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Summary of	Ecodan Power Inverter 12-300D	Reg. No.	037-0013-20
Certificate Holder			
Name	Mitsubishi Electric Air Conditioning Systems Europe LTD		
Address	Nettlehill Road, Houston Industrial Estate	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 Power Inverter 12-300D		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	4.6 kg		
Certification Date	14.02.2020		
Testing basis	HP Keymark scheme rules rev. no. 6		



Model: PUHZ-SW120VHA + EHST30C-M*D

Configure model		
Model name	PUHZ-SW120VHA + EHST30C-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	16.00 kW	15.20 kW
El input	3.90 kW	6.03 kW
СОР	4.10	2.52

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	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.990	0.990





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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	2.40 kW	2.10 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh

Domestic Hot Water (DHW)



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	118 %	
СОР	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	



Model: PUHZ-SW120VHA + EHST30C-*M*D

Configure model		
Model name	PUHZ-SW120VHA + EHST30C-*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	16.00 kW	15.20 kW
El input	3.90 kW	6.03 kW
СОР	4.10	2.52

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	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = $+2$ °C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.990	0.990





Pdh Tj = 12°C 7.70 kW 7.40 kW COP Tj = 12°C 7.32 6.50 Cdh Tj = +12 °C 0.990 0.990 Pdh Tj = Tbiv 11.40 kW 10.70 kW COP Tj = Tbiv 2.37 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 10.50 kW 10.00 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.14 1.74 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 50 °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 2.40 kW 2.10 kW Annual energy consumption Ohe 6448 kWh 7790 kWh	This information was genera		
Cdh Tj = +12 °C 0.990 0.990 Pdh Tj = Tbiv 11.40 kW 10.70 kW COP Tj = Tbiv 2.37 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = 12°C	7.70 kW	7.40 kW
Pdh Tj = Tbiv 11.40 kW 10.70 kW COP Tj = Tbiv 2.37 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	COP Tj = 12°C	7.32	6.50
COP Tj = Tbiv 2.37 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 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	COP Tj = Tbiv	2.37	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh WTOL 60 °C 60 °C Poff 15 W 15 W PTO 15 W 15 W PSB 15 W 15 W 0 W CW Supplementary Heater: Type of energy input Electricity Electricity Electricity 2.40 kW 2.10 kW	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
WTOL 60 °C 60 °C Foff 15 W 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 Electricity 2.40 kW 2.10 kW	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
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 2.40 kW 2.10 kW	Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
PTO 15 W 15 W PSB 15 W 0 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 2.40 kW 2.10 kW	WTOL	60 °C	60 °C
PSB 15 W 15 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 2.40 kW 2.10 kW	Poff	15 W	15 W
PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 2.40 kW 2.10 kW	РТО	15 W	15 W
Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 2.40 kW 2.10 kW	PSB	15 W	15 W
Supplementary Heater: PSUP 2.40 kW 2.10 kW	PCK	o w	0 W
	Supplementary Heater: Type of energy input	Electricity	Electricity
Annual energy consumption Qhe 6448 kWh 7790 kWh	Supplementary Heater: PSUP	2.40 kW	2.10 kW
	Annual energy consumption Qhe	6448 kWh	7790 kWh

Domestic Hot Water (DHW)



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	118 %	
СОР	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	

Model: PUHZ-SW120VHA + ERST30C-*M*D

Configure model		
Model name	PUHZ-SW120VHA + ERST30C-*M*D	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.20 kW
El input	3.90 kW	6.03 kW
СОР	4.10	2.52

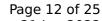
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	127 %
Prated	12.90 kW	12.10 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.990	0.990





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	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	2.40 kW	2.10 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh

Domestic Hot Water (DHW)



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	118 %	
СОР	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	



Model: PUHZ-SW120YHA + EHST30C-M*D

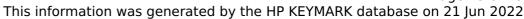
Configure model		
Model name PUHZ-SW120YHA + EHST30C-M*D		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	16.00 kW	15.20 kW	
El input	3.90 kW	6.03 kW	
СОР	4.10	2.52	

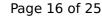
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh Tj = +7 °C	0.980	0.980





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.40 kW	2.10 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh
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Domestic Hot Water (DHW)



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	118 %	
СОР	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	



Model: PUHZ-SW120YHA + EHST30C-*M*D

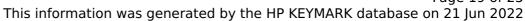
Configure model		
Model name PUHZ-SW120YHA + EHST30C-*M*D		
Application Heating + DHW + low temp		
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility No		
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	16.00 kW	15.20 kW	
El input	3.90 kW	6.03 kW	
СОР	4.10	2.52	

EN 14511-4	
Shutting off the heat transfer medium flow	naccod
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	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh Tj = +7 °C	0.980	0.980





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.40 kW	2.10 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh
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Domestic Hot Water (DHW)



EN 16147		
Declared load profile	XL	
Efficiency ηDHW	118 %	
СОР	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	

Model: PUHZ-SW120YHA + ERST30C-*M*D

Configure model		
Model name	PUHZ-SW120YHA + ERST30C-*M*D	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.20 kW	
El input	3.90 kW	6.03 kW	
СОР	4.10	2.52	

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	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
Low temperature	Medium temperature	
164 %	127 %	
12.90 kW	12.10 kW	
4.18	3.24	
-7 °C	-7 °C	
-20 °C	-20 °C	
11.40 kW	10.70 kW	
2.37	1.83	
1.000	1.000	
6.90 kW	6.50 kW	
4.18	3.13	
0.990	0.990	
6.50 kW	6.00 kW	
5.63	4.50	
0.980	0.980	
	Low temperature 164 % 12.90 kW 4.18 -7 °C -20 °C 11.40 kW 2.37 1.000 6.90 kW 4.18 0.990 6.50 kW 5.63	





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	2.40 kW	2.10 kW
Annual energy consumption Qhe	6377 kWh	7708 kWh

Domestic Hot Water (DHW)



EN 16147	
Declared load profile	XL
Efficiency ηDHW	118 %
СОР	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