

## Subtype Inverter Air Source Heat Pump- R290- 15

|                     |   |
|---------------------|---|
| Certificate Holder  | Guangzhou Dentwiton Manufacture Co., Ltd.   |
| Address             | No.3, No. 9, Huasheng Beiroad, Xicheng industry zone,<br>Renhe town, Baiyun district, |
| ZIP                 |   |
| City                | Guangzhou   |
| Country             | CN  |
| Certification Body  | BRE Global Limited  |
| Subtype title       | Inverter Air Source Heat Pump- R290- 15   |
| Registration number | 041-K077-07   |
| Heat Pump Type      | Outdoor Air/Water   |
| Refrigerant         | R290  |
| Mass of Refrigerant | 1.15 kg   |
| Certification Date  | 24.11.2023  |
| Testing basis       | Heat Pump KEYMARK certification Scheme rules v12                                      |

**Model HS15V-DPNNW**

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | HS15V-DPNNW           |
| 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 | 12.26 kW        | 11.69 kW           |
| El input    | 2.50 kW         | 3.39 kW            |
| COP         | 4.90            | 3.45               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 58 dB(A)        | 58 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 186 %           | 144 %              |
| Prated         | 12.38 kW        | 11.91 kW           |
| SCOP           | 4.72            | 3.67               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -25 °C          | -25 °C             |
| Pdh Tj = -7°C  | 10.95 kW        | 10.54 kW           |
| COP Tj = -7°C  | 3.22            | 2.51               |
| Cdh Tj = -7 °C | 0.900           | 0.900              |
| Pdh Tj = +2°C  | 7.18 kW         | 6.61 kW            |
| COP Tj = +2°C  | 4.62            | 3.55               |
| Cdh Tj = +2 °C | 0.900           | 0.900              |
| Pdh Tj = +7°C  | 5.70 kW         | 5.63 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 6.33        | 4.87        |
| Cdh Tj = +7 °C                                      | 0.900       | 0.900       |
| Pdh Tj = 12°C                                       | 6.17 kW     | 6.62 kW     |
| COP Tj = 12°C                                       | 7.36        | 6.44        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.900       |
| Pdh Tj = Tbiv                                       | 10.95 kW    | 10.54 kW    |
| COP Tj = Tbiv                                       | 3.22        | 2.51        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.33 kW    | 9.83 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.05        | 2.20        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900       | 0.900       |
| WTOL  | 70 °C       | 70 °C       |
| Poff  | 3 W         | 3 W         |
| PTO   | 3 W         | 3 W         |
| PSB   | 3 W         | 3 W         |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 2.05 kW     | 2.09 kW     |
| Annual energy consumption Qhe                       | 5420 kWh    | 6711 kWh    |