

	This information has generated by the fir the		
Summary of	Ecodan Power Inverter 10	Reg. No.	037-0049-20
Certificate Holder		-	
Name	Mitsubishi Electric Air Conditioning Systems Euro	ope LTD	
Address	Nettlehill Road, Houston Industrial Estate	Zip	EH54 5EQ
City	Livingston	Country	United Kingdom
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)	
Name of testing laboratory	CETIAT		
Subtype title	Ecodan Power Inverter 10		
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-SW100VHA(-BS) + EHSC-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	125 %
Prated	10.40 kW	10.00 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.98	0.98
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.24	3.18
Cdh	0.98	0.98
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.49	4.37
Cdh	0.98	0.98



Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.98	0.98
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.40	1.33
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	5027 kWh	6331 kWh



Model: PUHZ-SW100VHA(-BS) + EHSC-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	125 %
Prated	10.40 kW	10.00 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.98	0.98
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.24	3.18
Cdh	0.98	0.98
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.49	4.37
Cdh	0.98	0.98



Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.98	0.98
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.40	1.33
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	5027 kWh	6331 kWh



Model: PUHZ-SW100VHA(-BS) + EHSC-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	125 %
Prated	10.40 kW	10.00 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.98	0.98
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.24	3.18
Cdh	0.98	0.98
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.49	4.37
Cdh	0.98	0.98



 $$\operatorname{\textit{Page}}\ 10$$ of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

	· · · · · · · · · · · · · · · · · · ·	
Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.98	0.98
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.40	1.33
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	5027 kWh	6331 kWh



Model: PUHZ-SW100YHA(-BS) + EHSC-M*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	125 %
Prated	10.40 kW	10.00 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.99	0.99
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.27	3.21
Cdh	0.99	0.99
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.54	4.39
Cdh	0.99	0.99



$$\operatorname{\textit{Page}}\ 13$$ of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.99	0.99
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.33	1.40
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	4993 kWh	6288 kWh



Model: PUHZ-SW100YHA(-BS) + EHSC-VM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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



 $$\operatorname{\textit{Page}}\ 15$$ of 71 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	125 %
Prated	10.40 kW	10.00 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.99	0.99
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.27	3.21
Cdh	0.99	0.99
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.54	4.39
Cdh	0.99	0.99



 $$\operatorname{\textit{Page}}\ 16$$ of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

	,	
Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.99	0.99
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.33	1.40
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	4993 kWh	6288 kWh



Model: PUHZ-SW100YHA(-BS) + EHSC-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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



 $$\operatorname{\textit{Page}}\ 18$$ of 71 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	125 %
Prated	10.40 kW	10.00 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.99	0.99
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.27	3.21
Cdh	0.99	0.99
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.54	4.39
Cdh	0.99	0.99



 $$\operatorname{\textit{Page}}\ 19$ of 71$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.99	0.99
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.33	1.40
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	4993 kWh	6288 kWh



Model: PUHZ-SW100VHA(-BS) + EHST20C-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 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}}\xspace$ 21 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

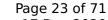
EN 14825	
	Medium temperature
η_s	125 %
Prated	10.00 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.98
Pdh Tj = +2°C	5.40 kW
$COP Tj = +2^{\circ}C$	3.18
Cdh	0.98
Pdh Tj = +7°C	3.90 kW
COP Tj = +7°C	4.37
Cdh	0.98





This information has generated by the	
Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.98
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
РТО	15 W
PSB	15 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6331 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	103 %	
СОР	2.48	
Heating up time	1:46 h:min	
Standby power input	36.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



Model: PUHZ-SW100VHA(-BS) + EHST20C-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 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	
Medium temperature	
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

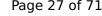
EN 14825	
	Medium temperature
η_{s}	125 %
Prated	10.00 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.98
Pdh Tj = +2°C	5.40 kW
COP Tj = +2°C	3.18
Cdh	0.98
Pdh Tj = +7°C	3.90 kW
COP Tj = +7°C	4.37
Cdh	0.98





Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.98
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
PTO	15 W
PSB	15 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6331 kWh
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Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\xspace$ 27 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	L	
Efficiency ηDHW	103 %	
СОР	2.48	
Heating up time	1:46 h:min	
Standby power input	36.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	

Model: PUHZ-SW100VHA(-BS) + EHST20C-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 m³/h	

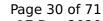
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



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EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

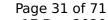
EN 14825	
	Medium temperature
η_{s}	125 %
Prated	10.00 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.98
Pdh Tj = +2°C	5.40 kW
COP Tj = +2°C	3.18
Cdh	0.98
Pdh Tj = +7°C	3.90 kW
COP Tj = +7°C	4.37
Cdh	0.98





This information was generated by the HF RETMARK database on 17 Dec 2020		
Pdh Tj = 12°C	7.00 kW	
COP Tj = 12°C	6.58	
Cdh	0.98	
Pdh Tj = Tbiv	8.90 kW	
COP Tj = Tbiv	1.79	
Pdh Tj = TOL	6.50 kW	
COP Tj = TOL	1.33	
WTOL	60 °C	
Poff	15 W	
РТО	15 W	
PSB	15 W	
PCK	0 W	
Supplementary Heater: Type of energy input	electricity	
Supplementary Heater: PSUP	1.70 kW	
Annual energy consumption Qhe	6331 kWh	

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	103 %	
СОР	2.48	
Heating up time	1:46 h:min	
Standby power input	36.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



Model: PUHZ-SW100YHA(-BS) + EHST20C-M*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 m³/h	

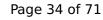
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



 $$\operatorname{\textit{Page}}\xspace$ 33 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1		
	Medium temperature	
Sound power level indoor	40 dB(A)	
Sound power level outdoor	70 dB(A)	

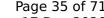
EN 14825	
	Medium temperature
η_s	125 %
Prated	10.00 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.99
Pdh Tj = +2°C	5.40 kW
COP Tj = +2°C	3.21
Cdh	0.99
Pdh Tj = +7°C	3.90 kW
$COP Tj = +7^{\circ}C$	4.39
Cdh	0.99





This information has generated by the	
Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.99
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.40
WTOL	60 °C
Poff	22 W
РТО	22 W
PSB	22 W
PCK	o w
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6288 kWh

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\xspace$ 35 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	L	
Efficiency ηDHW	103 %	
СОР	2.48	
Heating up time	1:46 h:min	
Standby power input	36.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	

Model: PUHZ-SW100YHA(-BS) + EHST20C-VM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 m³/h	

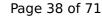
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



 $$\operatorname{\textit{Page}}\xspace$ 37 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

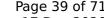
EN 14825	
	Medium temperature
η_{s}	125 %
Prated	10.00 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.99
Pdh Tj = +2°C	5.40 kW
COP Tj = +2°C	3.21
Cdh	0.99
Pdh Tj = $+7^{\circ}$ C	3.90 kW
$COP Tj = +7^{\circ}C$	4.39
Cdh	0.99





Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.99
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.40
WTOL	60 °C
Poff	22 W
РТО	22 W
PSB	22 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6288 kWh

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\ 39$ of 71$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency ηDHW	103 %
СОР	2.48
Heating up time	1:46 h:min
Standby power input	36.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW100YHA(-BS) + EHST20C-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 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	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

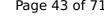
EN 14825	
	Medium temperature
η_s	125 %
Prated	10.00 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.99
Pdh Tj = +2°C	5.40 kW
COP Tj = +2°C	3.21
Cdh	0.99
Pdh Tj = +7°C	3.90 kW
COP Tj = +7°C	4.39
Cdh	0.99





Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.99
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.40
WTOL	60 °C
Poff	22 W
PTO	22 W
PSB	22 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6288 kWh

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\xspace$ 43 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency ηDHW	103 %
СОР	2.48
Heating up time	1:46 h:min
Standby power input	36.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW100VHA(-BS) + ERSC-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	166 %	127 %
Prated	10.40 kW	10.00 kW
SCOP	4.23	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.98	0.98
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.24	3.18
Cdh	0.98	0.98
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.49	4.37
Cdh	0.98	0.98



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Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.98	0.98
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.40	1.33
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	5027 kWh	6331 kWh



Model: PUHZ-SW100VHA(-BS) + ERSC-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	166 %	127 %
Prated	10.40 kW	10.00 kW
SCOP	4.23	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.98	0.98
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.24	3.18
Cdh	0.98	0.98
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.49	4.37
Cdh	0.98	0.98



 $$\operatorname{\textit{Page}}$$ 49 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

	· · · · · · · · · · · · · · · · · · ·	
Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.98	0.98
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.40	1.33
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	5027 kWh	6331 kWh



Model: PUHZ-SW100YHA(-BS) + ERSC-M*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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}}\xspace\,51$ of 71 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	166 %	127 %
Prated	10.40 kW	10.00 kW
SCOP	4.23	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.99	0.99
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.27	3.21
Cdh	0.99	0.99
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.54	4.39
Cdh	0.99	0.99



 $$\operatorname{Page}\:52\:of\:71\:$ This information was generated by the HP KEYMARK database on 17 Dec 2020

	,	
Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.99	0.99
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.33	1.40
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	4993 kWh	6288 kWh



Model: PUHZ-SW100YHA(-BS) + ERSC-VM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	11.20 kW
El input	2.52 kW	4.46 kW
СОР	4.44	2.51
Indoor water flow rate	1.93 m³/h	1.20 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}}\xspace$ 54 of 71 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	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	166 %	127 %
Prated	10.40 kW	10.00 kW
SCOP	4.23	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	9.20 kW	8.90 kW
COP Tj = -7°C	2.47	1.79
Cdh	0.99	0.99
Pdh Tj = +2°C	5.60 kW	5.40 kW
COP Tj = +2°C	4.27	3.21
Cdh	0.99	0.99
Pdh Tj = +7°C	4.30 kW	3.90 kW
COP Tj = +7°C	5.54	4.39
Cdh	0.99	0.99



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Pdh Tj = 12°C	7.30 kW	7.00 kW
COP Tj = 12°C	7.43	6.58
Cdh	0.99	0.99
Pdh Tj = Tbiv	9.20 kW	8.90 kW
COP Tj = Tbiv	2.47	1.79
Pdh Tj = TOL	6.50 kW	6.50 kW
COP Tj = TOL	1.33	1.40
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	1.80 kW	1.70 kW
Annual energy consumption Qhe	4993 kWh	6288 kWh



Model: PUHZ-SW100VHA(-BS) + ERST20C-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 m³/h	

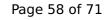
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



 $$\operatorname{\textit{Page}}\xspace$ 57 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

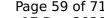
EN 14825	
	Medium temperature
ls	127 %
rated	10.00 kW
СОР	3.24
oiv	-7 °C
OL	-20 °C
dh Tj = -7°C	8.90 kW
OP Tj = -7°C	1.79
lh	0.98
h Tj = +2°C	5.40 kW
OP Tj = +2°C	3.18
dh	0.98
dh Tj = +7°C	3.90 kW
OP Tj = +7°C	4.37
dh	0.98





This information has generated by the	
Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.98
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
РТО	15 W
PSB	15 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6331 kWh

Domestic Hot Water (DHW)





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EN 16147	
Declared load profile	L
Efficiency ηDHW	103 %
СОР	2.48
Heating up time	1:46 h:min
Standby power input	36.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW100VHA(-BS) + ERST20C-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 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}}\xspace$ 61 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

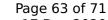
EN 14825	
	Medium temperature
η_s	127 %
Prated	10.00 kW
SCOP	3.24
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.98
Pdh Tj = +2°C	5.40 kW
COP Tj = +2°C	3.18
Cdh	0.98
Pdh Tj = +7°C	3.90 kW
COP Tj = +7°C	4.37
Cdh	0.98





This information has generated by the	
Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.98
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
РТО	15 W
PSB	15 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6331 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	103 %
СОР	2.48
Heating up time	1:46 h:min
Standby power input	36.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW100YHA(-BS) + ERST20C-M*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 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}}\xspace$ 65 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

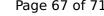
EN 14825	
	Medium temperature
η_s	127 %
Prated	10.00 kW
SCOP	3.24
Tbiv	-7 °C
TOL	-20 °C
Pdh Tj = -7°C	8.90 kW
COP Tj = -7°C	1.79
Cdh	0.99
Pdh Tj = +2°C	5.40 kW
COP Tj = +2°C	3.21
Cdh	0.99
Pdh Tj = +7°C	3.90 kW
COP Tj = +7°C	4.39
Cdh	0.99





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Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.99
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.40
WTOL	60 °C
Poff	22 W
РТО	22 W
PSB	22 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6288 kWh

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\xspace$ 67 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency ηDHW	103 %
СОР	2.48
Heating up time	1:46 h:min
Standby power input	36.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



Model: PUHZ-SW100YHA(-BS) + ERST20C-VM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	
El input	4.46 kW	
СОР	2.51	
Indoor water flow rate	1.20 m³/h	

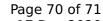
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



 $$\operatorname{\textit{Page}}\xspace$ 69 of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	70 dB(A)

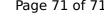
EN 14825		
	Medium temperature	
η_{s}	127 %	
Prated	10.00 kW	
SCOP	3.24	
Tbiv	-7 °C	
TOL	-20 °C	
Pdh Tj = -7°C	8.90 kW	
COP Tj = -7°C	1.79	
Cdh	0.99	
Pdh Tj = +2°C	5.40 kW	
COP Tj = +2°C	3.21	
Cdh	0.99	
Pdh Tj = $+7^{\circ}$ C	3.90 kW	
COP Tj = +7°C	4.39	
Cdh	0.99	





This information was generated by the	TIF KLIMANK database on 17 Dec 202
Pdh Tj = 12°C	7.00 kW
COP Tj = 12°C	6.58
Cdh	0.99
Pdh Tj = Tbiv	8.90 kW
COP Tj = Tbiv	1.79
Pdh Tj = TOL	6.50 kW
COP Tj = TOL	1.40
WTOL	60 °C
Poff	22 W
РТО	22 W
PSB	22 W
PCK	0 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.70 kW
Annual energy consumption Qhe	6288 kWh

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\ 71$$ of 71 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	L	
Efficiency ηDHW	103 %	
СОР	2.48	
Heating up time	1:46 h:min	
Standby power input	36.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	