Subtype Ecodan Zubadan 14-300D 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 14-300D AA
Registration number	037-0028-20
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.7 kg
Certification Date	06.10.2020
Testing basis	HP Keymark scheme rules rev. no. 6
Testing laboratory	SZU Brno, CZ

Model PUD-SHWM140VAA(-BS) + E*ST30D-*M*D	
Model name	PUD-SHWM140VAA(-BS) + E*ST30D-*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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	121 %
COP	2.91
Heating up time	02:15 h:min
Standby power input	42 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	12 kW	12 kW
El input	2.55 kW	4.9 kW
COP	4.7	2.45

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	179 %	134 %
Prated	14 kW	14 kW

SCOP	4.54	3.43
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.76	2.15
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.3	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.2 kW	6.3 kW
COP Tj = +7°C	6.27	4.96
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.4 kW	4 kW
COP Tj = 12°C	9	6.9
Cdh Tj = +12 °C	0.98	0.97
Pdh Tj = Tbiv	14 kW	14 kW
COP Tj = Tbiv	2.69	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14 kW	14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.8
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	6367 kWh	8421 kWh

Model PUD-SHWM140VAA(-BS) + E*ST30D-M*D

Model name	PUD-SHWM140VAA(-BS) + E*ST30D-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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency ηDHW	121 %
COP	2.91
Heating up time	02:15 h:min
Standby power input	42 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	12 kW	12 kW
El input	2.55 kW	4.9 kW
COP	4.7	2.45

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	179 %	134 %
Prated	14 kW	14 kW

SCOP	4.54	3.43
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.76	2.15
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.3	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.2 kW	6.3 kW
COP Tj = +7°C	6.27	4.96
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.4 kW	4 kW
COP Tj = 12°C	9	6.9
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COP Tj = Tbiv	2.69	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14 kW	14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.8
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	6367 kWh	8421 kWh

Model PUD-SHWM140YAA(-BS) + E*ST30D-*M*D	
Model name	PUD-SHWM140YAA(-BS) + E*ST30D-*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 ηDHW	121 %
COP	2.91
Heating up time	02:15 h:min
Standby power input	42 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	12 kW	12 kW
El input	2.55 kW	4.9 kW
COP	4.7	2.45

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	177 %	134 %
Prated	14 kW	14 kW

SCOP	4.51	3.42
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.76	2.15
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.3	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.2 kW	6.3 kW
COP Tj = +7°C	6.2	4.96
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.4 kW	4 kW
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Pdh Tj = Tbiv	14 kW	14 kW
COP Tj = Tbiv	2.69	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14 kW	14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.8
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	6416 kWh	8455 kWh

Model PUD-SHWM140YAA(-BS) + E*ST30D-M*D

Model name	PUD-SHWM140YAA(-BS) + E*ST30D-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 ηDHW	121 %
COP	2.91
Heating up time	02:15 h:min
Standby power input	42 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	12 kW	12 kW
El input	2.55 kW	4.9 kW
COP	4.7	2.45

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
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EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	177 %	134 %
Prated	14 kW	14 kW

SCOP	4.51	3.42
Tbiv	-10 °C	-10 °C
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Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.76	2.15
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.3	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.2 kW	6.3 kW
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Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.4 kW	4 kW
COP Tj = 12°C	9	6.9
Cdh Tj = +12 °C	0.96	0.96
Pdh Tj = Tbiv	14 kW	14 kW
COP Tj = Tbiv	2.69	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14 kW	14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.8
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	6416 kWh	8455 kWh