

Page 1 of 17

#### This information was generated by the HP KEYMARK database on 22 Jun 2022

#### **Login**

Summary of	Ecodan Zubadan 14-300D AA	Reg. No.	037-0028-20
Certificate Holder	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 14-300D AA		
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		

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

Configure model		
Model name PUD-SHWM140VAA(-BS) + E*ST30D-*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	12 kW	12 kW
El input	2.55 kW	4.9 kW
СОР	4.7	2.45

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



EN 12102-1		
	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		
	Low temperature	Medium temperature
$\eta_{s}$	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
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	6367 kWh	8421 kWh

### Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	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	



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

Configure model		
Model name PUD-SHWM140VAA(-BS) + E*ST30D-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	12 kW	12 kW	
El input	2.55 kW	4.9 kW	
СОР	4.7	2.45	

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



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

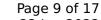
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	179 %	134 %
Prated	14 kW	14 kW
SCOP	4.54	3.43
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.76	2.15
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.3	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	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
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o 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

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	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	



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

Configure model		
Model name	PUD-SHWM140YAA(-BS) + E*ST30D-*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	12 kW	12 kW
El input	2.55 kW	4.9 kW
СОР	4.7	2.45

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



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

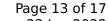
EN 14825		
	Low temperature	e Medium temperature
$\eta_{s}$	177 %	134 %
Prated	14 kW	14 kW
SCOP	4.51	3.42
Tbiv	-10 °C	-10 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.4 kW	12.4 kW
COP Tj = -7°C	2.76	2.15
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.6 kW	7.5 kW
COP Tj = +2°C	4.3	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +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
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
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o 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

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	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	



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

Configure model		
Model name	PUD-SHWM140YAA(-BS) + E*ST30D-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

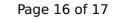
EN 14511-2		
	Low temperature	Medium temperature
Heat output	12 kW	12 kW
El input	2.55 kW	4.9 kW
СОР	4.7	2.45

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



EN 12102-1		
	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		
	Low temperature	Medium temperature
$\eta_{s}$	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





This information was generated by the HP KEYMARK database on 22 Jun 20		
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	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW

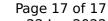
Domestic Hot Water (DHW)

Annual energy consumption Qhe

Average Climate

6416 kWh

8455 kWh





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	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	