Subtype Ecodan Power Inverter 5/6-170E 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 5/6-170E Packaged R290
Registration number	037-0133-23
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.6 kg
Certification Date	31.08.2023
Testing basis	HP Keymark scheme rules rev. no. 10
Testing laboratory	SZU Brno, CZ

Model PUZ-WZ50VAA(-BS) + EHPT17X-*M*E	
Model name	PUZ-WZ50VAA(-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	4 kW	4 kW
El input	0.78 kW	1.27 kW
COP	5.1	3.15

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	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	177 %	135 %
Prated	5 kW	5 kW
SCOP	4.51	3.46
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	4.42 kW	4.42 kW
COP Tj = -7°C	3.02	2.39
Cdh Tj = -7 °C	0.99	0.992
Pdh Tj = +2°C	2.69 kW	2.69 kW
COP Tj = +2°C	4.42	3.22
Cdh Tj = +2 °C	0.975	0.982
Pdh Tj = +7°C	1.73 kW	1.73 kW
COP Tj = +7°C	6.08	4.8
Cdh Tj = +7 °C	0.947	0.958
Pdh Tj = 12°C	1.68 kW	1.8 kW
COP Tj = 12°C	7.5	6.54
Cdh Tj = +12 °C	0.933	0.946
Pdh Tj = Tbiv	4.42 kW	4.42 kW
COP Tj = Tbiv	3.02	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.9 kW	4.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
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	0.1 kW	0.1 kW
Annual energy consumption Qhe	2291 kWh	2984 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	230 %	159 %
Prated	5 kW	5 kW
SCOP	5.82	4.04
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	5 kW	5 kW
COP Tj = +2°C	3.52	2.07
Cdh Tj = +2 °C	0.989	0.994
Pdh Tj = +7°C	3.21 kW	3.21 kW
COP Tj = +7°C	5.69	3.38
Cdh Tj = +7 °C	0.973	0.984
Pdh Tj = 12°C	2.04 kW	1.84 kW
COP Tj = 12°C	7.53	5.96
Cdh Tj = +12 °C	0.945	0.951
Pdh Tj = Tbiv	5 kW	5 kW
COP Tj = Tbiv	3.52	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5 kW	5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.989	0.994
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	1148 kWh	1652 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-WZ50VAA(-BS) + ERPT17X-*M*E	
Model name	PUZ-WZ50VAA(-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	4 kW	4 kW
El input	0.78 kW	1.27 kW
COP	5.1	3.15

EN 14511-2 | Cooling	+7°C/+12°C	+18°C/+23°C
El input	1.03 kW	1.31 kW
Cooling capacity	3.2	4.2
EER	3.1	3.2

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	182 %	138 %
Prated	5 kW	5 kW
SCOP	4.62	3.53
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	4.42 kW	4.42 kW
COP Tj = -7°C	3.02	2.39
Cdh Tj = -7 °C	0.99	0.992
Pdh Tj = +2°C	2.69 kW	2.69 kW
COP Tj = +2°C	4.42	3.22
Cdh Tj = +2 °C	0.975	0.982
Pdh Tj = +7°C	1.73 kW	1.73 kW
COP Tj = +7°C	6.08	4.8
Cdh Tj = +7 °C	0.947	0.958
Pdh Tj = 12°C	1.68 kW	1.8 kW
COP Tj = 12°C	7.5	6.54
Cdh Tj = +12 °C	0.933	0.946
Pdh Tj = Tbiv	4.42 kW	4.42 kW
COP Tj = Tbiv	3.02	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.9 kW	4.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.994
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	0.1 kW	0.1 kW
Annual energy consumption Qhe	2236 kWh	2929 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	244 %	165 %
Prated	5 kW	5 kW
SCOP	6.17	4.21
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	5 kW	5 kW
COP Tj = +2°C	3.52	2.07
Cdh Tj = +2 °C	0.989	0.994
Pdh Tj = +7°C	3.21 kW	3.21 kW
COP Tj = +7°C	5.69	3.38
Cdh Tj = +7 °C	0.973	0.984
Pdh Tj = 12°C	2.04 kW	1.84 kW
COP Tj = 12°C	7.53	5.96
Cdh Tj = +12 °C	0.945	0.951
Pdh Tj = Tbiv	5 kW	5 kW
COP Tj = Tbiv	3.52	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5 kW	5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.989	0.994
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	1082 kWh	1586 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	3.2 kW	4.2 kW
SEER	3.99	4.89
Pdc Tj = 35°C	3.2 kW	4.2 kW
EER Tj = 35°C	3.1	3.2
Cdc Tj = 35 °C	0.985	0.989
Pdc Tj = 30°C	2.35 kW	3.07 kW
EER Tj = 30°C	3.69	4.3
Cdc Tj = 30 °C	0.976	0.979
Pdc Tj = 25°C	1.51 kW	1.97 kW
EER Tj = 25°C	4.48	5.59
Cdc Tj = 25 °C	0.955	0.957
Pdc Tj = 20°C	1.31 kW	1.8 kW

EER Tj = 20°C	5.39	7.24
Cdc Tj = 20 °C	0.938	0.94
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	481 kWh	515 kWh

Model PUZ-WZ60VAA(-BS) + EHPT17X-*M*E	
Model name	PUZ-WZ60VAA(-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	5 kW	5 kW
El input	1 kW	1.61 kW
COP	5	3.1

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	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	175 %	137 %
Prated	6 kW	6 kW
SCOP	4.46	3.5
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	5.31 kW	5.31 kW
COP Tj = -7°C	2.97	2.35
Cdh Tj = -7 °C	0.992	0.993
Pdh Tj = +2°C	3.23 kW	3.23 kW
COP Tj = +2°C	4.4	3.42
Cdh Tj = +2 °C	0.98	0.984
Pdh Tj = +7°C	2.08 kW	2.08 kW
COP Tj = +7°C	5.78	4.42
Cdh Tj = +7 °C	0.958	0.968
Pdh Tj = 12°C	1.8 kW	1.7 kW
COP Tj = 12°C	7.69	6.39
Cdh Tj = +12 °C	0.936	0.944
Pdh Tj = Tbiv	5.31 kW	5.31 kW
COP Tj = Tbiv	2.97	2.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.9 kW	5.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	0.1 kW	0.1 kW
Annual energy consumption Qhe	2778 kWh	3541 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	233 %	159 %
Prated	6 kW	6 kW
SCOP	5.91	4.05
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	6 kW	6 kW
COP Tj = +2°C	3.37	2.03
Cdh Tj = +2 °C	0.992	0.995
Pdh Tj = +7°C	3.86 kW	3.86 kW
COP Tj = +7°C	5.52	3.34
Cdh Tj = +7 °C	0.979	0.987
Pdh Tj = 12°C	2.13 kW	1.85 kW
COP Tj = 12°C	7.8	5.88
Cdh Tj = +12 °C	0.945	0.952
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	3.37	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.37	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
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	1357 kWh	1981 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-WZ60VAA(-BS) + ERPT17X-*M*E	
Model name	PUZ-WZ60VAA(-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	5 kW	5 kW
El input	1 kW	1.61 kW
COP	5	3.1

EN 14511-2 | Cooling	+7°C/+12°C	+18°C/+23°C
El input	1.24 kW	1.53 kW
Cooling capacity	3.6	4.6
EER	2.9	3

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	179 %	139 %
Prated	6 kW	6 kW
SCOP	4.55	3.56
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	5.31 kW	5.31 kW
COP Tj = -7°C	2.97	2.35
Cdh Tj = -7 °C	0.992	0.993
Pdh Tj = +2°C	3.23 kW	3.23 kW
COP Tj = +2°C	4.4	3.42
Cdh Tj = +2 °C	0.98	0.984
Pdh Tj = +7°C	2.08 kW	2.08 kW
COP Tj = +7°C	5.78	4.42
Cdh Tj = +7 °C	0.958	0.968
Pdh Tj = 12°C	1.8 kW	1.7 kW
COP Tj = 12°C	7.69	6.39
Cdh Tj = +12 °C	0.936	0.944
Pdh Tj = Tbiv	5.31 kW	5.31 kW
COP Tj = Tbiv	2.97	2.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.9 kW	5.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	0.1 kW	0.1 kW
Annual energy consumption Qhe	2723 kWh	3486 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	245 %	164 %
Prated	6 kW	6 kW
SCOP	6.21	4.19
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	6 kW	6 kW
COP Tj = +2°C	3.37	2.03
Cdh Tj = +2 °C	0.992	0.995
Pdh Tj = +7°C	3.86 kW	3.86 kW
COP Tj = +7°C	5.52	3.34
Cdh Tj = +7 °C	0.979	0.987
Pdh Tj = 12°C	2.13 kW	1.85 kW
COP Tj = 12°C	7.8	5.88
Cdh Tj = +12 °C	0.945	0.952
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	3.37	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.37	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.992	0.995
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	1291 kWh	1914 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	3.6 kW	4.6 kW
SEER	3.98	4.79
Pdc Tj = 35°C	3.6 kW	4.6 kW
EER Tj = 35°C	2.9	3
Cdc Tj = 35 °C	0.988	0.99
Pdc Tj = 30°C	2.64 kW	3.37 kW
EER Tj = 30°C	3.64	4.19
Cdc Tj = 30 °C	0.979	0.981
Pdc Tj = 25°C	1.7 kW	2.16 kW
EER Tj = 25°C	4.47	5.49
Cdc Tj = 25 °C	0.961	0.962
Pdc Tj = 20°C	1.65 kW	2.22 kW

EER Tj = 20°C	5.4	7.05
Cdc Tj = 20 °C	0.951	0.952
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	543 kWh	576 kWh