

Subtype Matrix Zero R290 Series 26 30 35 40 kW

Certificate Holder	INVENTOR A.G. SINGLE MEMBER ELECTRIC APPLIANCES S.A.
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Country	GR
Certification Body	BRE Global Limited
Subtype title	Matrix Zero R290 Series 26 30 35 40 kW
Registration number	041-K014-19
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	2.9 kg
Certification Date	22.09.2025
Testing basis	HP KEYMARK certification scheme rules rev. no.15
Testing laboratory	Intertek Testing Services Shenzhen LTD. Guangzhou Branch, CN

**Model MX290-40T**

Model name	MX290-40T
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Warmer
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	39.00 kW	39.00 kW
El input	9.75 kW	14.00 kW
COP	4.00	2.79

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	76 dB(A)	76 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	165.1 %	132.5 %
Prated	39.0 kW	39.0 kW
SCOP	4.20	3.39
Tbiv	-5 °C	-5 °C
TOL	-10.00 °C	-10.00 °C
Pdh Tj = -7°C	31.37 kW	32.08 kW
COP Tj = -7°C	2.53	1.83
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	20.72 kW	19.72 kW
COP Tj = +2°C	4.17	3.34
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	12.92 kW	14.11 kW

COP Tj = +7°C	6.56	5.25
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	6.53 kW	6.18 kW
COP Tj = 12°C	9.22	6.67
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	31.49 kW	32.25 kW
COP Tj = Tbiv	2.62	1.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	34.53 kW	33.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.98	1.77
WTOL	85.00 °C	85.00 °C
Poff	14.00 W	14.00 W
PTO	13.00 W	13.00 W
PSB	14.00 W	14.00 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.47 kW	5.22 kW
Annual energy consumption Qhe	19176 kWh	23781 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	76 dB(A)	76 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	151 %	117 %
Prated	34.0 kW	33.5 kW
SCOP	3.84	3.00
Tbiv	-7.00 °C	-7.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	19.57 kW	19.91 kW
COP Tj = -7°C	3.14	2.43
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	12.29 kW	11.47 kW
COP Tj = +2°C	4.82	3.61
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.24 kW	8.08 kW
COP Tj = +7°C	7.02	5.29
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	6.49 kW	5.96 kW
COP Tj = 12°C	8.23	6.50
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	19.57 kW	19.91 kW
COP Tj = Tbiv	3.14	2.43

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	22.95 kW	23.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.96	1.54
WTOL	85.00 °C	85.00 °C
Poff	14.00 W	14.00 W
PTO	13.00 W	13.00 W
PSB	14.00 W	14.00 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	11.05 kW	10.31 kW
Annual energy consumption Qhe	21823.00 kWh	27514.00 kWh
Pdh Tj = -15°C (if TOL)	26.69	26.18
COP Tj = -15°C (if TOL	2.31	1.83
Cdh Tj = -15 °C	0.9	0.9

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	76 dB(A)	76 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	210.80 %	177.10 %
Prated	39.00 kW	39.00 kW
SCOP	5.35	4.50
Tbiv	7.00 °C	7.00 °C
TOL	2.00 °C	2.00 °C
Pdh Tj = +2°C	33.03 kW	32.88 kW
COP Tj = +2°C	2.44	2.15
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	24.06 kW	22.84 kW
COP Tj = +7°C	4.60	3.94
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	10.40 kW	10.91 kW
COP Tj = 12°C	8.32	6.37
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	24.06 kW	22.84 kW
COP Tj = Tbiv	4.60	3.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	33.03 kW	32.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.44	2.15
WTOL	85.00 °C	85.00 °C
Poff	14.00 W	14.00 W
PTO	13.00 W	13.00 W
PSB	14.00 W	14.00 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.98 kW	6.12 kW
Annual energy consumption Qhe	9746.00 kWh	11573.00 kWh