

This information was generated by the HP KEYMARK database on 25 Feb 2023

	Ecodan Power Inverter 5-200D Packaged	Reg. No.	037-0032-20
Certificate Holder	Mitsubishi Electric Air Conditioning Systems Europe LTD		
	Nettlehill Road, Houston Industrial Estate		EH54 5EQ
	Livingston		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

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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

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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

This information was generated by the HP KEYMARK database on 25 Feb 2023

	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

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COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.84	1.97
Cdh $T_j = TOL$ or Pdh $T_j = T_{designh}$ if $TOL < T_{designh}$		
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 η_{DHW}	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 η_{DHW}	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

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	Low temperature	Medium temperature
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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
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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

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Pdh Tj = Tbiv	4.40 kW	4.40 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.19 kW	4.19 kW

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COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.84	1.97
Cdh $T_j = TOL$ or Pdh $T_j = T_{designh}$ if $TOL < T_{designh}$		
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 η_{DHW}	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 η_{DHW}	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

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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

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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

This information was generated by the HP KEYMARK database on 25 Feb 2023

	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
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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

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COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.84	1.97
Cdh $T_j = TOL$ or Pdh $T_j = T_{designh}$ if $TOL < T_{designh}$		
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 η_{DHW}	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 η_{DHW}	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

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EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
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EN 14825

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Prated	5.00 kW	5.00 kW
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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	4.96	3.35
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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)

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This information was generated by the HP KEYMARK database on 25 Feb 2023

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Pdh Tj = -7°C	4.40 kW	4.40 kW
COP Tj = -7°C	3.17	2.04
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COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.84	1.97
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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	2139 kWh	3038 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	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 η_{DHW}	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) + 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

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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
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Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1166 kWh	1671 kWh

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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
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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

This information was generated by the HP KEYMARK database on 25 Feb 2023

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) + 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

This information was generated by the HP KEYMARK database on 25 Feb 2023

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

This information was generated by the HP KEYMARK database on 25 Feb 2023

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

This information was generated by the HP KEYMARK database on 25 Feb 2023

	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

This information was generated by the HP KEYMARK database on 25 Feb 2023

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

This information was generated by the HP KEYMARK database on 25 Feb 2023

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

This information was generated by the HP KEYMARK database on 25 Feb 2023

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

This information was generated by the HP KEYMARK database on 25 Feb 2023

	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

This information was generated by the HP KEYMARK database on 25 Feb 2023

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