

## Subtype DC Inverter Air to Water Heat Pump- R290- 80B

|                     |   |
|---------------------|---|
| Certificate Holder  | Guangzhou Sprsun New Energy Technology Dev. Co., Ltd, |
| Address             | No.15 Tangxi Road, Yinsha Industrial Park             |
| ZIP                 | 511338  |
| City                | Guangzhou   |
| Country             | CN  |
| Certification Body  | BRE Global Limited                                    |
| Subtype title       | DC Inverter Air to Water Heat Pump- R290- 80B         |
| Registration number | 041-K036-19   |
| Heat Pump Type      | Outdoor Air/Water                                     |
| Refrigerant         | R290  |
| Mass of Refrigerant | 1.8 kg  |
| Certification Date  | 19.11.2024  |
| Testing basis       | HP KEYMARK certification scheme rules rev. no.14      |

## Model CGK-080V4-B

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | CGK-080V4-B           |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | n/a                   |
| 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 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 | 16.35 kW        | 18.79 kW           |
| El input    | 3.33 kW         | 6.67 kW            |
| COP         | 4.91            | 2.82               |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 63 dB(A)        | 61 dB(A)           |

### EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 186 %           | 142 %              |
| Prated         | 18.37 kW        | 17.37 kW           |
| SCOP           | 4.73            | 3.63               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 16.25 kW        | 15.36 kW           |
| COP Tj = -7°C  | 2.91            | 2.16               |
| Cdh Tj = -7 °C | 0.900           | 0.900              |
| Pdh Tj = +2°C  | 10.02 kW        | 9.59 kW            |
| COP Tj = +2°C  | 4.58            | 3.58               |
| Cdh Tj = +2 °C | 0.900           | 0.900              |
| Pdh Tj = +7°C  | 9.29 kW         | 8.84 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 6.83        | 5.11        |
| Cdh Tj = +7 °C                                      | 0.900       | 0.900       |
| Pdh Tj = 12°C                                       | 10.49 kW    | 10.05 kW    |
| COP Tj = 12°C                                       | 8.97        | 7.05        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.900       |
| Pdh Tj = Tbiv                                       | 16.25 kW    | 15.36 kW    |
| COP Tj = Tbiv                                       | 2.91        | 2.16        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 16.49 kW    | 15.71 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.59        | 1.92        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900       | 0.900       |
| WTOL  | 75 °C       | 75 °C       |
| Poff  | 20 W        | 20 W        |
| PTO   | 21 W        | 21 W        |
| PSB   | 20 W        | 20 W        |
| PCK   | 43 W        | 43 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.88 kW     | 1.66 kW     |
| Annual energy consumption Qhe                       | 8023 kWh    | 9873 kWh    |