

## Subtype Air/water HP R290 Monobloc outdoor unit 230V 12kW + Air/water/tank 6-12 kW Monobloc indoor unit

Certificate Holder	ES Heat Pumps AB
Address	Metallgatan 2
ZIP	441 32
City	Alingsås
Country	SE
Certification Body	Kiwa Nederland B.V.
Subtype title	Air/water HP R290 Monobloc outdoor unit 230V 12kW + Air/water/tank 6-12 kW Monobloc indoor unit
Registration number	007-DQ0206
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.9 kg
Certification Date	20.06.2025
Testing basis	European KEYMARK Scheme for Heat Pumps (v15)
Testing laboratory	KIWA, NL

**Model ES M12 R290 + ES M100L ST**

Model name	ES M12 R290 + ES M100L ST
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	1.89
Heating up time	1:08 h:min
Standby power input	36.0 W
Reference hot water temperature	49.1 °C
Mixed water at 40°C	107 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	6.83 kW	7.55 kW
El input	1.36 kW	2.37 kW
COP	5.04	3.18

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	54 dB(A)	54 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	191 %	155 %
Prated	9.19 kW	8.80 kW

SCOP	4.85	3.94
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.13 kW	7.78 kW
COP Tj = -7°C	3.12	3.22
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.02 kW	4.71 kW
COP Tj = +2°C	4.85	3.72
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.40 kW	4.13 kW
COP Tj = +7°C	6.50	4.99
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.09 kW	4.95 kW
COP Tj = 12°C	8.18	6.62
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.13 kW	7.78 kW
COP Tj = Tbiv	3.12	3.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.61 kW	6.97 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.95	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.58 kW	1.83 kW
Annual energy consumption Qhe	3914 kWh	4613 kWh

**Model ES M12 R290 + ES M100L ST UK**

Model name	ES M12 R290 + ES M100L ST UK
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

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