

## 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

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 $\eta_{DHW}$	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
$\eta_s$	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