Login

Summary of	Ecodan Zubadan 23	Reg. No.	037-0057-20
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)		
Subtype title	Ecodan Zubadan 23		
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-SHW230YKA2 + EHSE-*M*C

Configure model	
Model name	PUHZ-SHW230YKA2 + 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	23 kW	23 kW
El input	6.3 kW	9.31 kW
COP	3.65	2.47

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	75 dB(A)	75 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	164 %	127 %
Prated	25 kW	23 kW
SCOP	4.18	3.25
Tbiv	-10 °C	-10 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	22.1 kW	20.3 kW
COP Tj = -7°C	3.4	2.1
Cdh Tj = -7 °C	0.95	0.95
Pdh Tj = +2°C	13.5 kW	12.4 kW
COP Tj = +2°C	3.8	3.02
Cdh Tj = +2 °C	0.95	0.95
Pdh Tj = +7°C	12 kW	11.2 kW
COP Tj = +7°C	5.32	4.54
Cdh Tj = +7 °C	0.95	0.95

Pdh Tj = 12°C	14.6 kW	13.7 kW
COP Tj = 12°C	6.68	5.79
Cdh Tj = +12 °C	0.95	0.95
Pdh Tj = Tbiv	25 kW	23 kW
COP Tj = Tbiv	2.19	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	25 kW	23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.85
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	0 kW	0 kW
Annual energy consumption Qhe	12351 kWh	14615 kWh

Model: PUHZ-SHW230YKA2 + EHSE-M*C

Configure model	
Model name	PUHZ-SHW230YKA2 + 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	23 kW	23 kW
El input	6.3 kW	9.31 kW
COP	3.65	2.47

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	75 dB(A)	75 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	25 kW	23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.85
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	0 kW	0 kW
Annual energy consumption Qhe	12351 kWh	14615 kWh

Model: PUHZ-SHW230YKA2 + ERSE-*M*C

Configure model	
Model name	PUHZ-SHW230YKA2 + 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

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Average Climate

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EN 14825		
	Low temperature	**Medium temperature**
η_s	165 %	128 %
Prated	25 kW	23 kW
SCOP	4.21	3.28
Tbiv	-10 °C	-10 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	22.1 kW	20.3 kW
COP Tj = -7°C	3.4	2.1
Cdh Tj = -7 °C	0.95	0.95
Pdh Tj = +2°C	13.5 kW	12.4 kW
COP Tj = +2°C	3.8	3.04
Cdh Tj = +2 °C	0.95	0.95
Pdh Tj = +7°C	12 kW	11.2 kW
COP Tj = +7°C	5.32	4.54
Cdh Tj = +7 °C	0.95	0.95

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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.85
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	0 kW	0 kW
Annual energy consumption Qhe	12270 kWh	14485 kWh

Model: PUHZ-SHW230YKA2 + ERSE-M*C

Configure model	
Model name	PUHZ-SHW230YKA2 + 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	23 kW	23 kW
El input	6.3 kW	9.31 kW
COP	3.65	2.47

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		
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Pdh Tj = +7°C	12 kW	11.2 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	25 kW	23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.85
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	0 kW	0 kW
Annual energy consumption Qhe	12270 kWh	14485 kWh

Model: PUHZ-SHW230YKA2(-BS) + EHSE-*M*D

Configure model	
Model name	PUHZ-SHW230YKA2(-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	23 kW	23 kW
El input	6.3 kW	9.31 kW
COP	3.65	2.47

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	75 dB(A)	75 dB(A)

EN 14825		
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η_s	164 %	127 %
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COP Tj = -7°C	3.4	2.1
Cdh Tj = -7 °C	0.98	1
Pdh Tj = +2°C	13.5 kW	12.4 kW
COP Tj = +2°C	3.8	3.02
Cdh Tj = +2 °C	0.95	1
Pdh Tj = +7°C	12 kW	11.2 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	12351 kWh	14615 kWh

Model: PUHZ-SHW230YKA2(-BS) + EHSE-M*D

Configure model	
Model name	PUHZ-SHW230YKA2(-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

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	Low temperature	**Medium temperature**
Heat output	23 kW	23 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	12351 kWh	14615 kWh

Model: PUHZ-SHW230YKA2(-BS) + ERSE-*M*D

Configure model	
Model name	PUHZ-SHW230YKA2(-BS) + ERSE-*M*D
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Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	12270 kWh	14485 kWh

Model: PUHZ-SHW230YKA2(-BS) + ERSE-M*D

Configure model	
Model name	PUHZ-SHW230YKA2(-BS) + ERSE-M*D
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Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

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