

## Subtype X-Force 12 kW

Certificate Holder	Inventor A.G. Electric Appliances S.A.
Address	2 Thoukididou str. & 24th km National Road Athens - Lamia
ZIP	14565
City	Agios Stefanos
Country	GR
Certification Body	BRE Global Limited
Subtype title	X-Force 12 kW
Registration number	041-K014-06
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.75 kg
Certification Date	19.12.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09

**Model XFM\*12S\***

Model name	XFM*12S*
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 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	64 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	132 %
Prated	11.28 kW	11.08 kW
SCOP	4.56	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.98 kW	9.80 kW
COP Tj = -7°C	2.54	2.00
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	6.30 kW	6.58 kW
COP Tj = +2°C	4.42	3.27
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.30 kW	4.24 kW
COP Tj = +7°C	6.33	4.45
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.32 kW	5.00 kW
COP Tj = 12°C	8.88	6.54
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	9.98 kW	9.80 kW
COP Tj = Tbiv	2.54	2.00

Pdh Tj = TOL or Pd <sub>h</sub> Tj = T <sub>designh</sub> if TOL < T <sub>designh</sub>	10.02 kW	9.03 kW
COP Tj = TOL or COP Tj = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.40	1.80
Cd <sub>h</sub> Tj = TOL or Pd <sub>h</sub> Tj = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.990	0.990
WTOL	67 °C	67 °C
P <sub>off</sub>	7 W	7 W
PTO	19 W	19 W
PSB	7 W	7 W
PCK	17 W	17 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.26 kW	2.05 kW
Annual energy consumption Q <sub>he</sub>	5112 kWh	6791 kWh