Subtype Ecodan Power Inverter 8-170E Packaged R290

Certificate Holder	Mitsubishi Electric Air Conditioning Systems Europe LTD
Address	Nettlehill Road, Houston Industrial Estate
ZIP	EH54 5EQ
City	Livingston
Country	GB
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)
Subtype title	Ecodan Power Inverter 8-170E Packaged R290
Registration number	037-0134-23
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1 kg
Certification Date	31.08.2023
Testing basis	HP Keymark scheme rules rev. no. 10
Testing laboratory	SZU Brno, CZ

Model PUZ-WZ80VAA(-BS) + EHPT17X-*M*E	
Model name	PUZ-WZ80VAA(-BS) + EHPT17X-*M*E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer
Heat Source	Outdoor Air
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	L
Efficiency ηDHW	120 %
COP	2.87
Heating up time	2:41 h:min
Standby power input	41 W
Reference hot water temperature	55.5 °C
Mixed water at 40°C	236 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 kW	6 kW
El input	1.28 kW	2 kW
COP	4.7	3

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	kW	kW
Cooling capacity		
EER		

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature

Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	174 %	138 %
Prated	8 kW	8 kW
SCOP	4.42	3.52
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.04	2.19
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.36 kW	4.33 kW
COP Tj = +2°C	4.13	3.34
Cdh Tj = +2 °C	0.986	0.988
Pdh Tj = +7°C	2.81 kW	2.78 kW
COP Tj = +7°C	6.17	5
Cdh Tj = +7 °C	0.967	0.973
Pdh Tj = 12°C	2.14 kW	1.91 kW
COP Tj = 12°C	7.68	6.55
Cdh Tj = +12 °C	0.946	0.949
Pdh Tj = Tbiv	7.08 kW	7.08 kW
COP Tj = Tbiv	3.04	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.1 kW	7.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.9 kW	0.85 kW
Annual energy consumption Qhe	3738 kWh	4694 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	226 %	159 %
Prated	8 kW	8 kW
SCOP	5.72	4.05
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	8 kW	8 kW
COP Tj = +2°C	3.42	2.12
Cdh Tj = +2 °C	0.994	0.996
Pdh Tj = +7°C	5.14 kW	5.14 kW
COP Tj = +7°C	5.26	3.26
Cdh Tj = +7 °C	0.985	0.99
Pdh Tj = 12°C	2.29 kW	2.29 kW
COP Tj = 12°C	7.24	5.84
Cdh Tj = +12 °C	0.953	0.962
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	3.42	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.42	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1870 kWh	2641 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	kW	kW
SEER		
Pdc Tj = 35°C	kW	kW
EER Tj = 35°C		
Cdc Tj = 35 °C		
Pdc Tj = 30°C	kW	kW
EER Tj = 30°C		
Cdc Tj = 30 °C		
Pdc Tj = 25°C	kW	kW
EER Tj = 25°C		
Cdc Tj = 25 °C		
Pdc Tj = 20°C	kW	kW

EER Tj = 20°C		
Cdc Tj = 20 °C		
Poff	W	W
PTO	W	W
PSB	W	W
PCK	W	W
Annual energy consumption Qce	kWh	kWh

Model PUZ-WZ80VAA(-BS) + ERPT17X-*M*E

Model name	PUZ-WZ80VAA(-BS) + ERPT17X-*M*E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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	L
Efficiency ηDHW	120 %
COP	2.87
Heating up time	2:41 h:min
Standby power input	41 W
Reference hot water temperature	55.5 °C
Mixed water at 40°C	236 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 kW	6 kW
El input	1.28 kW	2 kW
COP	4.7	3

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	1.48 kW	1.79 kW
Cooling capacity	4	5
EER	2.7	2.8

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	176 %	140 %
Prated	8 kW	8 kW
SCOP	4.49	3.56
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.04	2.19
Cdh Tj = -7 °C	0.994	0.995
Pdh Tj = +2°C	4.36 kW	4.33 kW
COP Tj = +2°C	4.13	3.34
Cdh Tj = +2 °C	0.986	0.988
Pdh Tj = +7°C	2.81 kW	2.78 kW
COP Tj = +7°C	6.17	5
Cdh Tj = +7 °C	0.967	0.973
Pdh Tj = 12°C	2.14 kW	1.91 kW
COP Tj = 12°C	7.68	6.55
Cdh Tj = +12 °C	0.946	0.949
Pdh Tj = Tbiv	7.08 kW	7.08 kW
COP Tj = Tbiv	3.04	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.1 kW	7.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.9 kW	0.85 kW
Annual energy consumption Qhe	3683 kWh	4639 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	234 %	163 %
Prated	8 kW	8 kW
SCOP	5.93	4.15
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	8 kW	8 kW
COP Tj = +2°C	3.42	2.12
Cdh Tj = +2 °C	0.994	0.996
Pdh Tj = +7°C	5.14 kW	5.14 kW
COP Tj = +7°C	5.26	3.26
Cdh Tj = +7 °C	0.985	0.99
Pdh Tj = 12°C	2.29 kW	2.29 kW
COP Tj = 12°C	7.24	5.84
Cdh Tj = +12 °C	0.953	0.962
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	3.42	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.42	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1803 kWh	2575 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	4 kW	5 kW
SEER	3.96	4.92
Pdc Tj = 35°C	4 kW	5 kW
EER Tj = 35°C	2.7	2.8
Cdc Tj = 35 °C	0.99	0.992
Pdc Tj = 30°C	2.93 kW	3.65 kW
EER Tj = 30°C	3.58	4.33
Cdc Tj = 30 °C	0.982	0.982
Pdc Tj = 25°C	2.5 kW	3.17 kW
EER Tj = 25°C	4.53	5.75
Cdc Tj = 25 °C	0.973	0.973
Pdc Tj = 20°C	2.34 kW	3.42 kW

EER Tj = 20°C	5.38	7.38
Cdc Tj = 20 °C	0.966	0.968
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	606 kWh	609 kWh