

## Subtype DC Inverter Heat Pump 140

|                     |   |
|---------------------|---|
| Certificate Holder  | GZ AXEN Heat Pump Technology Co., Ltd.                                |
| Address             | No.22, Lianyun Erheng Road, Shiqi Village, Shiqi Town, Panyu District |
| ZIP                 | 511450  |
| City                | Guangzhou   |
| Country             | CN  |
| Certification Body  | BRE Global Limited  |
| Subtype title       | DC Inverter Heat Pump 140   |
| Registration number | 041-K030-08   |
| Heat Pump Type      | Outdoor Air/Water   |
| Refrigerant         | R32   |
| Mass of Refrigerant | 2.1 kg  |
| Certification Date  | 10.01.2023  |
| Testing basis       | Heat Pump Keymark Scheme Rules Rev 11                                 |
| Testing laboratory  | TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN      |

## Model KS-140W/EN8BP

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | KS-140W/EN8BP         |
| 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     | 1x230V 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 | 14.34 kW        | 14.13 kW           |
| EI input    | 3.05 kW         | 4.69 kW            |
| COP         | 4.71            | 3.01               |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 63 dB(A)        | 65 dB(A)           |

## EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 177 %           | 125 %              |
| Prated         | 13.54 kW        | 13.34 kW           |
| SCOP           | 4.50            | 3.21               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 11.98 kW        | 11.80 kW           |
| COP Tj = -7°C  | 2.56            | 2.05               |
| Cdh Tj = -7 °C | 0.990           | 0.990              |
| Pdh Tj = +2°C  | 7.30 kW         | 7.53 kW            |
| COP Tj = +2°C  | 4.54            | 3.08               |
| Cdh Tj = +2 °C | 0.990           | 0.990              |
| Pdh Tj = +7°C  | 5.19 kW         | 4.73 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 5.77        | 4.10        |
| Cdh Tj = +7 °C                                      | 0.990       | 0.990       |
| Pdh Tj = 12°C                                       | 5.30 kW     | 5.53 kW     |
| COP Tj = 12°C                                       | 7.86        | 5.93        |
| Cdh Tj = +12 °C                                     | 0.990       | 0.990       |
| Pdh Tj = Tbiv                                       | 11.98 kW    | 11.80 kW    |
| COP Tj = Tbiv                                       | 2.56        | 2.05        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.06 kW    | 11.85 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.38        | 1.71        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990       | 0.990       |
| WTOL  | 65 °C       | 65 °C       |
| Poff  | 7 W         | 7 W         |
| PTO   | 20 W        | 20 W        |
| PSB   | 7 W         | 7 W         |
| PCK   | 28 W        | 28 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.48 kW     | 1.49 kW     |
| Annual energy consumption Qhe                       | 6220 kWh    | 8584 kWh    |