

Subtype Ecodan Zubadan (TR) 6/8/10 + 300F AA

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 Zubadan (TR) 6/8/10 + 300F AA
Registration number	037-0149-23
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.8 kg
Certification Date	05.12.2023
Testing basis	HP Keymark scheme rules rev. no. 11
Testing laboratory	SZU Brno, CZ

Model PUZ-SHWM60VAA + ERST30F-*M*E

Model name	PUZ-SHWM60VAA + ERST30F-*M*E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency η_{DHW}	130 %
COP	3.14
Heating up time	2:42 h:min
Standby power input	44.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	4 kW
El input	0.99 kW	1.63 kW
COP	5.05	2.45

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	1.46 kW	1.11 kW
Cooling capacity	5.1	6
EER	3.5	5.4

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	188 %	131 %
P _{rated}	6 kW	6 kW
SCOP	4.78	3.35
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	5.31 kW	5.31 kW
COP T _j = -7°C	3.4	2.28
C _{dh T_j} = -7 °C	0.99	0.994
P _{dh T_j} = +2°C	4.8 kW	4.4 kW
COP T _j = +2°C	4.78	3.22
C _{dh T_j} = +2 °C	0.985	0.989
P _{dh T_j} = +7°C	4.9 kW	4.1 kW
COP T _j = +7°C	5.9	4.2
C _{dh T_j} = +7 °C	0.982	0.985
P _{dh T_j} = 12°C	3 kW	2.7 kW
COP T _j = 12°C	6.52	5.87
C _{dh T_j} = +12 °C	0.967	0.967
P _{dh T_j} = T _{biv}	6 kW	6 kW
COP T _j = T _{biv}	2.76	2
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	6 kW	6 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.76	2
C _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	0.993	0.995
WT _{OL}	70 °C	70 °C
P _{off}	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 Q _{he}	2593 kWh	3700 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	5.1 kW	6 kW
SEER	3.89	5.93
P _{dc T_j} = 35°C	5.1 kW	6 kW
EER T _j = 35°C	3.5	5.4

Cdc Tj = 35 °C	0.99	0.987
Pdc Tj = 30°C	3.76 kW	4.42 kW
EER Tj = 30°C	3.84	5.95
Cdc Tj = 30 °C	0.985	0.98
Pdc Tj = 25°C	2.42 kW	3.3 kW
EER Tj = 25°C	4.07	6.38
Cdc Tj = 25 °C	0.975	0.971
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.57	7
Cdc Tj = 20 °C	0.973	0.97
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	787 kWh	608 kWh

Model PUZ-SHWM80VAA + ERST30F-*M*E

Model name	PUZ-SHWM80VAA + ERST30F-*M*E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency η_{DHW}	130 %
COP	3.14
Heating up time	2:42 h:min
Standby power input	44.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.15 kW	1.62 kW
Cooling capacity	7.1	8
EER	3.3	4.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	188 %	134 %
P _{rated}	8 kW	8 kW
SCOP	4.77	3.42
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	7.08 kW	7.08 kW
COP T _j = -7°C	3.23	2.32
C _{dh T_j} = -7 °C	0.993	0.995
P _{dh T_j} = +2°C	4.4 kW	4.4 kW
COP T _j = +2°C	4.78	3.22
C _{dh T_j} = +2 °C	0.984	0.989
P _{dh T_j} = +7°C	5 kW	4.4 kW
COP T _j = +7°C	5.9	4.4
C _{dh T_j} = +7 °C	0.982	0.985
P _{dh T_j} = 12°C	3 kW	2.8 kW
COP T _j = 12°C	6.52	6.09
C _{dh T_j} = +12 °C	0.967	0.967
P _{dh T_j} = T _{biv}	8 kW	8 kW
COP T _j = T _{biv}	2.67	1.84
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	8 kW	8 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.67	1.84
C _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	0.995	0.997
WT _{OL}	70 °C	70 °C
P _{off}	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 Q _{he}	3462 kWh	4837 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	7.1 kW	8 kW
SEER	4.13	5.74
P _{dc T_j} = 35°C	7.1 kW	8 kW
EER T _j = 35°C	3.3	4.95

Cdc Tj = 35 °C	0.993	0.991
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.989	0.986
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.98	0.976
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.972	0.971
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	1031 kWh	836 kWh

Model PUZ-SHWM80YAA + ERST30F-*M*E

Model name	PUZ-SHWM80YAA + ERST30F-*M*E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	130 %
COP	3.14
Heating up time	2:42 h:min
Standby power input	44.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

EN 14511-2 | Cooling

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	2.15 kW	1.62 kW
EER	7.1	8
	3.3	4.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	187 %	133 %
P _{rated}	8 kW	8 kW
SCOP	4.76	3.41
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	7.08 kW	7.08 kW
COP T _j = -7°C	3.23	2.32
Cd _h T _j = -7 °C	0.99	0.993
P _{dh T_j} = +2°C	4.4 kW	4.4 kW
COP T _j = +2°C	4.78	3.22
Cd _h T _j = +2 °C	0.976	0.984
P _{dh T_j} = +7°C	5 kW	4.4 kW
COP T _j = +7°C	5.9	4.4
Cd _h T _j = +7 °C	0.974	0.978
P _{dh T_j} = 12°C	3 kW	2.8 kW
COP T _j = 12°C	6.52	6.09
Cd _h T _j = +12 °C	0.952	0.952
P _{dh T_j} = T _{biv}	8 kW	8 kW
COP T _j = T _{biv}	2.67	1.84
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	8 kW	8 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.67	1.84
Cd _h T _j = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	0.993	0.995
WT _{OL}	70 °C	70 °C
P _{off}	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 Q _{he}	3474 kWh	4848 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	7.1 kW	8 kW
SEER	4.07	5.63
P _{dc T_j} = 35°C	7.1 kW	8 kW
EER T _j = 35°C	3.3	4.95

Cdc Tj = 35 °C	0.99	0.986
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.984	0.979
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.97	0.965
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.959	0.958
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	1048 kWh	853 kWh

Model PUZ-SHWM100VAA + ERST30F-*M*E

Model name	PUZ-SHWM100VAA + ERST30F-*M*E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency η_{DHW}	130 %
COP	3.14
Heating up time	2:42 h:min
Standby power input	44.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	8 kW	7 kW
El input	1.58 kW	2.59 kW
COP	5.05	2.7

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3 kW	2.22 kW
Cooling capacity	9	10
EER	3	4.5

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	186 %	138 %
Prated	10 kW	10 kW
SCOP	4.73	3.53
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.85 kW	8.85 kW
COP Tj = -7°C	3.12	2.2
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	5.4 kW	5.4 kW
COP Tj = +2°C	4.65	3.4
Cdh Tj = +2 °C	0.987	0.991
Pdh Tj = +7°C	5.2 kW	4.8 kW
COP Tj = +7°C	6	4.62
Cdh Tj = +7 °C	0.983	0.986
Pdh Tj = 12°C	3.2 kW	2.9 kW
COP Tj = 12°C	6.96	6.3
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	2.51	1.7
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	1.7
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	70 °C	70 °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	4369 kWh	5858 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9 kW	10 kW
SEER	3.98	5.73
Pdc Tj = 35°C	9 kW	10 kW
EER Tj = 35°C	3	4.5

Cdc Tj = 35 °C	0.995	0.993
Pdc Tj = 30°C	6.63 kW	7.37 kW
EER Tj = 30°C	3.82	5.68
Cdc Tj = 30 °C	0.991	0.988
Pdc Tj = 25°C	4.26 kW	4.74 kW
EER Tj = 25°C	4.43	6.05
Cdc Tj = 25 °C	0.984	0.981
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.23	6.55
Cdc Tj = 20 °C	0.975	0.972
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	1357 kWh	1047 kWh

Model PUZ-SHWM100YAA + ERST30F-*M*E

Model name	PUZ-SHWM100YAA + ERST30F-*M*E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	130 %
COP	3.14
Heating up time	2:42 h:min
Standby power input	44.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	8 kW	7 kW
El input	1.58 kW	2.59 kW
COP	5.05	2.7

EN 14511-2 | Cooling

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	3 kW	2.22 kW
EER	9	10
	3	4.5

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	186 %	138 %
P _{rated}	10 kW	10 kW
SCOP	4.72	3.52
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	8.85 kW	8.85 kW
COP T _j = -7°C	3.12	2.2
C _{dh T_j} = -7 °C	0.992	0.995
P _{dh T_j} = +2°C	5.4 kW	5.4 kW
COP T _j = +2°C	4.65	3.4
C _{dh T_j} = +2 °C	0.981	0.986
P _{dh T_j} = +7°C	5.2 kW	4.8 kW
COP T _j = +7°C	6	4.62
C _{dh T_j} = +7 °C	0.975	0.979
P _{dh T_j} = 12°C	3.2 kW	2.9 kW
COP T _j = 12°C	6.96	6.3
C _{dh T_j} = +12 °C	0.952	0.952
P _{dh T_j} = T _{biv}	10 kW	10 kW
COP T _j = T _{biv}	2.51	1.7
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	10 kW	10 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.51	1.7
C _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	0.994	0.996
WT _{OL}	70 °C	70 °C
P _{off}	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 Q _{he}	4380 kWh	5868 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	9 kW	10 kW
SEER	3.93	5.64
P _{dc T_j} = 35°C	9 kW	10 kW
EER T _j = 35°C	3	4.5

Cdc Tj = 35 °C	0.993	0.99
Pdc Tj = 30°C	6.63 kW	7.37 kW
EER Tj = 30°C	3.82	5.68
Cdc Tj = 30 °C	0.987	0.983
Pdc Tj = 25°C	4.26 kW	4.74 kW
EER Tj = 25°C	4.43	6.05
Cdc Tj = 25 °C	0.977	0.972
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.23	6.55
Cdc Tj = 20 °C	0.963	0.959
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	1372 kWh	1064 kWh