

Subtype Ecodan Zubadan 14-300D

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 14-300D
Registration number	037-0014-20
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	5.5 kg
Certification Date	14.02.2020
Testing basis	HP Keymark scheme rules rev. no. 6

Model PUHZ-SHW140YHA + EHST30C-M*D

Model name	PUHZ-SHW140YHA + EHST30C-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
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}	118 %
COP	2.84
Heating up time	02:12 h:min
Standby power input	43.0 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	14.00 kW	14.00 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	163 %	127 %
Prated	17.00 kW	15.80 kW
SCOP	4.16	3.25

Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15.00 kW	14.00 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	9.10 kW	8.50 kW
COP Tj = +2°C	4.01	3.10
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.90 kW	5.50 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.00 kW	14.00 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	13.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	2.90 kW	1.90 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

Model PUAZ-SHW140YHA + EHST30C-*M*D

Model name	PUAZ-SHW140YHA + EHST30C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
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}	118 %
COP	2.84
Heating up time	02:12 h:min
Standby power input	43.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

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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	14.00 kW	14.00 kW
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Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	163 %	127 %
Prated	17.00 kW	15.80 kW
SCOP	4.16	3.25

Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15.00 kW	14.00 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	9.10 kW	8.50 kW
COP Tj = +2°C	4.01	3.10
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.90 kW	5.50 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.00 kW	14.00 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	13.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	2.90 kW	1.90 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

Model PUHZ-SHW140YHA + ERST30C-*M*D

Model name	PUHZ-SHW140YHA + ERST30C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
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}	118 %
COP	2.84
Heating up time	02:12 h:min
Standby power input	43.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

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Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	14.00 kW	14.00 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	165 %	128 %
Prated	17.00 kW	15.80 kW

SCOP	4.21	3.27
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15.00 kW	14.00 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	9.10 kW	8.50 kW
COP Tj = +2°C	4.03	3.10
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.90 kW	5.50 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.00 kW	14.00 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	13.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	2.90 kW	1.90 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh