249 %       | 156 %       |
| Prated                                              | 7.00 kW     | 8.00 kW     |
| SCOP                                                | 6.30        | 3.98        |
| Tbiv                                                | 2 °C        | 2 °C        |
| TOL                                                 | 2 °C        | 2 °C        |
| Pdh Tj = +2°C                                       | 6.70 kW     | 7.60 kW     |
| COP Tj = +2°C                                       | 3.34        | 2.42        |
| Cdh Tj = +2 °C                                      | 0.990       | 0.990       |
| Pdh Tj = +7°C                                       | 4.95 kW     | 4.85 kW     |
| COP Tj = +7°C                                       | 5.82        | 3.50        |
| Cdh Tj = +7 °C                                      | 0.970       | 0.980       |
| Pdh Tj = 12°C                                       | 2.26 kW     | 2.10 kW     |
| COP Tj = 12°C                                       | 8.03        | 4.92        |
| Cdh Tj = +12 °C                                     | 0.910       | 0.940       |
| Pdh Tj = Tbiv                                       | 6.70 kW     | 7.60 kW     |
| COP Tj = Tbiv                                       | 3.34        | 2.42        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.70 kW     | 7.60 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.34        | 2.42        |
| 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                                                 | 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                       | 1420 kWh    | 2553 kWh    |

## Model GRS-CQ8.0Pd/NhG4-E1+SXTVD300LC/B-E

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Model name                          | GRS-CQ8.0Pd/NhG4-E1+SXTVD300LC/B-E |
| Application                         | Heating + DHW + low temp           |
| Units                               | Outdoor                            |
| Climate zone (for heating)          | 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 $\eta_{DHW}$         | 117 %      |
| COP                             | 2.77       |
| Heating up time                 | 2:54 h:min |
| Standby power input             | 64.5 W     |
| Reference hot water temperature | 51.4 °C    |
| Mixed water at 40°C             | 354 l      |

### EN 16147 | Colder Climate

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | XL         |
| Efficiency $\eta_{DHW}$         | 94 %       |
| COP                             | 2.24       |
| Heating up time                 | 3:42 h:min |
| Standby power input             | 78.5 W     |
| Reference hot water temperature | 50.7 °C    |
| Mixed water at 40°C             | 312 l      |

### EN 16147 | Warmer Climate

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | XL         |
| Efficiency $\eta_{DHW}$         | 130 %      |
| COP                             | 3.10       |
| Heating up time                 | 2:25 h:min |
| Standby power input             | 58.9 W     |
| Reference hot water temperature | 52.4 °C    |
| Mixed water at 40°C             | 345 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 | 8.00 kW         | 7.80 kW            |
| El input    | 1.63 kW         | 2.56 kW            |
| COP         | 4.90            | 3.05               |

#### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 64 dB(A)        | 64 dB(A)           |

#### EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 184 %           | 145 %              |
| Prated                                              | 7.00 kW         | 7.00 kW            |
| SCOP                                                | 4.68            | 3.70               |
| Tbiv                                                | -7 °C           | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 5.99 kW         | 6.33 kW            |
| COP Tj = -7°C                                       | 3.15            | 2.27               |
| Cdh Tj = -7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +2°C                                       | 3.96 kW         | 3.92 kW            |
| COP Tj = +2°C                                       | 4.31            | 3.45               |
| Cdh Tj = +2 °C                                      | 0.970           | 0.980              |
| Pdh Tj = +7°C                                       | 2.22 kW         | 2.46 kW            |
| COP Tj = +7°C                                       | 6.61            | 5.30               |
| Cdh Tj = +7 °C                                      | 0.930           | 0.950              |
| Pdh Tj = 12°C                                       | 1.96 kW         | 1.82 kW            |
| COP Tj = 12°C                                       | 7.84            | 6.70               |
| Cdh Tj = +12 °C                                     | 0.900           | 0.910              |
| Pdh Tj = Tbiv                                       | 5.99 kW         | 6.33 kW            |
| COP Tj = Tbiv                                       | 3.15            | 2.27               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.49 kW         | 6.54 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.85            | 1.98               |
| 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                                                 | 25 W            | 25 W               |

|                                            |             |             |
|--------------------------------------------|-------------|-------------|
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP                 | 0.51 kW     | 0.46 kW     |
| Annual energy consumption Q <sub>he</sub>  | 2979 kWh    | 3996 kWh    |

#### EN 14825 | Colder Climate

|                                                                                                                             | Low temperature | Medium temperature |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                                                                                                    | 160 %           | 116 %              |
| Prated                                                                                                                      | 7.00 kW         | 7.00 kW            |
| SCOP                                                                                                                        | 4.08            | 2.98               |
| T <sub>biv</sub>                                                                                                            | -15 °C          | -15 °C             |
| TOL                                                                                                                         | -22 °C          | -22 °C             |
| P <sub>dh</sub> T <sub>j</sub> = -7°C                                                                                       | 3.99 kW         | 4.34 kW            |
| COP T <sub>j</sub> = -7°C                                                                                                   | 3.41            | 2.45               |
| C <sub>dh</sub> T <sub>j</sub> = -7 °C                                                                                      | 0.980           | 0.990              |
| P <sub>dh</sub> T <sub>j</sub> = +2°C                                                                                       | 2.63 kW         | 2.63 kW            |
| COP T <sub>j</sub> = +2°C                                                                                                   | 4.93            | 3.61               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C                                                                                      | 0.950           | 0.970              |
| P <sub>dh</sub> T <sub>j</sub> = +7°C                                                                                       | 1.75 kW         | 1.63 kW            |
| COP T <sub>j</sub> = +7°C                                                                                                   | 5.90            | 4.09               |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C                                                                                      | 0.920           | 0.940              |
| P <sub>dh</sub> T <sub>j</sub> = 12°C                                                                                       | 1.95 kW         | 2.03 kW            |
| COP T <sub>j</sub> = 12°C                                                                                                   | 7.24            | 5.83               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C                                                                                     | 0.910           | 0.930              |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>                                                                           | 5.34 kW         | 5.57 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>                                                                                       | 2.75            | 2.00               |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 4.53 kW         | 5.20 kW            |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 2.09            | 1.22               |
| C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> |                 |                    |
| WTOL                                                                                                                        | 65 °C           | 65 °C              |
| P <sub>off</sub>                                                                                                            | 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                                                                                                  | 2.47 kW         | 1.80 kW            |
| Annual energy consumption Q <sub>he</sub>                                                                                   | 3937 kWh        | 5624 kWh           |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL                                                                              | 5.34            | 5.57               |
| COP T <sub>j</sub> = -15°C (if TOL                                                                                          | 2.75            | 2.00               |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C                                                                                     |                 |                    |

#### EN 14825 | Warmer Climate

|  | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

|                                                     |             |             |
|-----------------------------------------------------|-------------|-------------|
| $\eta_s$                                            | 249 %       | 156 %       |
| Prated                                              | 7.00 kW     | 8.00 kW     |
| SCOP                                                | 6.30        | 3.98        |
| Tbiv                                                | 2 °C        | 2 °C        |
| TOL                                                 | 2 °C        | 2 °C        |
| Pdh Tj = +2°C                                       | 6.70 kW     | 7.60 kW     |
| COP Tj = +2°C                                       | 3.34        | 2.42        |
| Cdh Tj = +2 °C                                      | 0.990       | 0.990       |
| Pdh Tj = +7°C                                       | 4.95 kW     | 4.85 kW     |
| COP Tj = +7°C                                       | 5.82        | 3.50        |
| Cdh Tj = +7 °C                                      | 0.970       | 0.980       |
| Pdh Tj = 12°C                                       | 2.26 kW     | 2.10 kW     |
| COP Tj = 12°C                                       | 8.03        | 4.92        |
| Cdh Tj = +12 °C                                     | 0.910       | 0.940       |
| Pdh Tj = Tbiv                                       | 6.70 kW     | 7.60 kW     |
| COP Tj = Tbiv                                       | 3.34        | 2.42        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.70 kW     | 7.60 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.34        | 2.42        |
| 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                                                 | 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                       | 1420 kWh    | 2553 kWh    |