

Subtype Air to Water Heat Pump- R290- 8kW-C-100L

Certificate Holder	Aira Group AB
Address	Norra Stationsgatan 93C
ZIP	11364
City	Stockholm
Country	SE
Certification Body	BRE Global Limited
Subtype title	Air to Water Heat Pump- R290- 8kW-C-100L
Registration number	041-K087-03
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.9 kg
Certification Date	11.03.2024
Testing basis	Heat Pump Keymark Scheme Rules Rev 13
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

Model Indoor unit: HPI-AO-100-1.0, Outdoor unit: HPO-AW-8-230V-1.0

Model name	Indoor unit: HPI-AO-100-1.0, Outdoor unit: HPO-AW-8-230V-1.0
Application	Heating + DHW + low temp
Units	Indoor, 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 16147 | Average Climate

Declared load profile	M
Efficiency η_{DHW}	76 %
COP	1.73
Heating up time	1:7:32 h:min
Standby power input	53.0 W
Reference hot water temperature	48.5 °C
Mixed water at 40°C	106 l

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	8.81 kW	9.21 kW
El input	1.95 kW	3.05 kW
COP	4.52	3.02

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	45 dB(A)
Sound power level outdoor	55 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	185 %	141 %

Prated	8.77 kW	8.65 kW
SCOP	4.70	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.75 kW	7.65 kW
COP Tj = -7°C	2.85	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.88 kW	4.85 kW
COP Tj = +2°C	4.76	3.58
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.23 kW	4.10 kW
COP Tj = +7°C	6.38	4.73
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.03 kW	4.93 kW
COP Tj = 12°C	8.45	6.46
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.75 kW	7.65 kW
COP Tj = Tbiv	2.85	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.22 kW	6.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	11 W	11 W
PTO	46 W	46 W
PSB	11 W	11 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.55 kW	2.03 kW
Annual energy consumption Qhe	3851 kWh	4955 kWh