Login

Summary of	Ecodan Power Inverter 5-200D Packaged	Reg. No.	037-0032-20
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 Power Inverter 5-200D Packaged		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	2 kg		
Certification Date	22.06.2020		
Testing basis	HP Keymark scheme rules rev. no. 6		

Model: PUZ-WM50VHA(-BS) + EHPT20X-M*D

Configure model	
Model name	PUZ-WM50VHA(-BS) + EHPT20X-M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.62 kW
COP	5.00	3.08

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

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	226 %	157 %
Prated	5.00 kW	5.00 kW
SCOP	5.73	4.00
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.70	1.98
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	5.10	3.40
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.90 kW	1.80 kW
COP Tj = 12°C	7.98	5.81
Cdh Tj = +12 °C	0.940	0.950

Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.70	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1166 kWh	1671 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825

	Low temperature	**Medium temperature**
η_s	183 %	129 %
Prated	5.00 kW	5.00 kW
SCOP	4.66	3.31
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.40 kW	4.40 kW
COP Tj = -7°C	3.17	2.04
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.47	3.23
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.90 kW	1.70 kW
COP Tj = +7°C	6.55	4.47
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.80 kW	1.80 kW
COP Tj = 12°C	8.57	6.67
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	4.40 kW	4.40 kW
COP Tj = Tbiv	3.17	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.19 kW	4.19 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.81 kW	0.81 kW
Annual energy consumption Qhe	2216 kWh	3122 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
COP	3.62
Heating up time	2:49 h:min
Standby power input	34.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	135 %
COP	3.19
Heating up time	2:19 h:min
Standby power input	37.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

Model: PUZ-WM50VHA(-BS) + EHPT20X-*M*D

Configure model	
Model name	PUZ-WM50VHA(-BS) + EHPT20X-*M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.62 kW
COP	5.00	3.08

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

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
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Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.70	1.98
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	5.10	3.40
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.90 kW	1.80 kW
COP Tj = 12°C	7.98	5.81
Cdh Tj = +12 °C	0.940	0.950

Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.70	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	1.98
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WTOL	60 °C	60 °C
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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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1166 kWh	1671 kWh

Average Climate

EN 12102-1		
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EN 14825

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.81 kW	0.81 kW
Annual energy consumption Qhe	2216 kWh	3122 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
COP	3.62
Heating up time	2:49 h:min
Standby power input	34.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	135 %
COP	3.19
Heating up time	2:19 h:min
Standby power input	37.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

Model: PUZ-WM50VHA(-BS) + ERPT20X-*M*D

Configure model	
Model name	PUZ-WM50VHA(-BS) + ERPT20X-*M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.62 kW
COP	5.00	3.08

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

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	237 %	162 %
Prated	5.00 kW	5.00 kW
SCOP	6.00	4.13
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.70	1.98
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	4.96	3.35
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.90 kW	1.80 kW
COP Tj = 12°C	8.00	5.81
Cdh Tj = +12 °C	0.940	0.950

Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.70	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1112 kWh	1616 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825

	Low temperature	**Medium temperature**
η_s	190 %	133 %
Prated	5.00 kW	5.00 kW
SCOP	4.83	3.40
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.40 kW	4.40 kW
COP Tj = -7°C	3.17	2.04
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.56	3.29
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.90 kW	1.70 kW
COP Tj = +7°C	6.55	4.47
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.19 kW	4.19 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.81 kW	0.81 kW
Annual energy consumption Qhe	2139 kWh	3038 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
COP	3.62
Heating up time	2:49 h:min
Standby power input	34.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	135 %
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Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

Model: PUZ-WM50VHA(-BS) + ERPT20X-M*D

Configure model	
Model name	PUZ-WM50VHA(-BS) + ERPT20X-M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.62 kW
COP	5.00	3.08

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
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COP Tj = +2°C	3.70	1.98
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
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Pdh Tj = 12°C	1.90 kW	1.80 kW
COP Tj = 12°C	8.00	5.81
Cdh Tj = +12 °C	0.940	0.950

Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.70	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1112 kWh	1616 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
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EN 14825

	Low temperature	**Medium temperature**
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.81 kW	0.81 kW
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Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
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Standby power input	34.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

Average Climate

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Efficiency ηDHW	135 %
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Reference hot water temperature	52.5 °C
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Model: PUZ-WM50VHA(-BS) + EHPX-M*D

Configure model	
Model name	PUZ-WM50VHA(-BS) + EHPX-M*D
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.62 kW
COP	5.00	3.08

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
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EN 14825		
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1166 kWh	1671 kWh

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Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.47	3.23
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.90 kW	1.70 kW
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Model: PUZ-WM50VHA(-BS) + EHPX-*M*D

Configure model	
Model name	PUZ-WM50VHA(-BS) + EHPX-*M*D
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

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	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.62 kW
COP	5.00	3.08

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Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate

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	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	226 %	157 %
Prated	5.00 kW	5.00 kW
SCOP	5.73	4.00
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.70	1.98
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	5.10	3.40
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.90 kW	1.80 kW
COP Tj = 12°C	7.98	5.81
Cdh Tj = +12 °C	0.940	0.950

Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.70	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1166 kWh	1671 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825

	Low temperature	**Medium temperature**
η_s	183 %	129 %
Prated	5.00 kW	5.00 kW
SCOP	4.66	3.31
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.40 kW	4.40 kW
COP Tj = -7°C	3.17	2.04
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.47	3.23
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.90 kW	1.70 kW
COP Tj = +7°C	6.55	4.47
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.80 kW	1.80 kW
COP Tj = 12°C	8.57	6.67
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	4.40 kW	4.40 kW
COP Tj = Tbiv	3.17	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.19 kW	4.19 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.81 kW	0.81 kW
Annual energy consumption Qhe	2216 kWh	3122 kWh

Model: PUZ-WM50VHA(-BS)

Configure model	
Model name	PUZ-WM50VHA(-BS)
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.62 kW
COP	5.00	3.08

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

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	237 %	162 %
Prated	5.00 kW	5.00 kW
SCOP	6.00	4.13
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.68	1.98
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	4.96	3.35
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	1.90 kW	1.80 kW
COP Tj = 12°C	8.00	5.81
Cdh Tj = +12 °C	0.940	0.950

Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.70	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.70	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1112 kWh	1616 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825

	Low temperature	**Medium temperature**
η_s	190 %	133 %
Prated	5.00 kW	5.00 kW
SCOP	4.83	3.40
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.40 kW	4.40 kW
COP Tj = -7°C	3.17	2.04
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.56	3.29
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.90 kW	1.70 kW
COP Tj = +7°C	6.55	4.47
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.80 kW	1.80 kW
COP Tj = 12°C	8.57	6.67
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	4.40 kW	4.40 kW
COP Tj = Tbiv	3.17	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.19 kW	4.19 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	0.81 kW	0.81 kW
Annual energy consumption Qhe	2139 kWh	3038 kWh