

Page 1 of 25

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Login

Summary of	Ecodan Power Inverter 20	Reg. No.	037-0053-20	
Certificate Holder	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)			
Subtype title	Ecodan Power Inverter 20			
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-SW200YKA(-BS) + EHSE-*M*C

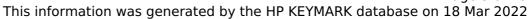
Configure model		
Model name	PUHZ-SW200YKA(-BS) + EHSE-*M*C	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	25 kW	25 kW
El input	6.25 kW	10.2 kW
СОР	4	2.45

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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

	EN 14825		
Low temperature	Medium temperature		
163 %	127 %		
17.3 kW	15.5 kW		
4.14	3.26		
-7 °C	-7 °C		
-20 °C	-20 °C		
15.3 kW	13.7 kW		
2.53	1.83		
0.99	0.99		
9.3 kW	8.3 kW		
4.2	3.28		
0.99	0.99		
6.3 kW	5.9 kW		
5.22	4.27		
0.99	0.99		
	163 % 17.3 kW 4.14 -7 °C -20 °C 15.3 kW 2.53 0.99 9.3 kW 4.2 0.99 6.3 kW 5.22		





This information was general		
Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.08	6.31
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = Tbiv	2.53	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
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	3.1 kW	2.5 kW
Annual energy consumption Qhe	8638 kWh	9820 kWh



Model: PUHZ-SW200YKA(-BS) + EHSE-*M*D

Configure model		
Model name	PUHZ-SW200YKA(-BS) + EHSE-*M*D	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	25 kW	25 kW
El input	6.25 kW	10.2 kW
СОР	4	2.45

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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
Low temperature	Medium temperature	
163 %	127 %	
17.3 kW	15.5 kW	
4.14	3.26	
-7 °C	-7 °C	
-20 °C	-20 °C	
15.3 kW	13.7 kW	
2.53	1.83	
1	1	
9.3 kW	8.3 kW	
4.2	3.28	
0.99	0.99	
6.3 kW	5.9 kW	
5.22	4.27	
0.99	0.98	
	Low temperature 163 % 17.3 kW 4.14 -7 °C -20 °C 15.3 kW 2.53 1 9.3 kW 4.2 0.99 6.3 kW 5.22	





Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.08	6.31
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = Tbiv	2.53	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
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	3.1 kW	2.5 kW
Annual energy consumption Qhe	8638 kWh	9820 kWh



Model: PUHZ-SW200YKA(-BS) + EHSE-M*C

Configure model		
Model name	PUHZ-SW200YKA(-BS) + EHSE-M*C	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	25 kW	25 kW
El input	6.25 kW	10.2 kW
СОР	4	2.45

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	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 %	127 %
Prated	17.3 kW	15.5 kW
SCOP	4.14	3.26
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	15.3 kW	13.7 kW
COP Tj = -7°C	2.53	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2^{\circ}$ C	9.3 kW	8.3 kW
COP Tj = +2°C	4.2	3.28
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	6.3 kW	5.9 kW
COP Tj = +7°C	5.22	4.27
Cdh Tj = +7 °C	0.99	0.99



Page 10 of 25

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.08	6.31
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = Tbiv	2.53	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
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	3.1 kW	2.5 kW
Annual energy consumption Qhe	8638 kWh	9820 kWh



Model: PUHZ-SW200YKA(-BS) + EHSE-M*D

Configure model		
Model name	PUHZ-SW200YKA(-BS) + EHSE-M*D	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

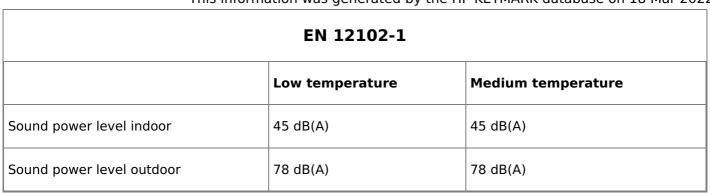
General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	25 kW	25 kW	
El input	6.25 kW	10.2 kW	
СОР	4	2.45	

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





CEN heat pump

EN 14825		
	Low temperature	Medium temperature
η_{s}	163 %	127 %
Prated	17.3 kW	15.5 kW
SCOP	4.14	3.26
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	15.3 kW	13.7 kW
COP Tj = -7°C	2.53	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	9.3 kW	8.3 kW
COP Tj = +2°C	4.2	3.28
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.3 kW	5.9 kW
COP Tj = +7°C	5.22	4.27
Cdh Tj = +7 °C	0.99	0.98



	-	
Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.08	6.31
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = Tbiv	2.53	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	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	3.1 kW	2.5 kW
Annual energy consumption Qhe	8638 kWh	9820 kWh



Model: PUHZ-SW200YKA(-BS) + ERSE-*M*C

Configure model		
Model name	PUHZ-SW200YKA(-BS) + ERSE-*M*C	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional) n/a		

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	25 kW	25 kW
El input	6.25 kW	10.2 kW
СОР	4	2.45

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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	129 %
Prated	17.3 kW	15.5 kW
SCOP	4.18	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7° C	15.3 kW	13.7 kW
$COP Tj = -7^{\circ}C$	2.53	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	9.3 kW	8.3 kW
COP Tj = +2°C	4.2	3.28
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7$ °C	6.3 kW	5.9 kW
$COPTj = +7^{\circ}C$	5.22	4.27
Cdh Tj = +7 °C	0.99	0.99



Page 16 of 25

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.08	6.31
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = Tbiv	2.53	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
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	3.1 kW	2.5 kW
Annual energy consumption Qhe	8558 kWh	9740 kWh



Model: PUHZ-SW200YKA(-BS) + ERSE-*M*D

Configure model		
Model name	PUHZ-SW200YKA(-BS) + ERSE-*M*D	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	25 kW	25 kW	
El input	6.25 kW	10.2 kW	
СОР	4	2.45	

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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	129 %
Prated	17.3 kW	15.5 kW
SCOP	4.18	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7 °C	15.3 kW	13.7 kW
COP Tj = -7 °C	2.53	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	9.3 kW	8.3 kW
COP Tj = +2°C	4.2	3.28
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	6.3 kW	5.9 kW
$COPTj = +7^{\circ}C$	5.22	4.27
Cdh Tj = +7 °C	0.99	0.98



Page 19 of 25

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.08	6.31
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = Tbiv	2.53	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
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	3.1 kW	2.5 kW
Annual energy consumption Qhe	8558 kWh	9740 kWh



Model: PUHZ-SW200YKA(-BS) + ERSE-M*C

Configure model		
Model name PUHZ-SW200YKA(-BS) + ERSE-M*C		
Application Heating (medium temp)		
Units Indoor + Outdoor		
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	25 kW	25 kW	
El input	6.25 kW	10.2 kW	
СОР	4	2.45	

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	45 dB(A)	45 dB(A)
Sound power level outdoor	78 dB(A)	78 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	129 %
Prated	17.3 kW	15.5 kW
SCOP	4.18	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	15.3 kW	13.7 kW
COP Tj = -7°C	2.53	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.3 kW	8.3 kW
COP Tj = +2°C	4.2	3.28
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.3 kW	5.9 kW
COP Tj = +7°C	5.22	4.27
Cdh Tj = +7 °C	0.99	0.99



$$\operatorname{\textit{Page}}\xspace$ 22 of 25 This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C 7.7 kW 7.4 kW COP Tj = 12°C 7.08 6.31 Cdh Tj = +12 °C 0.99 0.99 Pdh Tj = Tbiv 15.3 kW 13.7 kW COP Tj = Tbiv 2.53 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 14.2 kW 13 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.3 1.78 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 3.1 kW 2.5 kW Annual energy consumption Qhe 8558 kWh 9740 kWh			
Cdh Tj = +12 °C 0.99 0.99 Pdh Tj = Tbiv 15.3 kW 13.7 kW COP Tj = Tbiv 2.53 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = 12°C	7.7 kW	7.4 kW
Pdh Tj = Tbiv 15.3 kW 13.7 kW COP Tj = Tbiv 2.53 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	COP Tj = 12°C	7.08	6.31
COP Tj = Tbiv 2.53 1.83 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	COP Tj = Tbiv	2.53	1.83
WTOL 60 °C 60 °C 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 3.1 kW 2.5 kW	Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
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 3.1 kW 2.5 kW	COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
PTO 22 W 22 W PSB 22 W 22 W PCK 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 3.1 kW 22 W 23 W 24 W 25 W 26 W 27 W 28 W 29 W 20 W	WTOL	60 °C	60 °C
PSB 22 W 22 W PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 3.1 kW 2.5 kW	Poff	22 W	22 W
PCK 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 3.1 kW 2.5 kW	РТО	22 W	22 W
Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 3.1 kW 2.5 kW	PSB	22 W	22 W
Supplementary Heater: PSUP 3.1 kW 2.5 kW	PCK	0 W	0 W
	Supplementary Heater: Type of energy input	Electricity	Electricity
Annual energy consumption Qhe 8558 kWh 9740 kWh	Supplementary Heater: PSUP	3.1 kW	2.5 kW
	Annual energy consumption Qhe	8558 kWh	9740 kWh



Model: PUHZ-SW200YKA(-BS) + ERSE-M*D

Configure model			
Model name	PUHZ-SW200YKA(-BS) + ERSE-M*D		
Application	Heating (medium temp)		
Units	Indoor + Outdoor		
Climate Zone	n/a		
Reversibility	Yes		
Cooling mode application (optional)	n/a		

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	25 kW	25 kW
El input	6.25 kW	10.2 kW
СОР	4	2.45

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	45 dB(A)	45 dB(A)	
Sound power level outdoor	78 dB(A)	78 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	129 %
Prated	17.3 kW	15.5 kW
SCOP	4.18	3.29
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	15.3 kW	13.7 kW
COP Tj = -7°C	2.53	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	9.3 kW	8.3 kW
COP Tj = +2°C	4.2	3.28
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7$ °C	6.3 kW	5.9 kW
$COP Tj = +7^{\circ}C$	5.22	4.27
Cdh Tj = +7 °C	0.99	0.98
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Page 25 of 25

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.08	6.31
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15.3 kW	13.7 kW
COP Tj = Tbiv	2.53	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.2 kW	13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.3	1.78
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	3.1 kW	2.5 kW
Annual energy consumption Qhe	8558 kWh	9740 kWh