

Subtype BoxAir Inverter BA90IP

Certificate Holder	Master Therm tepelna cerpadla 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 BA90IP
Registration number	037-197-25
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	3.5 kg
Certification Date	25.03.2025
Testing basis	HP Keymark certification scheme rules rev. no.13
Testing laboratory	SZU Brno, CZ

Model BoxAir Inverter BA90IP

Model name	BoxAir Inverter BA90IP
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
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	26.18 kW	23.60 kW
El input	5.32 kW	7.47 kW
COP	4.92	3.16

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	184 %	139 %
Prated	29.40 kW	29.14 kW
SCOP	4.67	3.54
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	26.86 kW	26.02 kW
COP Tj = -7°C	2.82	2.13
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	16.78 kW	15.89 kW
COP Tj = +2°C	4.61	3.48
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	10.18 kW	11.01 kW
COP Tj = +7°C	6.26	4.75

Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	8.06 kW	7.67 kW
COP Tj = 12°C	7.29	5.71
Cdh Tj = +12 °C	0.978	0.982
Pdh Tj = Tbiv	29.40 kW	29.14 kW
COP Tj = Tbiv	2.52	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.40 kW	29.14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	24 W	24 W
PTO	24 W	24 W
PSB	24 W	24 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	13001 kWh	16983 kWh