Login

Summary of	Ecodan Zubadan 6/8-170D AA	Reg. No.	037-0018-20
Certificate Holder			
Name	Mitsubishi Electric Air Conditioning Systems Europe LTD		
Address	Nettlehill Road, Houston Industrial Estate	Zip	EH54 5EQ
City	Livingston	Country	United Kingdom
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)		
Subtype title	Ecodan Zubadan 6/8-170D AA		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.4 kg		
Certification Date	30.11.2020		
Testing basis	HP Keymark scheme rules rev. no. 6		

Model: PUD-SHWM60VAA(-BS) + E*ST17D-*M*BD

Configure model	
Model name	PUD-SHWM60VAA(-BS) + E*ST17D-*M*BD
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5 kW	5 kW
El input	1 kW	1.89 kW
COP	4.99	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	178 %	134 %
Prated	6 kW	6 kW
SCOP	4.52	3.41
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	5.3 kW	5.3 kW
COP Tj = -7°C	3.29	2.14
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.45	3.23
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	5.67	4.91
Cdh Tj = +7 °C	0.98	0.99

Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	7.8	6.89
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	3.21	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.02
WTOL	60 °C	60 °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	2743 kWh	3631 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	136 %
COP	3.22
Heating up time	01:38 h:min
Standby power input	37 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	236 l

Model: PUD-SHWM60VAA(-BS) + E*ST17D-*M*D

Configure model	
Model name	PUD-SHWM60VAA(-BS) + E*ST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5 kW	5 kW
El input	1 kW	1.89 kW
COP	4.99	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	178 %	134 %
Prated	6 kW	6 kW
SCOP	4.52	3.41
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	5.3 kW	5.3 kW
COP Tj = -7°C	3.29	2.14
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.45	3.23
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	5.67	4.91
Cdh Tj = +7 °C	0.98	0.99

Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	7.8	6.89
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	3.21	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.02
WTOL	60 °C	60 °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	2743 kWh	3631 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	136 %
COP	3.22
Heating up time	01:38 h:min
Standby power input	37 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	236 l

Model: PUD-SHWM80VAA(-BS) + E*ST17D-*M*BD

Configure model	
Model name	PUD-SHWM80VAA(-BS) + E*ST17D-*M*BD
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	6 kW	6 kW
El input	1.19 kW	2.26 kW
COP	5.03	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	181 %	135 %
Prated	8 kW	8 kW
SCOP	4.6	3.45
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3.11	2.14
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.43	3.23
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.91
Cdh Tj = +7 °C	0.98	0.99

Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8.21	7.05
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	3.09	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	1.97
WTOL	60 °C	60 °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	3597 kWh	4793 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	136 %
COP	3.22
Heating up time	01:38 h:min
Standby power input	37 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	236 l

Model: PUD-SHWM80VAA(-BS) + E*ST17D-*M*D

Configure model	
Model name	PUD-SHWM80VAA(-BS) + E*ST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	6 kW	6 kW
El input	1.19 kW	2.26 kW
COP	5.03	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	181 %	135 %
Prated	8 kW	8 kW
SCOP	4.6	3.45
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3.11	2.14
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.43	3.23
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.91
Cdh Tj = +7 °C	0.98	0.99

Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8.21	7.05
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	3.09	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	1.97
WTOL	60 °C	60 °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	3597 kWh	4793 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	136 %
COP	3.22
Heating up time	01:38 h:min
Standby power input	37 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	236 l

Model: PUD-SHWM80YAA(-BS) + E*ST17D-*M*BD

Configure model	
Model name	PUD-SHWM80YAA(-BS) + E*ST17D-*M*BD
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	n/a

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	6 kW	6 kW
El input	1.19 kW	2.26 kW
COP	5.03	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	179 %	134 %
Prated	8 kW	8 kW
SCOP	4.55	3.42
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3.11	2.14
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.44	3.23
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.91
Cdh Tj = +7 °C	0.97	0.98

Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8.21	7.05
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	3.09	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	1.97
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	3632 kWh	4832 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	136 %
COP	3.22
Heating up time	01:38 h:min
Standby power input	37 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	236 l

Model: PUD-SHWM80YAA(-BS) + E*ST17D-*M*D

Configure model	
Model name	PUD-SHWM80YAA(-BS) + E*ST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	6 kW	6 kW
El input	1.19 kW	2.26 kW
COP	5.03	2.65

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	179 %	134 %
Prated	8 kW	8 kW
SCOP	4.55	3.42
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3.11	2.14
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.44	3.23
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.91
Cdh Tj = +7 °C	0.97	0.98

Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8.21	7.05
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	3.09	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.09	1.97
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	3632 kWh	4832 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	136 %
COP	3.22
Heating up time	01:38 h:min
Standby power input	37 W
Reference hot water temperature	53.4 °C
Mixed water at 40°C	236 l