Subtype Matrix Zero MX290-08S/10S

Certificate Holder	INVENTOR A.G. SINGLE MEMBER ELECTRIC APPLIANCES S.A.
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Certification Body	ICIM S.p.A.
Subtype title	Matrix Zero MX290-08S/10S
Registration number	ICIM-PDC-000342
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.1 kg
Certification Date	29.07.2025
Testing basis	V12
Testing laboratory	Bureau Veritas Consumer Products Services (Guangzhou) Co., Ltd, Science City Branch

Model MX290-08S

Model name	MX290-08S
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Warmer
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	8.4 kW	7.8 kW
El input	1.68 kW	2.44 kW
COP	5.00	3.20

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	204 %	149 %
Prated	8.00 kW	6.80 kW
SCOP	5.19	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.09 kW	5.97 kW
COP Tj = -7°C	3.06	2.37
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.53 kW	3.71 kW
COP Tj = +2°C	5.10	3.85
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.96 kW	3.62 kW
COP Tj = +7°C	7.47	5.12

Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.51 kW	4.31 kW
COP Tj = 12°C	9.66	6.77
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.09 kW	5.97 kW
COP Tj = Tbiv	3.06	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.97 kW	6.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	75 °C	75 °C
Poff	9 W	9 W
PTO	14 W	14 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.03 kW	0.34 kW
Annual energy consumption Qhe	3184 kWh	3676 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	174 %	135 %
Prated	6.8 kW	7.0 kW
SCOP	4.44	3.46
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	4.11 kW	4.49 kW
COP Tj = -7°C	3.97	2.87
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.18 kW	3.07 kW
COP Tj = +2°C	5.60	4.38
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.90 kW	3.67 kW
COP Tj = +7°C	6.46	5.58
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.43 kW	4.36 kW
COP Tj = 12°C	8.67	7.22
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.48 kW	5.69 kW
COP Tj = Tbiv	2.73	2.09

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.64 kW	5.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.54
WTOL	75.00 °C	75.00 °C
Poff	9.00 W	9.00 W
PTO	14 W	14 W
PSB	9.00 W	9.00 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	1.92 kW
Annual energy consumption Qhe	3772.00 kWh	4992.00 kWh
Pdh Tj = -15°C (if TOL	5.48	5.69
COP Tj = -15°C (if TOL	2.73	2.09
Cdh Tj = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	259.00 %	184.00 %
Prated	8.2 kW	8.3 kW
SCOP	6.56	4.68
Tbiv	7.00 °C	7.00 °C
TOL	2.00 °C	2.00 °C
Pdh Tj = +2°C	8.20 kW	7.99 kW
COP Tj = +2°C	3.59	2.54
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.27 kW	5.36 kW
COP Tj = +7°C	6.03	4.15
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.46 kW	4.21 kW
COP Tj = 12°C	8.58	6.35
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.27 kW	5.36 kW
COP Tj = Tbiv	6.03	4.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.27 kW	7.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.59	2.54
WTOL	75.00 °C	75.00 °C
Poff	9.00 W	9.00 W
PTO	14.00 W	14.00 W
PSB	9 W	9 W

PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.30 kW
Annual energy consumption Qhe	1669.00 kWh	2368.00 kWh

Model MX290-10S

Model name	MX290-10S
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Warmer
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	10.0 kW	9.5 kW
El input	2.13 kW	3.11 kW
COP	4.70	3.05

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	199 %	149 %
Prated	9.2 kW	7.8 kW
SCOP	5.07	3.82
Tbiv	-7 °C	-7 °C
TOL	-10.00 °C	-10.00 °C
Pdh Tj = -7°C	8.11 kW	6.88 kW
COP Tj = -7°C	2.84	2.31
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.10 kW	4.23 kW
COP Tj = +2°C	4.96	3.80
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.96 kW	3.62 kW
COP Tj = +7°C	7.47	5.21

Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.48 kW	4.31 kW
COP Tj = 12°C	9.56	6.86
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.11 kW	6.88 kW
COP Tj = Tbiv	2.84	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.50 kW	7.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	1.99
WTOL	75.00 °C	75.00 °C
Poff	9.00 W	9.00 W
PTO	14.00 W	14.00 W
PSB	9.00 W	9.00 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.66 kW	0.35 kW
Annual energy consumption Qhe	3744 kWh	4215 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	178 %	136 %
Prated	7.9 kW	8.0 kW
SCOP	4.54	3.49
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	4.89 kW	4.86 kW
COP Tj = -7°C	3.74	2.90
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.07 kW	3.09 kW
COP Tj = +2°C	5.66	4.38
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.83 kW	3.76 kW
COP Tj = +7°C	7.63	5.64
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.46 kW	4.32 kW
COP Tj = 12°C	9.24	6.92
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.42 kW	6.55 kW
COP Tj = Tbiv	2.69	1.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.39 kW	5.80 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.08	1.57
WTOL	75.00 °C	75.00 °C
Poff	9.00 W	9.00 W
PTO	14 W	14 W
PSB	9.00 W	9.00 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.48 kW	2.20 kW
Annual energy consumption Qhe	4269.00 kWh	5659.00 kWh
Pdh Tj = -15°C (if TOL	6.42	6.55
COP Tj = -15°C (if TOL	2.69	1.99
Cdh Tj = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	281.00 %	188.00 %
Prated	8.6 kW	8.8 kW
SCOP	7.11	4.79
Tbiv	7.00 °C	7.00 °C
TOL	2.00 °C	2.00 °C
Pdh Tj = +2°C	8.60 kW	8.54 kW
COP Tj = +2°C	3.62	2.50
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.52 kW	5.68 kW
COP Tj = +7°C	6.26	4.20
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.61 kW	4.29 kW
COP Tj = 12°C	9.84	6.53
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.52 kW	5.68 kW
COP Tj = Tbiv	6.26	4.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.61 kW	8.54 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.62	2.50
WTOL	75.00 °C	75.00 °C
Poff	9.00 W	9.00 W
PTO	14.00 W	14.00 W
PSB	9 W	9 W
PCK	0.00 W	0.00 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.26 kW
Annual energy consumption Qhe	1614.00 kWh	2456.00 kWh