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Summary of	Ecodan Power Inverter 12	Reg. No.	037-0051-20
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 T	est Institut	e, Public Enterprise)
Name of testing laboratory	CETIAT		
Subtype title	Ecodan Power Inverter 12		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	4.6 kg		
Certification Date	09.04.2020		
Testing basis	HP Keymark scheme rules rev. no. 7		



Model: PUHZ-SW120VHA(-BS) + EHSC-M*C

Gener	al Data
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 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



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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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + EHSC-VM*C

Gener	al Data
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 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



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	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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + EHSC-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 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



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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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.40 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + EHST20C-M*C

General Data	
Power supply	1x230V 50Hz

Heating

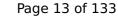
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 m³/h

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



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)

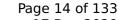
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	

Model: PUHZ-SW120VHA(-BS) + EHST20C-VM*C

General Data		
Power supply	1x230V 50Hz	

Heating

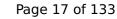
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 m³/h

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



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)

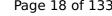
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	

Model: PUHZ-SW120VHA(-BS) + EHST20C-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 m³/h

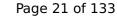
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



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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)

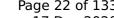
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.40 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





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EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.33
Heating up time	01:14 h:min
Standby power input	58.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW120VHA(-BS) + ERSC-M*C

General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.21 kW	
El input	3.90 kW	6.26 kW	
СОР	4.10	2.43	
Indoor water flow rate	2.75 m³/h	1.64 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



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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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + ERSC-VM*C

General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.21 kW	
El input	3.90 kW	6.26 kW	
СОР	4.10	2.43	
Indoor water flow rate	2.75 m³/h	1.64 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



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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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + ERST20C-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 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



	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	3.21
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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99

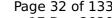


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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.40 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





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EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.33
Heating up time	01:14 h:min
Standby power input	58.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW120VHA(-BS) + ERST20C-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

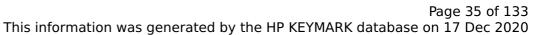
EN 14511-2				
	Low temperature	Medium temperature		
Heat output	16.00 kW	15.21 kW		
El input	3.90 kW	6.26 kW		
СОР	4.10	2.43		
Indoor water flow rate	2.75 m³/h	1.64 m³/h		

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



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	3.21
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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	0.99	0.99





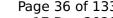
	· · · · · · · · · · · · · · · · · · ·	
Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.40 kW	2.10 kW

6303 kWh

7643 kWh

Domestic Hot Water (DHW)

Annual energy consumption Qhe





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



Model: PUHZ-SW120YHA(-BS) + EHSC-M*C

General Data	
Power supply 3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature Medium temperature	
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 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	



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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99



$$\operatorname{\textit{Page}}\ 39$ of 133$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6259 kWh	7603 kWh



Model: PUHZ-SW120YHA(-BS) + EHSC-VM*C

General Data	
Power supply 3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature Medium temperature	
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 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	



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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99



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7.70 kW	7.40 kW
7.32	6.55
0.99	0.99
11.40 kW	10.70 kW
2.37	1.83
7.70 kW	10.00 kW
1.38	1.74
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
o w	0 W
electricity	electricity
2.40 kW	2.10 kW
6259 kWh	7603 kWh
	7.32 0.99 11.40 kW 2.37 7.70 kW 1.38 60 °C 22 W 22 W 0 W electricity 2.40 kW



Model: PUHZ-SW120YHA(-BS) + EHSC-YM*C

General Data	
Power supply 3x400V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.21 kW	
El input	3.90 kW	6.26 kW	
СОР	4.10	2.43	
Indoor water flow rate	2.75 m³/h	1.64 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



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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99



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

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6259 kWh	7603 kWh



Model: PUHZ-SW120YHA(-BS) + EHST20C-M*C

General Data	
Power supply 3x400V 50Hz	

Heating

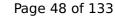
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.21 kW	
El input	3.90 kW	6.26 kW	
СОР	4.10	2.43	
Indoor water flow rate	2.75 m³/h	1.64 m³/h	

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



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)	

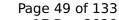
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.40 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	

Model: PUHZ-SW120YHA(-BS) + EHST20C-VM*C

General Data		
Power supply 3x400V 50Hz		

Heating

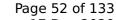
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.21 kW	
El input	3.90 kW	6.26 kW	
СОР	4.10	2.43	
Indoor water flow rate	2.75 m³/h	1.64 m³/h	

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



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)

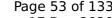
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6259 kWh	7603 kWh

Domestic Hot Water (DHW)





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



Model: PUHZ-SW120YHA(-BS) + EHST20C-YM*C

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 m³/h

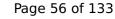
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



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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)

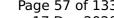
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99





	· · · · · · · · · · · · · · · · · · ·	
Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6259 kWh	7603 kWh

Domestic Hot Water (DHW)





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



Model: PUHZ-SW120YHA(-BS) + ERSC-M*C

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.21 kW	
El input	3.90 kW	6.26 kW	
СОР	4.10	2.43	
Indoor water flow rate	2.75 m³/h	1.64 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	



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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99



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7.70 kW	7.40 kW
7.32	6.55
0.99	0.99
11.40 kW	10.70 kW
2.37	1.83
7.70 kW	10.00 kW
1.38	1.74
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
o w	0 W
electricity	electricity
2.40 kW	2.10 kW
6259 kWh	7603 kWh
	7.32 0.99 11.40 kW 2.37 7.70 kW 1.38 60 °C 22 W 22 W 0 W electricity 2.40 kW



Model: PUHZ-SW120YHA(-BS) + ERSC-VM*C

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.21 kW	
El input	3.90 kW	6.26 kW	
СОР	4.10	2.43	
Indoor water flow rate	2.75 m³/h	1.64 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	



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	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99



$$\operatorname{\textit{Page}}\xspace$ 63 of 133 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6259 kWh	7603 kWh



Model: PUHZ-SW120YHA(-BS) + ERST20C-M*C

General Data	
Power supply 3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 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



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)

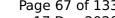
EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	127 %
Prated	12.90 kW	12.10 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6259 kWh	7603 kWh

Domestic Hot Water (DHW)





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EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.33
Heating up time	01:14 h:min
Standby power input	58.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW120YHA(-BS) + ERST20C-VM*C

General Data	
Power supply 3x400V 50Hz	

Heating

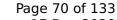
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.21 kW
El input	3.90 kW	6.26 kW
СОР	4.10	2.43
Indoor water flow rate	2.75 m³/h	1.64 m³/h

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



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)

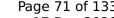
EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	127 %
Prated	12.90 kW	12.10 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	0.99	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	0.99	0.99





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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	0.99	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	6259 kWh	7603 kWh

Domestic Hot Water (DHW)





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



Model: PUHZ-SW120VHA(-BS) + EHST20C-M*D

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
Indoor water flow rate	2.75 m³/h	1.63 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	



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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)

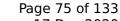
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99





	· · · · · · · · · · · · · · · · · · ·	
Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	
	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	1:29 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



Model: PUHZ-SW120VHA(-BS) + EHST20C-VM*D

General Data	
Power supply	1x230V 50Hz

Heating

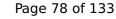
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.20 kW
El input	3.90 kW	6.03 kW
СОР	4.10	2.52
Indoor water flow rate	2.75 m³/h	1.63 m³/h

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

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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)

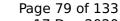
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	1:29 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



Model: PUHZ-SW120VHA(-BS) + EHST20C-YM*D

General Data	
Power supply	3x400V 50Hz

Heating

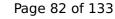
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.20 kW	
El input	3.90 kW	6.03 kW	
СОР	4.10	2.52	
Indoor water flow rate	2.75 m³/h	1.63 m³/h	

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



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)	

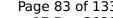
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	138 %	
СОР	3.25	
Heating up time	1:29 h:min	
Standby power input	35.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



Model: PUHZ-SW120VHA(-BS) + EHSC-M*D

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	
Indoor water flow rate	2.75 m³/h	1.63 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	



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + EHSC-VM*D

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	
Indoor water flow rate	2.75 m³/h	1.63 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	



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + EHSC-YM*D

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		
Indoor water flow rate	2.75 m³/h	1.63 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	



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + ERST20C-VM*D

General Data	
Power supply	1x230V 50Hz

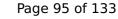
Heating

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
Indoor water flow rate	2.75 m³/h	1.63 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

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)

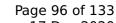
EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	127 %
Prated	12.90 kW	12.10 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99





Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	1:29 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



Model: PUHZ-SW120VHA(-BS) + ERSC-MED

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
Indoor water flow rate	2.75 m³/h	1.63 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



	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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh



Model: PUHZ-SW120VHA(-BS) + ERSC-VM*D

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
Indoor water flow rate	2.75 m³/h	1.63 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



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.17	3.12
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.55	4.47
Cdh	1.00	0.99



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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.50
Cdh	1.00	0.99
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6303 kWh	7643 kWh



Model: PUHZ-SW120YHA(-BS) + EHST20C-M*D

General Data	
Power supply	3x400V 50Hz

Heating

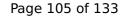
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.20 kW
El input	3.90 kW	6.03 kW
СОР	4.10	2.52
Indoor water flow rate	2.75 m³/h	1.63 m³/h

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



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)

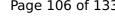
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98





-	
7.70 kW	7.40 kW
7.32	6.55
1.00	0.98
11.40 kW	10.70 kW
2.37	1.83
7.70 kW	10.00 kW
1.38	1.74
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
o w	o w
electricity	electricity
2.35 kW	2.10 kW
6259 kWh	7603 kWh
	7.32 1.00 11.40 kW 2.37 7.70 kW 1.38 60 °C 22 W 22 W 0 W electricity 2.35 kW

Domestic Hot Water (DHW)





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EN 16147	
Declared load profile	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	1:29 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



Model: PUHZ-SW120YHA(-BS) + EHST20C-VM*D

Gen	neral 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
Indoor water flow rate	2.75 m³/h	1.63 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



	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)

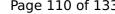
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98





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7.70 kW	7.40 kW		
7.32	6.55		
1.00	0.98		
11.40 kW	10.70 kW		
2.37	1.83		
7.70 kW	10.00 kW		
1.38	1.74		
60 °C	60 °C		
22 W	22 W		
22 W	22 W		
22 W	22 W		
o w	o w		
electricity	electricity		
2.35 kW	2.10 kW		
6259 kWh	7603 kWh		
	7.32 1.00 11.40 kW 2.37 7.70 kW 1.38 60 °C 22 W 22 W 0 W electricity 2.35 kW		

Domestic Hot Water (DHW)





$$\operatorname{\textit{Page}}\ 110$ of 133$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	L	
Efficiency ηDHW	138 %	
СОР	3.25	
Heating up time	1:29 h:min	
Standby power input	35.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



Model: PUHZ-SW120YHA(-BS) + EHST20C-YM*D

General Data		
Power supply	3x400V 50Hz	

Heating

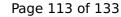
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	15.20 kW	
El input	3.90 kW	6.03 kW	
СОР	4.10	2.52	
Indoor water flow rate	2.75 m³/h	1.63 m³/h	

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



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)

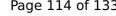
EN 14825		
	Low temperature	Medium temperature
η_{s}	162 %	125 %
Prated	12.90 kW	12.10 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98





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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	1.00	0.98
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\ 114\ \text{of}\ 133$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	L	
Efficiency ηDHW	138 %	
СОР	3.25	
Heating up time	1:29 h:min	
Standby power input	35.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



Model: PUHZ-SW120YHA(-BS) + EHSC-M*D

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
Indoor water flow rate	2.75 m³/h	1.63 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	



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98



$$\operatorname{\textit{Page}}\xspace$ 117 of 133 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	1.00	0.98
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh



Model: PUHZ-SW120YHA(-BS) + EHSC-VM*D

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
Indoor water flow rate	2.75 m³/h	1.63 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



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98



$$\operatorname{\textit{Page}}\ 120$ of 133$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	1.00	0.98
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh



Model: PUHZ-SW120YHA(-BS) + EHSC-YM*D

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
Indoor water flow rate	2.75 m³/h	1.63 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



 $$\operatorname{\textit{Page}}\ 122$ of 133$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98



$$\operatorname{\textit{Page}}\ 123$$ of 133 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	1.00	0.98
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh



Model: PUHZ-SW120YHA(-BS) + ERST20C-VM*D

General Data	
Power supply 3x400V 50Hz	

Heating

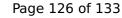
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	15.20 kW
El input	3.90 kW	6.03 kW
СОР	4.10	2.52
Indoor water flow rate	2.75 m³/h	1.63 m³/h

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



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)

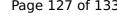
EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	127 %
Prated	12.90 kW	12.10 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.40 kW	10.70 kW
COP Tj = -7°C	2.37	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98





	Terated by the fire RETT.	
Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	1.00	0.98
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh

Domestic Hot Water (DHW)





$$\operatorname{\textit{Page}}\xspace$ 127 of 133 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	1:29 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



Model: PUHZ-SW120YHA(-BS) + ERSC-M*D

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
Indoor water flow rate	2.75 m³/h	1.63 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	



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98



$$\operatorname{\textit{Page}}\ 130$$ of 133 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	1.00	0.98
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh



Model: PUHZ-SW120YHA(-BS) + ERSC-VM*D

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	
Indoor water flow rate	2.75 m³/h	1.63 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	



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	1.00	1.00
Pdh Tj = +2°C	6.90 kW	6.50 kW
COP Tj = +2°C	4.20	3.14
Cdh	1.00	0.99
Pdh Tj = +7°C	6.50 kW	6.00 kW
COP Tj = +7°C	5.63	4.50
Cdh	1.00	0.98



$$\operatorname{\textit{Page}}\ 133$$ of 133 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.32	6.55
Cdh	1.00	0.98
Pdh Tj = Tbiv	11.40 kW	10.70 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL	7.70 kW	10.00 kW
COP Tj = TOL	1.38	1.74
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	2.35 kW	2.10 kW
Annual energy consumption Qhe	6259 kWh	7603 kWh