

Subtype BoxAir Inverter BA45I

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 BA45I
Registration number	037-0066-21
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	3 kg
Certification Date	26.01.2021
Testing basis	HP Keymark scheme rules rev. no. 7
Testing laboratory	SZU Brno, CZ

Model BoxAir Inverter BA45I

Model name	BoxAir Inverter BA45I
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	3x400V 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	15.05 kW	14.27 kW
El input	3.14 kW	4.51 kW
COP	4.80	3.16

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	146 %
Prated	14.22 kW	13.97 kW
SCOP	4.92	3.72
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.58 kW	12.35 kW
COP Tj = -7°C	2.87	2.10
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	7.28 kW	6.92 kW
COP Tj = +2°C	4.75	3.67
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.02 kW	4.95 kW

COP Tj = +7°C	6.91	5.07
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.44 kW	4.30 kW
COP Tj = 12°C	8.54	6.46
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	12.58 kW	12.35 kW
COP Tj = Tbiv	2.87	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.69 kW	12.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.92
WTOL	60 °C	60 °C
Poff	19 W	19 W
PTO	19 W	19 W
PSB	19 W	19 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.53 kW	1.96 kW
Annual energy consumption Qhe	5967 kWh	7748 kWh