

Subtype Ecodan Power Inverter (TR) 14 + 200F 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 Power Inverter (TR) 14 + 200F AA
Registration number	037-0146-23
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-SWM140VAA + ERST20F-*M*E

Model name	PUZ-SWM140VAA + ERST20F-*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	L
Efficiency η_{DHW}	131 %
COP	3.09
Heating up time	1:45 h:min
Standby power input	43.7 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	12 kW	7 kW
El input	2.52 kW	2.59 kW
COP	4.77	2.7

EN 14511-2 | Cooling

El input	+7°C/+12°C 4.77 kW	+18°C/+23°C 3.73 kW
Cooling capacity	12.5	14
EER	2.62	3.75

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	178 %	136 %
P _{rated}	14 kW	14 kW
SCOP	4.51	3.47
T _{biv}	-7 °C	-7 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	12.4 kW	12.4 kW
COP T _j = -7°C	2.7	1.98
C _{dh T_j} = -7 °C	0.997	0.998
P _{dh T_j} = +2°C	7.6 kW	7.5 kW
COP T _j = +2°C	4.54	3.43
C _{dh T_j} = +2 °C	0.991	0.993
P _{dh T_j} = +7°C	6.4 kW	6.3 kW
COP T _j = +7°C	5.91	4.61
C _{dh T_j} = +7 °C	0.986	0.989
P _{dh T_j} = 12°C	4.1 kW	3.9 kW
COP T _j = 12°C	7.03	6.28
C _{dh T_j} = +12 °C	0.974	0.976
P _{dh T_j} = T _{biv}	12.4 kW	12.4 kW
COP T _j = T _{biv}	2.7	1.98
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	11 kW	11 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.4	1.75
C _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	0.997	0.998
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	3 kW	3 kW
Annual energy consumption Q _{he}	6407 kWh	8346 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	12.5 kW	14 kW
SEER	3.61	4.9
P _{dc T_j} = 35°C	12.5 kW	14 kW
EER T _j = 35°C	2.62	3.75

Cdc Tj = 35 °C	0.997	0.996
Pdc Tj = 30°C	9.21 kW	10.32 kW
EER Tj = 30°C	3.47	4.93
Cdc Tj = 30 °C	0.994	0.993
Pdc Tj = 25°C	6 kW	6.63 kW
EER Tj = 25°C	4.2	5.1
Cdc Tj = 25 °C	0.99	0.988
Pdc Tj = 20°C	3.7 kW	4.7 kW
EER Tj = 20°C	3.49	5.4
Cdc Tj = 20 °C	0.986	0.983
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	2080 kWh	1714 kWh

Model PUZ-SWM140YAA + ERST20F-*M*E

Model name	PUZ-SWM140YAA + ERST20F-*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	L
Efficiency η_{DHW}	131 %
COP	3.09
Heating up time	1:45 h:min
Standby power input	43.7 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	12 kW	7 kW
El input	2.52 kW	2.59 kW
COP	4.77	2.7

EN 14511-2 | Cooling

El input	+7°C/+12°C 4.77 kW	+18°C/+23°C 3.73 kW
Cooling capacity	12.5	14
EER	2.62	3.75

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	177 %	135 %
P _{rated}	14 kW	14 kW
SCOP	4.51	3.46
T _{biv}	-7 °C	-7 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	12.4 kW	12.4 kW
COP T _j = -7°C	2.7	1.98
C _{dh T_j} = -7 °C	0.995	0.996
P _{dh T_j} = +2°C	7.6 kW	7.5 kW
COP T _j = +2°C	4.54	3.43
C _{dh T_j} = +2 °C	0.987	0.99
P _{dh T_j} = +7°C	6.4 kW	6.3 kW
COP T _j = +7°C	5.91	4.61
C _{dh T_j} = +7 °C	0.98	0.984
P _{dh T_j} = 12°C	4.1 kW	3.9 kW
COP T _j = 12°C	7.03	6.28
C _{dh T_j} = +12 °C	0.962	0.965
P _{dh T_j} = T _{biv}	12.4 kW	12.4 kW
COP T _j = T _{biv}	2.7	1.98
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	11 kW	11 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.4	1.75
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}	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	3 kW	3 kW
Annual energy consumption Q _{he}	6415 kWh	8354 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	12.5 kW	14 kW
SEER	3.58	4.85
P _{dc T_j} = 35°C	12.5 kW	14 kW
EER T _j = 35°C	2.62	3.75

Cdc Tj = 35 °C	0.995	0.994
Pdc Tj = 30°C	9.21 kW	10.32 kW
EER Tj = 30°C	3.47	4.93
Cdc Tj = 30 °C	0.992	0.989
Pdc Tj = 25°C	6 kW	6.63 kW
EER Tj = 25°C	4.2	5.1
Cdc Tj = 25 °C	0.985	0.983
Pdc Tj = 20°C	3.7 kW	4.7 kW
EER Tj = 20°C	3.49	5.4
Cdc Tj = 20 °C	0.979	0.975
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	2095 kWh	1731 kWh

Model PUZ-SWM140VAA + ERSF-M*E

Model name	PUZ-SWM140VAA + ERSF-M*E
Application	Heating (medium 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 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	12 kW	7 kW
El input	2.52 kW	2.59 kW
COP	4.77	2.7

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.77 kW	3.73 kW
Cooling capacity	12.5	14
EER	2.62	3.75

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
ηs	178 %	136 %
Prated	14 kW	14 kW
SCOP	4.51	3.47

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.7	1.98
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.54	3.43
Cdh Tj = +2 °C	0.991	0.993
Pdh Tj = +7°C	6.4 kW	6.3 kW
COP Tj = +7°C	5.91	4.61
Cdh Tj = +7 °C	0.986	0.989
Pdh Tj = 12°C	4.1 kW	3.9 kW
COP Tj = 12°C	7.03	6.28
Cdh Tj = +12 °C	0.974	0.976
Pdh Tj = Tbiv	12.4 kW	12.4 kW
COP Tj = Tbiv	2.7	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.4	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
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	3 kW	3 kW
Annual energy consumption Qhe	6407 kWh	8346 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	12.5 kW	14 kW
SEER	3.61	4.9
Pdc Tj = 35°C	12.5 kW	14 kW
EER Tj = 35°C	2.62	3.75
Cdc Tj = 35 °C	0.997	0.996
Pdc Tj = 30°C	9.21 kW	10.32 kW
EER Tj = 30°C	3.47	4.93
Cdc Tj = 30 °C	0.994	0.993
Pdc Tj = 25°C	6 kW	6.63 kW
EER Tj = 25°C	4.2	5.1
Cdc Tj = 25 °C	0.99	0.988
Pdc Tj = 20°C	3.7 kW	4.7 kW
EER Tj = 20°C	3.49	5.4

Cdc Tj = 20 °C	0.986	0.983
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	2080 kWh	1714 kWh

Model PUZ-SWM140YAA + ERSF-M*E

Model name	PUZ-SWM140YAA + ERSF-M*E
Application	Heating (medium 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 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	12 kW	7 kW
El input	2.52 kW	2.59 kW
COP	4.77	2.7

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.77 kW	3.73 kW
Cooling capacity	12.5	14
EER	2.62	3.75

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
ηs	177 %	135 %
Prated	14 kW	14 kW
SCOP	4.51	3.46

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.7	1.98
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.54	3.43
Cdh Tj = +2 °C	0.987	0.99
Pdh Tj = +7°C	6.4 kW	6.3 kW
COP Tj = +7°C	5.91	4.61
Cdh Tj = +7 °C	0.98	0.984
Pdh Tj = 12°C	4.1 kW	3.9 kW
COP Tj = 12°C	7.03	6.28
Cdh Tj = +12 °C	0.962	0.965
Pdh Tj = Tbiv	12.4 kW	12.4 kW
COP Tj = Tbiv	2.7	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.4	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.997
WTOL	70 °C	70 °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	3 kW	3 kW
Annual energy consumption Qhe	6415 kWh	8354 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	12.5 kW	14 kW
SEER	3.58	4.85
Pdc Tj = 35°C	12.5 kW	14 kW
EER Tj = 35°C	2.62	3.75
Cdc Tj = 35 °C	0.995	0.994
Pdc Tj = 30°C	9.21 kW	10.32 kW
EER Tj = 30°C	3.47	4.93
Cdc Tj = 30 °C	0.992	0.989
Pdc Tj = 25°C	6 kW	6.63 kW
EER Tj = 25°C	4.2	5.1
Cdc Tj = 25 °C	0.985	0.983
Pdc Tj = 20°C	3.7 kW	4.7 kW
EER Tj = 20°C	3.49	5.4

Cdc Tj = 20 °C	0.979	0.975
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	2095 kWh	1731 kWh

Model PUZ-SWM140VAA + ERSF-*M*E

Model name	PUZ-SWM140VAA + ERSF-*M*E
Application	Heating (medium 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 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	12 kW	7 kW
El input	2.52 kW	2.59 kW
COP	4.77	2.7

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.77 kW	3.73 kW
Cooling capacity	12.5	14
EER	2.62	3.75

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
ηs	178 %	136 %
Prated	14 kW	14 kW
SCOP	4.51	3.47

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.7	1.98
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.54	3.43
Cdh Tj = +2 °C	0.991	0.993
Pdh Tj = +7°C	6.4 kW	6.3 kW
COP Tj = +7°C	5.91	4.61
Cdh Tj = +7 °C	0.986	0.989
Pdh Tj = 12°C	4.1 kW	3.9 kW
COP Tj = 12°C	7.03	6.28
Cdh Tj = +12 °C	0.974	0.976
Pdh Tj = Tbiv	12.4 kW	12.4 kW
COP Tj = Tbiv	2.7	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.4	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
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	3 kW	3 kW
Annual energy consumption Qhe	6407 kWh	8346 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	12.5 kW	14 kW
SEER	3.61	4.9
Pdc Tj = 35°C	12.5 kW	14 kW
EER Tj = 35°C	2.62	3.75
Cdc Tj = 35 °C	0.997	0.996
Pdc Tj = 30°C	9.21 kW	10.32 kW
EER Tj = 30°C	3.47	4.93
Cdc Tj = 30 °C	0.994	0.993
Pdc Tj = 25°C	6 kW	6.63 kW
EER Tj = 25°C	4.2	5.1
Cdc Tj = 25 °C	0.99	0.988
Pdc Tj = 20°C	3.7 kW	4.7 kW
EER Tj = 20°C	3.49	5.4

Cdc Tj = 20 °C	0.986	0.983
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	2080 kWh	1714 kWh

Model PUZ-SWM140YAA + ERSF-*M*E

Model name	PUZ-SWM140YAA + ERSF-*M*E
Application	Heating (medium 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 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	12 kW	7 kW
El input	2.52 kW	2.59 kW
COP	4.77	2.7

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.77 kW	3.73 kW
Cooling capacity	12.5	14
EER	2.62	3.75

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
ηs	177 %	135 %
Prated	14 kW	14 kW
SCOP	4.51	3.46

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.7	1.98
Cdh Tj = -7 °C	0.995	0.996
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.54	3.43
Cdh Tj = +2 °C	0.987	0.99
Pdh Tj = +7°C	6.4 kW	6.3 kW
COP Tj = +7°C	5.91	4.61
Cdh Tj = +7 °C	0.98	0.984
Pdh Tj = 12°C	4.1 kW	3.9 kW
COP Tj = 12°C	7.03	6.28
Cdh Tj = +12 °C	0.962	0.965
Pdh Tj = Tbiv	12.4 kW	12.4 kW
COP Tj = Tbiv	2.7	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11 kW	11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.4	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.997
WTOL	70 °C	70 °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	3 kW	3 kW
Annual energy consumption Qhe	6415 kWh	8354 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	12.5 kW	14 kW
SEER	3.58	4.85
Pdc Tj = 35°C	12.5 kW	14 kW
EER Tj = 35°C	2.62	3.75
Cdc Tj = 35 °C	0.995	0.994
Pdc Tj = 30°C	9.21 kW	10.32 kW
EER Tj = 30°C	3.47	4.93
Cdc Tj = 30 °C	0.992	0.989
Pdc Tj = 25°C	6 kW	6.63 kW
EER Tj = 25°C	4.2	5.1
Cdc Tj = 25 °C	0.985	0.983
Pdc Tj = 20°C	3.7 kW	4.7 kW
EER Tj = 20°C	3.49	5.4

Cdc Tj = 20 °C	0.979	0.975
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	2095 kWh	1731 kWh