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This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	Ecodan Power Inverter 10/12-300D AA	Reg. No.	037-0025-20
Certificate Holder	Certificate Holder		
Name	Mitsubishi Electric Air Conditioning Systems Euro	pe 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)		
Name of testing laboratory	Heat Pump Test Center WPZ		
Subtype title	Ecodan Power Inverter 10/12-300D AA		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass Of Refrigerant	1.6 kg		
Certification Date	06.10.2020		
Testing basis	HP Keymark scheme rules rev. no. 6		

Model: PUD-SWM100VAA(-BS) + E*ST30D-M*D

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.00 kW	8.00 kW
El input	1.60 kW	3.08 kW
СОР	5.00	2.60
Indoor water flow rate	1.37 m³/h	0.86 m³/h

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	178 %	131 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	3.10	2.00
Cdh	1.00	1.00
Pdh Tj = +2°C	5.70 kW	5.70 kW
COP Tj = +2°C	4.52	3.20
Cdh	0.99	0.99
Pdh Tj = +7°C	5.40 kW	5.20 kW
COP Tj = +7°C	5.68	4.77
Cdh	0.98	0.99

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Terated by the fir item.	
4.50 kW	3.60 kW
7.76	6.92
0.97	0.97
8.90 kW	8.90 kW
3.10	2.00
6.90 kW	6.90 kW
1.60	1.60
60 °C	60 °C
15 W	15 W
15 W	15 W
15 W	15 W
o w	o w
electricity	electricity
1.43 kW	1.43 kW
4441 kWh	6040 kWh
	4.50 kW 7.76 0.97 8.90 kW 3.10 6.90 kW 1.60 60 °C 15 W 15 W 0 W electricity 1.43 kW

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	221 %	131 %
Prated	10.00 kW	10.00 kW
SCOP	5.59	3.88
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10.00 kW	10.10 kW
COP Tj = +2°C	3.30	1.93
Cdh	1.00	1.00
Pdh Tj = +7°C	6.40 kW	6.40 kW
$COP Tj = +7^{\circ}C$	5.16	3.32
Cdh	0.99	0.99
Pdh Tj = 12°C	4.40 kW	4.20 kW
COP Tj = 12°C	6.88	5.19
Cdh	0.98	0.98
Pdh Tj = Tbiv	10.00 kW	10.10 kW
COP Tj = Tbiv	3.30	1.93
Pdh Tj = TOL	6.90 kW	6.90 kW
COP Tj = TOL	1.60	1.60
WTOL	60 °C	60 °C





Poff	15 W	15 W
PTO	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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	2.93	
Heating up time	2:25 h:min	
Standby power input	39.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	417	





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	145 %	
СОР	3.49	
Heating up time	2:38 h:min	
Standby power input	38.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	417	

Model: PUD-SWM100VAA(-BS) + E*ST30D-*M*D

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.00 kW	8.00 kW
El input	1.60 kW	3.08 kW
СОР	5.00	2.60
Indoor water flow rate	1.37 m³/h	0.86 m³/h

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

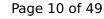
Average Climate



	EN 12102-1	
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	178 %	131 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	3.10	2.00
Cdh	1.00	1.00
Pdh Tj = +2°C	5.70 kW	5.70 kW
COP Tj = +2°C	4.52	3.20
Cdh	0.99	0.99
Pdh Tj = +7°C	5.40 kW	5.20 kW
COP Tj = +7°C	5.68	4.77
Cdh	0.98	0.99

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4.50 kW	3.60 kW
7.76	6.92
0.97	0.97
8.90 kW	8.90 kW
3.10	2.00
6.90 kW	6.90 kW
1.60	1.60
60 °C	60 °C
15 W	15 W
15 W	15 W
15 W	15 W
o w	o w
electricity	electricity
1.43 kW	1.43 kW
4441 kWh	6040 kWh
	4.50 kW 7.76 0.97 8.90 kW 3.10 6.90 kW 1.60 60 °C 15 W 15 W 0 W electricity 1.43 kW

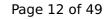
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	221 %	131 %
Prated	10.00 kW	10.00 kW
SCOP	5.59	3.88
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10.00 kW	10.10 kW
COP Tj = +2°C	3.30	1.93
Cdh	1.00	1.00
Pdh Tj = +7°C	6.40 kW	6.40 kW
COP Tj = +7°C	5.16	3.32
Cdh	0.99	0.99
Pdh Tj = 12°C	4.40 kW	4.20 kW
COP Tj = 12°C	6.88	5.19
Cdh	0.98	0.98
Pdh Tj = Tbiv	10.00 kW	10.10 kW
COP Tj = Tbiv	3.30	1.93
Pdh Tj = TOL	6.90 kW	6.90 kW
COP Tj = TOL	1.60	1.60
WTOL	60 °C	60 °C



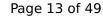


Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	121 %
СОР	2.93
Heating up time	2:25 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417





EN 16147	
Declared load profile	XL
Efficiency ηDHW	145 %
СОР	3.49
Heating up time	2:38 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417



Model: PUD-SWM100YAA(-BS) + E*ST30D-M*D

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.00 kW	8.00 kW
El input	1.60 kW	3.08 kW
СОР	5.00	2.60
Indoor water flow rate	1.37 m³/h	0.86 m³/h

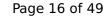
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.49	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	3.10	2.00
Cdh	0.99	1.00
Pdh Tj = +2°C	5.70 kW	5.70 kW
COP Tj = +2°C	4.52	3.20
Cdh	0.98	0.99
Pdh Tj = +7°C	5.40 kW	5.20 kW
COP Tj = +7°C	5.68	4.77
Cdh	0.98	0.98





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Pdh Tj = 12°C	4.50 kW	3.60 kW
COP Tj = 12°C	7.76	6.92
Cdh	0.96	0.96
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	3.10	2.00
Pdh Tj = TOL	6.90 kW	6.90 kW
COP Tj = TOL	1.60	1.60
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	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	1.43 kW	1.43 kW
Annual energy consumption Qhe	4441 kWh	6040 kWh

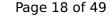
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	218 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	5.53	3.85
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10.00 kW	10.10 kW
COP Tj = +2°C	3.30	1.93
Cdh	0.99	1.00
Pdh Tj = +7°C	6.40 kW	6.40 kW
COP Tj = +7°C	5.16	3.32
Cdh	0.98	0.99
Pdh Tj = 12°C	4.40 kW	4.20 kW
COP Tj = 12°C	6.88	5.19
Cdh	0.97	0.97
Pdh Tj = Tbiv	10.00 kW	10.10 kW
COP Tj = Tbiv	3.30	1.93
Pdh Tj = TOL	6.90 kW	6.90 kW
COP Tj = TOL	1.60	1.60
WTOL	60 °C	60 °C





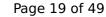
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Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	121 %
СОР	2.93
Heating up time	2:25 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417





EN 16147	
Declared load profile	XL
Efficiency ηDHW	145 %
СОР	3.49
Heating up time	2:38 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417



Model: PUD-SWM100YAA(-BS) + E*ST30D-*M*D

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.00 kW	8.00 kW
El input	1.60 kW	3.08 kW
СОР	5.00	2.60
Indoor water flow rate	1.37 m³/h	0.86 m³/h

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.49	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	3.10	2.00
Cdh	0.99	1.00
Pdh Tj = +2°C	5.70 kW	5.70 kW
COP Tj = +2°C	4.52	3.20
Cdh	0.98	0.99
Pdh Tj = +7°C	5.40 kW	5.20 kW
COP Tj = +7°C	5.68	4.77
Cdh	0.98	0.98

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Pdh Tj = 12°C	4.50 kW	3.60 kW
COP Tj = 12°C	7.76	6.92
Cdh	0.96	0.96
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	3.10	2.00
Pdh Tj = TOL	6.90 kW	6.90 kW
COP Tj = TOL	1.60	1.60
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	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	1.43 kW	1.43 kW
Annual energy consumption Qhe	4441 kWh	6040 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	218 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	5.53	3.85
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10.00 kW	10.10 kW
COP Tj = +2°C	3.30	1.93
Cdh	0.99	1.00
Pdh Tj = +7°C	6.40 kW	6.40 kW
COP Tj = +7°C	5.16	3.32
Cdh	0.98	0.99
Pdh Tj = 12°C	4.40 kW	4.20 kW
COP Tj = 12°C	6.88	5.19
Cdh	0.97	0.97
Pdh Tj = Tbiv	10.00 kW	10.10 kW
COP Tj = Tbiv	3.30	1.93
Pdh Tj = TOL	6.90 kW	6.90 kW
COP Tj = TOL	1.60	1.60
WTOL	60 °C	60 °C



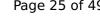


Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	121 %
СОР	2.93
Heating up time	2:25 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l





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EN 16147	
Declared load profile	XL
Efficiency ηDHW	145 %
СОР	3.49
Heating up time	2:38 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417

Model: PUD-SWM120VAA(-BS) + E*ST30D-M*D

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.13 kW	3.77 kW
СОР	4.70	2.65
Indoor water flow rate	1.72 m³/h	1.07 m³/h

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

Average Climate

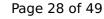


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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	129 %
Prated	12.00 kW	12.00 kW
SCOP	4.50	3.30
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.85	1.94
Cdh	1.00	1.00
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.51	3.13
Cdh	0.99	0.99
Pdh Tj = +7°C	5.60 kW	5.30 kW
COP Tj = +7°C	5.83	4.73
Cdh	0.98	0.99

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Pdh Tj = 12°C	4.40 kW	4.30 kW
COP Tj = 12°C	7.86	6.94
Cdh	0.97	0.98
Pdh Tj = Tbiv	10.60 kW	10.60 kW
COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL	8.10 kW	8.00 kW
COP Tj = TOL	1.58	1.57
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	1.82 kW	1.83 kW
Annual energy consumption Qhe	5371 kWh	7377 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)





EN 14825

	Low temperature	Medium temperature
η _s	217 %	129 %
Prated	12.00 kW	12.00 kW
SCOP	5.49	3.83
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	12.00 kW	12.00 kW
COP Tj = +2°C	3.24	1.85
Cdh	1.00	1.00
Pdh Tj = +7°C	7.70 kW	7.70 kW
$COP Tj = +7^{\circ}C$	4.90	3.17
Cdh	0.99	0.99
Pdh Tj = 12°C	4.40 kW	5.20 kW
COP Tj = 12°C	6.88	5.31
Cdh	0.98	0.98
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	3.24	1.85
Pdh Tj = TOL	8.00 kW	8.00 kW
COP Tj = TOL	1.57	1.57
WTOL	60 °C	60 °C





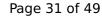
This information was ger	nerated by the HP KEYM	ARK database on 17 Dec 2020

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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2864 kWh	4128 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	121 %
СОР	2.93
Heating up time	2:25 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417





EN 16147	
Declared load profile	XL
Efficiency ηDHW	145 %
СОР	3.49
Heating up time	2:38 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417

Model: PUD-SWM120VAA(-BS) + E*ST30D-*M*D

General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.13 kW	3.77 kW
СОР	4.70	2.65
Indoor water flow rate	1.72 m³/h	1.07 m³/h

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

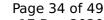
Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	129 %
Prated	12.00 kW	12.00 kW
SCOP	4.50	3.30
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.85	1.94
Cdh	1.00	1.00
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.51	3.13
Cdh	0.99	0.99
Pdh Tj = +7°C	5.60 kW	5.30 kW
COP Tj = +7°C	5.83	4.73
Cdh	0.98	0.99

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Pdh Tj = 12°C	4.40 kW	4.30 kW
COP Tj = 12°C	7.86	6.94
Cdh	0.97	0.98
Pdh Tj = Tbiv	10.60 kW	10.60 kW
COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL	8.10 kW	8.00 kW
COP Tj = TOL	1.58	1.57
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	1.82 kW	1.83 kW
Annual energy consumption Qhe	5371 kWh	7377 kWh

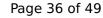
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)





EN 14825

	Low temperature	Medium temperature
η _s	217 %	129 %
Prated	12.00 kW	12.00 kW
SCOP	5.49	3.83
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	12.00 kW	12.00 kW
COP Tj = +2°C	3.24	1.85
Cdh	1.00	1.00
Pdh Tj = +7°C	7.70 kW	7.70 kW
$COP Tj = +7^{\circ}C$	4.90	3.17
Cdh	0.99	0.99
Pdh Tj = 12°C	4.40 kW	5.20 kW
COP Tj = 12°C	6.88	5.31
Cdh	0.98	0.98
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	3.24	1.85
Pdh Tj = TOL	8.00 kW	8.00 kW
COP Tj = TOL	1.57	1.57
WTOL	60 °C	60 °C



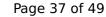


Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2864 kWh	4128 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	2.93	
Heating up time	2:25 h:min	
Standby power input	39.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	417	





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	145 %	
СОР	3.49	
Heating up time	2:38 h:min	
Standby power input	38.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	417	

Model: PUD-SWM120YAA(-BS) + E*ST30D-M*D

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	10.00 kW	10.00 kW	
El input	2.13 kW	3.77 kW	
СОР	4.70	2.65	
Indoor water flow rate	1.72 m³/h	1.07 m³/h	

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	176 %	128 %
Prated	12.00 kW	12.00 kW
SCOP	4.47	3.28
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.85	1.94
Cdh	0.99	1.00
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.51	3.13
Cdh	0.98	0.99
Pdh Tj = +7°C	5.60 kW	5.30 kW
COP Tj = +7°C	5.83	4.73
Cdh	0.98	0.98

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Pdh Tj = 12°C	4.40 kW	4.30 kW
COP Tj = 12°C	7.86	6.94
Cdh	0.96	0.96
Pdh Tj = Tbiv	10.60 kW	10.60 kW
COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL	8.10 kW	8.00 kW
COP Tj = TOL	1.58	1.57
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.82 kW	1.83 kW
Annual energy consumption Qhe	5371 kWh	7377 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)





EN 14825

	Low temperature	Medium temperature
η_{s}	215 %	128 %
Prated	12.00 kW	12.00 kW
SCOP	5.44	3.81
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	12.00 kW	12.00 kW
COP Tj = +2°C	3.24	1.85
Cdh	0.99	1.00
Pdh Tj = +7°C	7.70 kW	7.70 kW
COP Tj = +7°C	4.90	3.17
Cdh	0.99	0.99
Pdh Tj = 12°C	4.40 kW	5.20 kW
COP Tj = 12°C	6.88	5.31
Cdh	0.97	0.98
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	3.24	1.85
Pdh Tj = TOL	8.00 kW	8.00 kW
COP Tj = TOL	1.57	1.57
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	2864 kWh	4128 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	2.93	
Heating up time	2:25 h:min	
Standby power input	39.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	417	





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	145 %	
СОР	3.49	
Heating up time	2:38 h:min	
Standby power input	38.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	417	



Model: PUD-SWM120YAA(-BS) + E*ST30D-*M*D

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	10.00 kW	10.00 kW	
El input	2.13 kW	3.77 kW	
СОР	4.70	2.65	
Indoor water flow rate	1.72 m³/h	1.07 m³/h	

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
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EN 14825		
	Low temperature	Medium temperature
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Cdh	0.99	1.00
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.51	3.13
Cdh	0.98	0.99
Pdh Tj = +7°C	5.60 kW	5.30 kW
COP Tj = +7°C	5.83	4.73
Cdh	0.98	0.98

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COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL	8.10 kW	8.00 kW
COP Tj = TOL	1.58	1.57
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	1.82 kW	1.83 kW
Annual energy consumption Qhe	5371 kWh	7377 kWh

EN 12102-1		
	Low temperature	Medium temperature
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EN 14825

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Cdh	0.99	0.99
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COP Tj = 12°C	6.88	5.31
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Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	3.24	1.85
Pdh Tj = TOL	8.00 kW	8.00 kW
COP Tj = TOL	1.57	1.57
WTOL	60 °C	60 °C





This information was generated by the HP KEYMARK database on 17 Dec 2020		
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

2864 kWh

4128 kWh

Domestic Hot Water (DHW)

Annual energy consumption Qhe

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	121 %	
СОР	2.93	
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Reference hot water temperature	52.5 °C	
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