

Subtype BoxAir Inverter BA22IS-1

Certificate Holder	Master Therm tepelna cernadla s.r.o.
Address	Vaclavske namesti 819/43
ZIP	110 00
City	Praha
Country	CZ
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)
Subtype title	BoxAir Inverter BA22IS-1
Registration number	037-0068-21
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.3 kg
Certification Date	26.01.2021
Testing basis	HP Keymark scheme rules rev. no. 7
Testing laboratory	SZU Brno, CZ

**Model BoxAir Inverter BA22IS-1**

Model name	BoxAir Inverter BA22IS-1
Application	Heating (medium temp)
Units	Indoor, 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	4.91 kW	4.52 kW
El input	1.04 kW	1.49 kW
COP	4.72	3.05

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	172 %	130 %
Prated	4.51 kW	4.44 kW
SCOP	4.38	3.33
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.99 kW	3.93 kW
COP Tj = -7°C	2.74	2.03
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.58 kW	2.45 kW
COP Tj = +2°C	4.16	3.15
Cdh Tj = +2 °C	0.90	0.90

Pdh Tj = +7°C	1.64 kW	1.69 kW
COP Tj = +7°C	6.22	4.74
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.08 kW	1.96 kW
COP Tj = 12°C	7.50	5.74
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	3.99 kW	3.93 kW
COP Tj = Tbiv	2.74	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.64 kW	3.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	1.90
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	17 W	17 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.87 kW	0.77 kW
Annual energy consumption Qhe	2128 kWh	2759 kWh