

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
EI 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
η_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 Q _{he}	9746.00 kWh	11573.00 kWh