

Subtype Air Source Heat Pump- R290- 50

Certificate Holder	SolarEast Heat Pump Ltd.
Address	No.73 Defu Road
ZIP	528325
City	Guangdong Province,
Country	CN
Certification Body	BRE Global Limited
Subtype title	Air Source Heat Pump- R290- 50
Registration number	041-K042-10
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	4.8 kg
Certification Date	29.07.2025
Testing basis	HP KEYMARK certification scheme rules rev. no.15
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

**Model BLN-050TC3**

Model name	BLN-050TC3
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	48.19 kW	47.76 kW
El input	12.35 kW	17.24 kW
COP	3.90	2.77

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	82 dB(A)	80 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	156 %	130 %
Prated	35.40 kW	32.11 kW
SCOP	3.97	3.32
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	31.31 kW	28.41 kW
COP Tj = -7°C	2.96	2.12
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	19.35 kW	17.38 kW
COP Tj = +2°C	4.06	3.22
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	12.47 kW	11.30 kW

COP Tj = +7°C	4.51	4.39
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	14.91 kW	14.43 kW
COP Tj = 12°C	5.92	6.18
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	31.31 kW	28.41 kW
COP Tj = Tbiv	2.96	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	26.58 kW	26.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.53	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	108 W	108 W
PTO	118 W	118 W
PSB	108 W	108 W
PCK	150 W	150 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	8.82 kW	5.90 kW
Annual energy consumption Qhe	18407 kWh	19955 kWh