

Subtype Air Source Heat Pump- R290-008

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- R290-008
Registration number	041-K103-02
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.05 kg
Certification Date	10.10.2024
Testing basis	HP KEYMARK certification scheme rules rev. no.14

Model PHA-50 (50-008-0121-001) BLN-008TC1

Model name	PHA-50 (50-008-0121-001) BLN-008TC1
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	8.23 kW	8.12 kW
El input	1.65 kW	2.60 kW
COP	5.00	3.13

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	146 %
Prated	8.21 kW	8.35 kW
SCOP	4.93	3.72
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.27 kW	7.39 kW
COP Tj = -7°C	3.40	2.35
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.46 kW	4.51 kW
COP Tj = +2°C	4.86	3.69
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.64 kW	3.56 kW

COP Tj = +7°C	6.39	4.87
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.26 kW	4.09 kW
COP Tj = 12°C	8.01	6.83
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.27 kW	7.39 kW
COP Tj = Tbiv	3.40	2.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.06 kW	8.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	38 W	38 W
PSB	13 W	13 W
PCK	83 W	83 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.26 kW
Annual energy consumption Qhe	3445 kWh	4634 kWh

Model PHA-50I (50-008-0121-101) BLN-008TC1

Model name	PHA-50I (50-008-0121-101) BLN-008TC1
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	8.23 kW	8.12 kW
El input	1.65 kW	2.60 kW
COP	5.00	3.13

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	146 %
Prated	8.21 kW	8.35 kW
SCOP	4.93	3.72
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.27 kW	7.39 kW
COP Tj = -7°C	3.40	2.35
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.46 kW	4.51 kW
COP Tj = +2°C	4.86	3.69
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.64 kW	3.56 kW

COP Tj = +7°C	6.39	4.87
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.26 kW	4.09 kW
COP Tj = 12°C	8.01	6.83
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.27 kW	7.39 kW
COP Tj = Tbiv	3.40	2.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.06 kW	8.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	38 W	38 W
PSB	13 W	13 W
PCK	83 W	83 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.26 kW
Annual energy consumption Qhe	3445 kWh	4634 kWh

Model PHA-50 (50-008-0121-003) BLN-008TC3

Model name	PHA-50 (50-008-0121-003) BLN-008TC3
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	7.99 kW	8.12 kW
El input	1.63 kW	2.60 kW
COP	4.91	3.13

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	191 %	141 %
Prated	8.20 kW	8.04 kW
SCOP	4.84	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.25 kW	7.11 kW
COP Tj = -7°C	3.31	2.33
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.45 kW	4.34 kW
COP Tj = +2°C	4.81	3.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.48 kW	3.43 kW

COP Tj = +7°C	6.11	4.63
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.08 kW	3.95 kW
COP Tj = 12°C	8.06	6.26
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.25 kW	7.11 kW
COP Tj = Tbiv	3.31	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.04 kW	7.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	38 W	38 W
PSB	13 W	13 W
PCK	83 W	83 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.24 kW
Annual energy consumption Qhe	3497 kWh	4615 kWh

Model PHA-50I (50-008-0121-103) BLN-008TC3

Model name	PHA-50I (50-008-0121-103) BLN-008TC3
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	7.99 kW	8.12 kW
El input	1.63 kW	2.60 kW
COP	4.91	3.13

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	191 %	141 %
Prated	8.20 kW	8.04 kW
SCOP	4.84	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.25 kW	7.11 kW
COP Tj = -7°C	3.31	2.33
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.45 kW	4.34 kW
COP Tj = +2°C	4.81	3.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.48 kW	3.43 kW

COP Tj = +7°C	6.11	4.63
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.08 kW	3.95 kW
COP Tj = 12°C	8.06	6.26
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.25 kW	7.11 kW
COP Tj = Tbiv	3.31	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.04 kW	7.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	38 W	38 W
PSB	13 W	13 W
PCK	83 W	83 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.24 kW
Annual energy consumption Qhe	3497 kWh	4615 kWh