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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	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	4.17	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		
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		
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 + 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

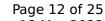
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.20 kW	
El input	3.90 kW	6.03 kW	
СОР	4.10	2.52	

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)

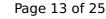
EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	127 %
Prated	12.90 kW	12.10 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	0.990	0.990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





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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
PTO	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	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	

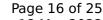
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



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)	

CEN heat pump KEYMARK

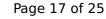
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.990	0.990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





7.70 kW	7.40 kW
7.32	6.55
0.980	0.980
11.40 kW	10.70 kW
2.37	1.83
10.50 kW	10.00 kW
2.14	1.74
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
0 W	0 W
Electricity	Electricity
2.40 kW	2.10 kW
6458 kWh	7788 kWh
	7.32 0.980 11.40 kW 2.37 10.50 kW 2.14 60 °C 22 W 22 W 22 W 0 W Electricity 2.40 kW

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
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Prated	12.90 kW	12.10 kW
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Pdh Tj = +2°C	6.90 kW	6.50 kW
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Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.50 kW	6.00 kW
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Cdh Tj = +7 °C	0.980	0.980
Cdh Tj = +7 °C	0.980	0.980





7.70 kW	7.40 kW
7.32	6.55
0.980	0.980
11.40 kW	10.70 kW
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10.50 kW	10.00 kW
2.14	1.74
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
0 W	0 W
Electricity	Electricity
2.40 kW	2.10 kW
6458 kWh	7788 kWh
	7.32 0.980 11.40 kW 2.37 10.50 kW 2.14 60 °C 22 W 22 W 22 W 0 W Electricity 2.40 kW

Domestic Hot Water (DHW)



$$\operatorname{\textit{Page}}\xspace$ 21 of 25 This information was generated by the HP KEYMARK database on 18 Mar 2022

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

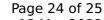
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.20 kW	
El input	3.90 kW	6.03 kW	
СОР	4.10	2.52	

EN 14511-4	
Shutting off the heat transfer medium flow	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}	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	4.18	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





The investment was general	This information was generated by the first Reference on 16 Plan 2022			
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