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

Summary of	Ecodan Power Inverter 16	Reg. No.	037-0052-20
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	RISE Research Institute of Sweden		
Subtype title	Ecodan Power Inverter 16		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	7.7 kg		
Certification Date	09.04.2020		
Testing basis	HP Keymark scheme rules rev. no. 7		

Model: PUHZ-SW160YKA(-BS) + EHSE-M*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	22.00 kW	22.00 kW
El input	5.23 kW	8.91 kW
COP	4.21	2.47
Indoor water flow rate	3.78 m³/h	2.37 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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	161 %	125 %
Prated	15.30 kW	13.50 kW
SCOP	4.10	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.50 kW	11.90 kW
COP Tj = -7°C	2.57	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	8.20 kW	7.20 kW
COP Tj = +2°C	4.15	3.19
Cdh	0.99	0.99
Pdh Tj = +7°C	6.30 kW	5.90 kW
COP Tj = +7°C	5.22	4.29
Cdh	0.99	0.99

Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.08	6.32
Cdh	0.99	0.99
Pdh Tj = Tbiv	13.50 kW	11.90 kW
COP Tj = Tbiv	2.57	1.83
Pdh Tj = TOL	9.30 kW	9.30 kW
COP Tj = TOL	1.62	1.70
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.80 kW	2.20 kW
Annual energy consumption Qhe	7493 kWh	8502 kWh

Model: PUHZ-SW160YKA(-BS) + EHSE-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	22.00 kW	22.00 kW
El input	5.23 kW	8.91 kW
COP	4.21	2.47
Indoor water flow rate	3.78 m³/h	2.37 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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	161 %	125 %
Prated	15.30 kW	13.50 kW
SCOP	4.10	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.50 kW	11.90 kW
COP Tj = -7°C	2.57	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	8.20 kW	7.20 kW
COP Tj = +2°C	4.15	3.19
Cdh	0.99	0.99
Pdh Tj = +7°C	6.30 kW	5.90 kW
COP Tj = +7°C	5.22	4.29
Cdh	0.99	0.99

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COP Tj = 12°C	7.08	6.32
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Pdh Tj = TOL	9.30 kW	9.30 kW
COP Tj = TOL	1.62	1.70
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.80 kW	2.20 kW
Annual energy consumption Qhe	7493 kWh	8502 kWh

Model: PUHZ-SW160YKA(-BS) + ERSE-M*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	22.00 kW	22.00 kW
El input	5.23 kW	8.91 kW
COP	4.21	2.47
Indoor water flow rate	3.78 m³/h	2.37 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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	163 %	126 %
Prated	15.30 kW	13.50 kW
SCOP	4.15	3.23
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.50 kW	11.90 kW
COP Tj = -7°C	2.57	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	8.20 kW	7.20 kW
COP Tj = +2°C	4.15	3.19
Cdh	0.99	0.99
Pdh Tj = +7°C	6.30 kW	5.90 kW
COP Tj = +7°C	5.22	4.29
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Pdh Tj = 12°C	7.70 kW	7.40 kW
COP Tj = 12°C	7.08	6.32
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Pdh Tj = Tbiv	13.50 kW	11.90 kW
COP Tj = Tbiv	2.57	1.83
Pdh Tj = TOL	9.30 kW	9.30 kW
COP Tj = TOL	1.62	1.70
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.80 kW	2.20 kW
Annual energy consumption Qhe	7493 kWh	8502 kWh

Model: PUHZ-SW160YKA(-BS) + ERSE-YM*C

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	22.00 kW	22.00 kW
El input	5.23 kW	8.91 kW
COP	4.21	2.47
Indoor water flow rate	3.78 m³/h	2.37 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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	163 %	126 %
Prated	15.30 kW	13.50 kW
SCOP	4.15	3.23
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.50 kW	11.90 kW
COP Tj = -7°C	2.57	1.83
Cdh	0.99	0.99
Pdh Tj = +2°C	8.20 kW	7.20 kW
COP Tj = +2°C	4.15	3.19
Cdh	0.99	0.99
Pdh Tj = +7°C	6.30 kW	5.90 kW
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PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.80 kW	2.20 kW
Annual energy consumption Qhe	7493 kWh	8502 kWh

Model: PUHZ-SW160YKA(-BS) + EHSE-M*D

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	22.00 kW	22.00 kW
El input	5.24 kW	8.91 kW
COP	4.20	2.47
Indoor water flow rate	3.79 m³/h	2.36 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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	161 %	125 %
Prated	15.30 kW	13.50 kW
SCOP	4.10	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.50 kW	11.90 kW
COP Tj = -7°C	2.57	1.83
Cdh	1.00	1.00
Pdh Tj = +2°C	8.20 kW	7.20 kW
COP Tj = +2°C	4.15	3.19
Cdh	0.99	0.99
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Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.77 kW	2.20 kW
Annual energy consumption Qhe	7493 kWh	8502 kWh

Model: PUHZ-SW160YKA(-BS) + EHSE-YM*D

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	22.00 kW	22.00 kW
El input	5.24 kW	8.91 kW
COP	4.20	2.47
Indoor water flow rate	3.79 m³/h	2.36 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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Supplementary Heater: Type of energy input	electricity	electricity
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