

Subtype X-Force 12 kW

Certificate Holder	INVENTOR A.G. SINGLE MEMBER 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
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.98 kW	12.28 kW
El input	2.68 kW	4.45 kW
COP	4.47	2.76

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
η_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 Pdh Tj = Tdesignh if TOL < Tdesignh	10.02 kW	9.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	67 °C	67 °C
Poff	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 Qhe	5112 kWh	6791 kWh