

	This information was generated by the minker		
Summary of	Ecodan Power Inverter 6	Reg. No.	037-0054-20
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 Test Institute, Public Enterprise)		
Name of testing laboratory	CETIAT		
Subtype title	Ecodan Power Inverter 6		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1.4 kg		
Certification Date	09.04.2020		
Testing basis	HP Keymark scheme rules rev. no. 7		



Model: PUHZ-SW50VKA(-BS) + EHSD-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	5.50 kW
El input	1.22 kW	2.48 kW
СОР	4.51	2.22
Indoor water flow rate	0.95 m³/h	0.59 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	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	163 %	125 %
Prated	4.50 kW	4.30 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.00 kW	3.80 kW
COP Tj = -7°C	2.87	2.13
Cdh	0.98	0.98
Pdh Tj = +2°C	2.40 kW	2.30 kW
COP Tj = +2°C	4.10	3.10
Cdh	0.98	0.98
Pdh Tj = +7°C	2.30 kW	2.20 kW
COP Tj = +7°C	5.79	4.42
Cdh	0.98	0.98



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Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	7.59	6.37
Cdh	0.98	0.98
Pdh Tj = Tbiv	4.00 kW	3.80 kW
COP Tj = Tbiv	2.87	2.13
Pdh Tj = TOL	3.20 kW	3.20 kW
COP Tj = TOL	1.33	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	0.80 kW	0.70 kW
Annual energy consumption Qhe	2138 kWh	2669 kWh



Model: PUHZ-SW50VKA(-BS) + EHSD-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	5.50 kW
El input	1.22 kW	2.48 kW
СОР	4.51	2.22
Indoor water flow rate	0.95 m³/h	0.59 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	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	163 %	125 %
Prated	4.50 kW	4.30 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.00 kW	3.80 kW
COP Tj = -7°C	2.87	2.13
Cdh	0.98	0.98
Pdh Tj = +2°C	2.40 kW	2.30 kW
COP Tj = +2°C	4.10	3.10
Cdh	0.98	0.98
Pdh Tj = +7°C	2.30 kW	2.20 kW
COP Tj = +7°C	5.79	4.42
Cdh	0.98	0.98



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Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	7.59	6.37
Cdh	0.98	0.98
Pdh Tj = Tbiv	4.00 kW	3.80 kW
COP Tj = Tbiv	2.87	2.13
Pdh Tj = TOL	3.20 kW	3.20 kW
COP Tj = TOL	1.33	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	0.80 kW	0.70 kW
Annual energy consumption Qhe	2138 kWh	2669 kWh



Model: PUHZ-SW50VKA(-BS) + EHSD-YM*C

General Data	
Power supply 3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	5.50 kW
El input	1.22 kW	2.48 kW
СОР	4.51	2.22
Indoor water flow rate	0.95 m³/h	0.59 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	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	163 %	125 %
Prated	4.50 kW	4.30 kW
SCOP	4.16	3.20
Tbiv	-7 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.00 kW	3.80 kW
COP Tj = -7°C	2.87	2.13
Cdh	0.98	0.98
Pdh Tj = +2°C	2.40 kW	2.30 kW
COP Tj = +2°C	4.10	3.10
Cdh	0.98	0.98
Pdh Tj = +7°C	2.30 kW	2.20 kW
COP Tj = +7°C	5.79	4.42
Cdh	0.98	0.98



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Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	7.59	6.37
Cdh	0.98	0.98
Pdh Tj = Tbiv	4.00 kW	3.80 kW
COP Tj = Tbiv	2.87	2.13
Pdh Tj = TOL	3.20 kW	3.20 kW
COP Tj = TOL	1.33	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	0.80 kW	0.70 kW
Annual energy consumption Qhe	2138 kWh	2669 kWh



Model: PUHZ-SW50VKA(-BS) + EHST20D-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	
El input	2.48 kW	
СОР	2.22	
Indoor water flow rate	0.59 m³/h	

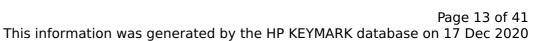
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



 $$\operatorname{Page}\ 12$$ of 41 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	63 dB(A)

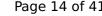
EN 14825	
	Medium temperature
η_s	125 %
Prated	4.30 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-15 °C
Pdh Tj = -7°C	3.80 kW
COP Tj = -7°C	2.13
Cdh	0.98
Pdh Tj = +2°C	2.30 kW
COP Tj = +2°C	3.10
Cdh	0.98
Pdh Tj = +7°C	2.20 kW
$COP Tj = +7^{\circ}C$	4.42
Cdh	0.98



This information was generated by the	
Pdh Tj = 12°C	2.70 kW
COP Tj = 12°C	6.37
Cdh	0.98
Pdh Tj = Tbiv	3.80 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL	3.20 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
РТО	15 W
PSB	15 W
PCK	o w
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	0.70 kW
Annual energy consumption Qhe	2669 kWh

Domestic Hot Water (DHW)

CEN heat pump KEYMARK





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	98 %	
СОР	2.33	
Heating up time	1:55 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 l	



Model: PUHZ-SW50VKA(-BS) + EHST20D-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	
El input	2.48 kW	
СОР	2.22	
Indoor water flow rate	0.59 m³/h	

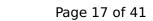
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



 $$\operatorname{Page}\ 16$$ of 41 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	63 dB(A)

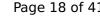
EN 14825	
	Medium temperature
η_s	125 %
Prated	4.30 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-15 °C
Pdh Tj = -7°C	3.80 kW
COP Tj = -7°C	2.13
Cdh	0.98
Pdh Tj = +2°C	2.30 kW
COP Tj = +2°C	3.10
Cdh	0.98
Pdh Tj = +7°C	2.20 kW
$COP Tj = +7^{\circ}C$	4.42
Cdh	0.98





Pdh Tj = 12°C	2.70 kW
COP Tj = 12°C	6.37
Cdh	0.98
Pdh Tj = Tbiv	3.80 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL	3.20 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	0.70 kW
Annual energy consumption Qhe	2669 kWh

Domestic Hot Water (DHW)





 $$\operatorname{Page}\ 18$$ of 41 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147		
Declared load profile	L	
Efficiency ηDHW	98 %	
СОР	2.33	
Heating up time	1:55 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 l	



Model: PUHZ-SW50VKA(-BS) + EHST20D-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	
El input	2.48 kW	
СОР	2.22	
Indoor water flow rate	0.59 m³/h	

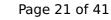
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



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EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	63 dB(A)

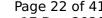
EN 14825	
	Medium temperature
η_s	125 %
Prated	4.30 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-15 °C
Pdh Tj = -7°C	3.80 kW
COP Tj = -7°C	2.13
Cdh	0.98
Pdh Tj = +2°C	2.30 kW
COP Tj = +2°C	3.10
Cdh	0.98
Pdh Tj = +7°C	2.20 kW
$COP Tj = +7^{\circ}C$	4.42
Cdh	0.98





This information has generated by the	
Pdh Tj = 12°C	2.70 kW
COP Tj = 12°C	6.37
Cdh	0.98
Pdh Tj = Tbiv	3.80 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL	3.20 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	0.70 kW
Annual energy consumption Qhe	2669 kWh

Domestic Hot Water (DHW)





 $$\operatorname{Page}\ 22$ of 41$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency ηDHW	98 %
СОР	2.33
Heating up time	1:55 h:min
Standby power input	58.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l



Model: PUHZ-SW50VKA(-BS) + EHST20D-VM*C2

General Data	
Power supply	1x230V 50Hz

Heating

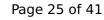
EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	
El input	2.48 kW	
СОР	2.22	
Indoor water flow rate	0.59 m³/h	

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	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	63 dB(A)

EN 14825	
	Medium temperature
η_{s}	125 %
Prated	4.30 kW
SCOP	3.20
Tbiv	-7 °C
TOL	-15 °C
Pdh Tj = -7°C	3.80 kW
COP Tj = -7°C	2.13
Cdh	0.98
Pdh Tj = +2°C	2.30 kW
COP Tj = +2°C	3.10
Cdh	0.98
Pdh Tj = +7°C	2.20 kW
COP Tj = +7°C	4.42
Cdh	0.98





This information has generated by the	
Pdh Tj = 12°C	2.70 kW
COP Tj = 12°C	6.37
Cdh	0.98
Pdh Tj = Tbiv	3.80 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL	3.20 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	0.70 kW
Annual energy consumption Qhe	2669 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	146 %
СОР	3.46
Heating up time	2:17 h:min
Standby power input	30.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	289 I



Model: PUHZ-SW50VKA(-BS) + ERSD-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	5.50 kW
El input	1.22 kW	2.48 kW
СОР	4.51	2.22
Indoor water flow rate	0.95 m³/h	0.59 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	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	167 %	128 %
Prated	4.50 kW	4.30 kW
SCOP	4.26	3.26
Tbiv	-7 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.00 kW	3.80 kW
COP Tj = -7°C	2.87	2.13
Cdh	0.98	0.98
Pdh Tj = +2°C	2.40 kW	2.30 kW
COP Tj = +2°C	4.10	3.10
Cdh	0.98	0.98
Pdh Tj = +7°C	2.30 kW	2.20 kW
COP Tj = +7°C	5.79	4.42
Cdh	0.98	0.98



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Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	7.59	6.37
Cdh	0.98	0.98
Pdh Tj = Tbiv	4.00 kW	3.80 kW
COP Tj = Tbiv	2.87	2.13
Pdh Tj = TOL	3.20 kW	3.20 kW
COP Tj = TOL	1.33	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	0.80 kW	0.70 kW
Annual energy consumption Qhe	2138 kWh	2669 kWh



Model: PUHZ-SW50VKA(-BS) + ERST20D-M*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	
El input	2.48 kW	
СОР	2.22	
Indoor water flow rate	0.59 m³/h	

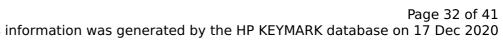
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



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EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	63 dB(A)

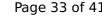
EN 14825	
	Medium temperature
n_s	128 %
Prated	4.30 kW
COP	3.26
-biv	-7 °C
ГОЬ	-15 °C
Pdh Tj = -7°C	3.80 kW
COP Tj = -7°C	2.13
Cdh	0.98
dh Tj = +2°C	2.30 kW
COP Tj = +2°C	3.10
Cdh	0.98
Pdh Tj = +7°C	2.20 kW
COP Tj = +7°C	4.42
Cdh	0.98



CEN heat pump KEYMARK	p
	This information was
Pdh Tj = 12°C	
COP Tj = 12°C	

Pdh Tj = 12°C	2.70 kW
COP Tj = 12°C	6.37
Cdh	0.98
Pdh Tj = Tbiv	3.80 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL	3.20 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
РТО	15 W
PSB	15 W
PCK	o w
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	0.70 kW
Annual energy consumption Qhe	2669 kWh

Domestic Hot Water (DHW)





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	98 %	
СОР	2.33	
Heating up time	1:55 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 l	



Model: PUHZ-SW50VKA(-BS) + ERST20D-VM*C

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	
El input	2.48 kW	
СОР	2.22	
Indoor water flow rate	0.59 m³/h	

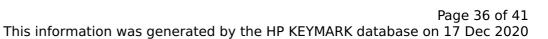
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



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EN 12102-1	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	63 dB(A)

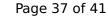
EN 14825	
	Medium temperature
η_s	128 %
Prated	4.30 kW
SCOP	3.26
Tbiv	-7 °C
TOL	-15 °C
Pdh Tj = -7°C	3.80 kW
COP Tj = -7°C	2.13
Cdh	0.98
Pdh Tj = +2°C	2.30 kW
COP Tj = +2°C	3.10
Cdh	0.98
Pdh Tj = +7°C	2.20 kW
COP Tj = +7°C	4.42
Cdh	0.98
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	_
Pdh Tj = 12°C	2.70 kW
COP Tj = 12°C	6.37
Cdh	0.98
Pdh Tj = Tbiv	3.80 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL	3.20 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
РТО	15 W
PSB	15 W
PCK	o w
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	0.70 kW
Annual energy consumption Qhe	2669 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	98 %	
СОР	2.33	
Heating up time	1:55 h:min	
Standby power input	58.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



Model: PUHZ-SW50VKA(-BS) + ERST20D-VM*C2

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.50 kW	
El input	2.48 kW	
СОР	2.22	
Indoor water flow rate	0.59 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	
	Medium temperature
Sound power level indoor	40 dB(A)
Sound power level outdoor	63 dB(A)

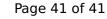
EN 14825		
	Medium temperature	
n_{s}	128 %	
Prated	4.30 kW	
COP	3.26	
-biv	-7 °C	
ГОЬ	-15 °C	
Pdh Tj = -7°C	3.80 kW	
COP Tj = -7°C	2.13	
Cdh	0.98	
dh Tj = +2°C	2.30 kW	
COP Tj = +2°C	3.10	
Cdh	0.98	
Pdh Tj = +7°C	2.20 kW	
COP Tj = +7°C	4.42	
Cdh	0.98	





This intermediate was generated by the	
Pdh Tj = 12°C	2.70 kW
COP Tj = 12°C	6.37
Cdh	0.98
Pdh Tj = Tbiv	3.80 kW
COP Tj = Tbiv	2.13
Pdh Tj = TOL	3.20 kW
COP Tj = TOL	1.33
WTOL	60 °C
Poff	15 W
РТО	15 W
PSB	15 W
PCK	o w
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	0.70 kW
Annual energy consumption Qhe	2669 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	146 %	
СОР	3.46	
Heating up time	2:17 h:min	
Standby power input	30.0 W	
Reference hot water temperature	53.1 °C	
Mixed water at 40°C	289 I	