

Subtype Air Source Heat Pump- R290-006

Certificate Holder	PERFEXIM Sp. z o.o.
Address	ul. Samotna 2
ZIP	61-441
City	Poznań
Country	PL
Certification Body	BRE Global Limited
Subtype title	Air Source Heat Pump- R290-006
Registration number	041-K103-01
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.55 kg
Certification Date	10.10.2024
Testing basis	HP KEYMARK certification scheme rules rev. no.14

Model PHA-50 (50-006-0816-001) BLN-006TC1

Model name	PHA-50 (50-006-0816-001) BLN-006TC1
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	6.07 kW	6.10 kW
El input	1.27 kW	1.95 kW
COP	4.77	3.12

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	190 %	146 %
Prated	6.08 kW	6.06 kW
SCOP	4.83	3.71
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.37 kW	5.36 kW
COP Tj = -7°C	3.09	2.33
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.40 kW	3.33 kW
COP Tj = +2°C	4.68	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.24 kW	2.17 kW

COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.36 kW	2.28 kW
COP Tj = 12°C	9.30	7.01
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.37 kW	5.36 kW
COP Tj = Tbiv	3.09	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.03 kW	5.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	30 W	30 W
PSB	10 W	10 W
PCK	42 W	42 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.05 kW	0.44 kW
Annual energy consumption Qhe	2599 kWh	3372 kWh

Model PHA-50I (50-006-0816-101) BLN-006TC1

Model name	PHA-50I (50-006-0816-101) BLN-006TC1
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	6.07 kW	6.10 kW
El input	1.27 kW	1.95 kW
COP	4.77	3.12

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	190 %	146 %
Prated	6.08 kW	6.06 kW
SCOP	4.83	3.71
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.37 kW	5.36 kW
COP Tj = -7°C	3.09	2.33
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.40 kW	3.33 kW
COP Tj = +2°C	4.68	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.24 kW	2.17 kW

COP Tj = +7°C	6.20	4.70
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.36 kW	2.28 kW
COP Tj = 12°C	9.30	7.01
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.37 kW	5.36 kW
COP Tj = Tbiv	3.09	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.03 kW	5.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	2.06
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Supplementary Heater: PSUP	0.05 kW	0.44 kW
Annual energy consumption Qhe	2599 kWh	3372 kWh