

Subtype X-Force 16 kW

|                     |   |
|---------------------|---|
| Certificate Holder  | INVENTOR A.G. SINGLE MEMBER ELECTRIC APPLIANCES<br>S.A.             |
| Address             | 2 Thoukididou str. & 24th km National Road Athens -<br>Lamia        |
| ZIP                 | 14565   |
| City                | Agios Stefanos  |
| Country             | GR  |
| Certification Body  | BRE Global Limited  |
| Subtype title       | X-Force 16 kW   |
| Registration number | 041-K014-07   |
| Heat Pump Type      | Outdoor Air/Water   |
| Refrigerant         | R32   |
| Mass of Refrigerant | 1.7 kg  |
| Certification Date  | 19.12.2022  |
| Testing basis       | Heat Pump Keymark Scheme Rules Rev 09                               |
| Testing laboratory  | TÜV SÜD Certification and Testing Co., Ltd. Guangzhou<br>Branch, CN |

**Model XFM\*16S\***

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | XFM*16S*              |
| 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 | 16.32 kW        | 16.31 kW           |
| El input    | 3.56 kW         | 5.64 kW            |
| COP         | 4.58            | 2.89               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 67 dB(A)        | 68 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 179 %           | 131 %              |
| Prated         | 15.45 kW        | 13.03 kW           |
| SCOP           | 4.55            | 3.36               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 13.67 kW        | 11.53 kW           |
| COP Tj = -7°C  | 2.68            | 2.02               |
| Cdh Tj = -7 °C | 0.990           | 0.990              |
| Pdh Tj = +2°C  | 8.23 kW         | 7.34 kW            |
| COP Tj = +2°C  | 4.35            | 3.12               |
| Cdh Tj = +2 °C | 0.990           | 0.990              |
| Pdh Tj = +7°C  | 5.51 kW         | 4.99 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 6.48        | 4.66        |
| Cdh Tj = +7 °C                                      | 0.990       | 0.990       |
| Pdh Tj = 12°C                                       | 6.53 kW     | 6.22 kW     |
| COP Tj = 12°C                                       | 9.43        | 7.41        |
| Cdh Tj = +12 °C                                     | 0.990       | 0.990       |
| Pdh Tj = Tbiv                                       | 13.67 kW    | 11.53 kW    |
| COP Tj = Tbiv                                       | 2.68        | 2.02        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 14.13 kW    | 10.79 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.47        | 1.87        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990       | 0.990       |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 98 W        | 98 W        |
| PTO   | 98 W        | 98 W        |
| PSB   | 98 W        | 98 W        |
| PCK   | 35 W        | 35 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.32 kW     | 2.24 kW     |
| Annual energy consumption Qhe                       | 7024 kWh    | 8023 kWh    |