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

Summary of	Ecodan Power Inverter 6	Reg. No.	037-0054-20
Certificate Holder			
Name	Mitsubishi Electric Air Conditioning Systems Europe 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
COP	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

Average Climate

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

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
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.80 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
COP	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

Average Climate

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

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
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.80 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
COP	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

Average Climate

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

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
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.80 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	
COP	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

Average Climate

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

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
PTO	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)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	98 %
COP	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	
COP	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

Average Climate

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

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
PTO	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)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	98 %
COP	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	
COP	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

Average Climate

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

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
PTO	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)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	98 %
COP	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	
COP	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

Average Climate

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

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
PTO	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)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	146 %
COP	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 l

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
COP	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

Average Climate

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

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
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.80 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	
COP	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

Average Climate

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

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
PTO	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)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	98 %
COP	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	
COP	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

Average Climate

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

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
PTO	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)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	98 %
COP	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*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	
COP	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

Average Climate

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

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
PTO	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)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	146 %
COP	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 l