

European Heat Pump KEYMARK Scheme Test report

Product	Heat Pumps
Product Type	Outdoor Air to Water Heat Pump
Sub-type and Models	EcoSilent R6
Refrigerant	R290
Mass of refrigerant	0.8 kg
Testing basis	EN 14511:2018 EN 14825:2018 EN 12102:2017 KEYMARK Certification Scheme for Heat Pumps (2023)

Model EcoSilent R6

Model name	EcoSilent R6
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	4.99 kW	4.98 kW
El input	0.98 kW	1.54 kW
COP	5.08	3.24

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	183 %	136 %
Prated	5.82 kW	5.59 kW
SCOP	4.64	3.48
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.15 kW	4.95 kW
COP Tj = -7°C	3.33	2.38
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.21 kW	3.03 kW
COP Tj = +2°C	4.55	3.34
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.29 kW	2.93 kW
COP Tj = +7°C	6.11	4.69
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.77 kW	3.66 kW
COP Tj = 12°C	7.88	6.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.15 kW	4.95 kW
COP Tj = Tbiv	3.33	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	6 W	6 W
PTO	20 W	20 W
PSB	6 W	6 W
PCK	42 W	42 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.01 kW
Annual energy consumption Qhe	2590 kWh	3325 kWh