

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

Summary of	Ecodan Power Inverter 9-300D Packaged AA	Reg. No.	037-0036-20
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	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)		
Subtype title	Ecodan Power Inverter 9-300D Packaged AA		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass Of Refrigerant	2.2 kg		
Certification Date	22.06.2020		
Testing basis	HP Keymark scheme rules rev. no. 6		

# Model: PUZ-WM85VAA(-BS) + EHPT30X-M\*D

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.50 kW	8.50 kW
El input	1.77 kW	3.01 kW
COP	4.80	2.82
Indoor water flow rate	1.46 m <sup>3</sup> /h	0.91 m <sup>3</sup> /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

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

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	193 %	139 %
Prated	8.50 kW	8.50 kW
SCOP	4.89	3.54
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	3.10	2.07
Cdh	0.99	1.00
Pdh Tj = +2°C	4.60 kW	4.60 kW
COP Tj = +2°C	4.79	3.46
Cdh	0.98	0.99
Pdh Tj = +7°C	3.20 kW	3.70 kW
COP Tj = +7°C	6.81	5.00
Cdh	0.97	0.98

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

Pdh Tj = 12°C	3.20 kW	3.40 kW
COP Tj = 12°C	9.14	7.08
Cdh	0.96	0.97
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	3.10	2.07
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.80	1.80
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	1.32 kW	1.32 kW
Annual energy consumption Qhe	3473 kWh	4837 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

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

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	227 %	139 %
Prated	8.50 kW	8.50 kW
SCOP	5.76	3.98
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.50 kW	8.50 kW
COP Tj = +2°C	3.66	1.88
Cdh	0.99	1.00
Pdh Tj = +7°C	5.50 kW	5.50 kW
COP Tj = +7°C	4.91	3.22
Cdh	0.99	0.99
Pdh Tj = 12°C	3.60 kW	3.40 kW
COP Tj = 12°C	7.66	5.76
Cdh	0.97	0.98
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.94	1.96
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.71	1.71
WTOL	60 °C	60 °C

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

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 Q <sub>he</sub>	1916 kWh	2799 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	120 %
COP	2.89
Heating up time	4:02 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

### Warmer Climate

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

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.24
Heating up time	3:42 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

# Model: PUZ-WM85VAA(-BS) + EHPT30X-YM\*D

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.50 kW	8.50 kW
El input	1.77 kW	3.01 kW
COP	4.80	2.82
Indoor water flow rate	1.46 m <sup>3</sup> /h	0.91 m <sup>3</sup> /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



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

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	193 %	139 %
Prated	8.50 kW	8.50 kW
SCOP	4.89	3.54
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	3.10	2.07
Cdh	0.99	1.00
Pdh Tj = +2°C	4.60 kW	4.60 kW
COP Tj = +2°C	4.79	3.46
Cdh	0.98	0.99
Pdh Tj = +7°C	3.20 kW	3.70 kW
COP Tj = +7°C	6.81	5.00
Cdh	0.97	0.98

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Pdh Tj = 12°C	3.20 kW	3.40 kW
COP Tj = 12°C	9.14	7.08
Cdh	0.96	0.97
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	3.10	2.07
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.80	1.80
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	1.32 kW	1.32 kW
Annual energy consumption Qhe	3473 kWh	4837 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

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

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	227 %	139 %
Prated	8.50 kW	8.50 kW
SCOP	5.76	3.98
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.50 kW	8.50 kW
COP Tj = +2°C	3.66	1.88
Cdh	0.99	1.00
Pdh Tj = +7°C	5.50 kW	5.50 kW
COP Tj = +7°C	4.91	3.22
Cdh	0.99	0.99
Pdh Tj = 12°C	3.60 kW	3.40 kW
COP Tj = 12°C	7.66	5.76
Cdh	0.97	0.98
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.94	1.96
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.71	1.71
WTOL	60 °C	60 °C

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

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 Q <sub>he</sub>	1916 kWh	2799 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	120 %
COP	2.89
Heating up time	4:02 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

### Warmer Climate

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

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.24
Heating up time	3:42 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

# Model: PUZ-WM85VAA(-BS) + ERPT30X-VM\*D

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.50 kW	8.50 kW
El input	1.77 kW	3.01 kW
COP	4.80	2.82
Indoor water flow rate	1.46 m <sup>3</sup> /h	0.91 m <sup>3</sup> /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

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

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	197 %	141 %
Prated	8.50 kW	8.50 kW
SCOP	5.00	3.60
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	3.10	2.07
Cdh	0.99	1.00
Pdh Tj = +2°C	4.60 kW	4.60 kW
COP Tj = +2°C	4.79	3.46
Cdh	0.98	0.99
Pdh Tj = +7°C	3.20 kW	3.70 kW
COP Tj = +7°C	6.81	5.00
Cdh	0.97	0.98

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

Pdh Tj = 12°C	3.20 kW	3.40 kW
COP Tj = 12°C	9.14	7.08
Cdh	0.96	0.97
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	3.10	2.07
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.80	1.80
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	1.32 kW	1.32 kW
Annual energy consumption Qhe	3473 kWh	4837 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)



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

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	234 %	141 %
Prated	8.50 kW	8.50 kW
SCOP	5.92	4.05
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.50 kW	8.50 kW
COP Tj = +2°C	3.66	1.88
Cdh	0.99	1.00
Pdh Tj = +7°C	5.50 kW	5.50 kW
COP Tj = +7°C	4.91	3.22
Cdh	0.99	0.99
Pdh Tj = 12°C	3.60 kW	3.40 kW
COP Tj = 12°C	7.66	5.76
Cdh	0.97	0.98
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.94	1.96
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.71	1.71
WTOL	60 °C	60 °C

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

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 Q <sub>he</sub>	1916 kWh	2799 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	120 %
COP	2.89
Heating up time	4:02 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

### Warmer Climate

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

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.24
Heating up time	3:42 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

# Model: PUZ-WM85YAA(-BS) + EHPT30X-M\*D

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.50 kW	8.50 kW
El input	1.77 kW	3.01 kW
COP	4.80	2.82
Indoor water flow rate	1.46 m <sup>3</sup> /h	0.91 m <sup>3</sup> /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

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

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	190 %	138 %
Prated	8.50 kW	8.50 kW
SCOP	4.84	3.52
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	3.10	2.07
Cdh	0.99	0.99
Pdh Tj = +2°C	4.60 kW	4.60 kW
COP Tj = +2°C	4.79	3.46
Cdh	0.98	0.98
Pdh Tj = +7°C	3.20 kW	3.70 kW
COP Tj = +7°C	6.81	5.00
Cdh	0.97	0.97

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

Pdh Tj = 12°C	3.20 kW	3.40 kW
COP Tj = 12°C	9.14	7.08
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	3.10	2.07
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.80	1.80
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	1.32 kW	1.32 kW
Annual energy consumption Qhe	3473 kWh	4837 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

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

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	224 %	138 %
Prated	8.50 kW	8.50 kW
SCOP	5.69	3.94
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.50 kW	8.50 kW
COP Tj = +2°C	3.66	1.88
Cdh	0.99	1.00
Pdh Tj = +7°C	5.50 kW	5.50 kW
COP Tj = +7°C	4.91	3.22
Cdh	0.99	0.99
Pdh Tj = 12°C	3.60 kW	3.40 kW
COP Tj = 12°C	7.66	5.76
Cdh	0.97	0.98
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.94	1.96
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.71	1.71
WTOL	60 °C	60 °C

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

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	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1916 kWh	2799 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	120 %
COP	2.89
Heating up time	4:02 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

### Warmer Climate



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

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.24
Heating up time	3:42 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

# Model: PUZ-WM85YAA(-BS) + EHPT30X-YM\*D

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.50 kW	8.50 kW
El input	1.77 kW	3.01 kW
COP	4.80	2.82
Indoor water flow rate	1.46 m <sup>3</sup> /h	0.91 m <sup>3</sup> /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

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

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	190 %	138 %
Prated	8.50 kW	8.50 kW
SCOP	4.84	3.52
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	3.10	2.07
Cdh	0.99	0.99
Pdh Tj = +2°C	4.60 kW	4.60 kW
COP Tj = +2°C	4.79	3.46
Cdh	0.98	0.98
Pdh Tj = +7°C	3.20 kW	3.70 kW
COP Tj = +7°C	6.81	5.00
Cdh	0.97	0.97

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

Pdh Tj = 12°C	3.20 kW	3.40 kW
COP Tj = 12°C	9.14	7.08
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	3.10	2.07
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.80	1.80
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	1.32 kW	1.32 kW
Annual energy consumption Qhe	3473 kWh	4837 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

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

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	224 %	138 %
Prated	8.50 kW	8.50 kW
SCOP	5.69	3.94
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TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.50 kW	8.50 kW
COP Tj = +2°C	3.66	1.88
Cdh	0.99	1.00
Pdh Tj = +7°C	5.50 kW	5.50 kW
COP Tj = +7°C	4.91	3.22
Cdh	0.99	0.99
Pdh Tj = 12°C	3.60 kW	3.40 kW
COP Tj = 12°C	7.66	5.76
Cdh	0.97	0.98
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.94	1.96
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.71	1.71
WTOL	60 °C	60 °C

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

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	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1916 kWh	2799 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	120 %
COP	2.89
Heating up time	4:02 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

### Warmer Climate

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

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.24
Heating up time	3:42 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

# Model: PUZ-WM85YAA(-BS) + ERPT30X-VM\*D

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8.50 kW	8.50 kW
El input	1.77 kW	3.01 kW
COP	4.80	2.82
Indoor water flow rate	1.46 m <sup>3</sup> /h	0.91 m <sup>3</sup> /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



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

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	197 %	141 %
Prated	8.50 kW	8.50 kW
SCOP	5.00	3.60
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.50 kW	7.50 kW
COP Tj = -7°C	3.10	2.07
Cdh	0.99	0.99
Pdh Tj = +2°C	4.60 kW	4.60 kW
COP Tj = +2°C	4.79	3.46
Cdh	0.98	0.98
Pdh Tj = +7°C	3.20 kW	3.70 kW
COP Tj = +7°C	6.81	5.00
Cdh	0.97	0.97

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

Pdh Tj = 12°C	3.20 kW	3.40 kW
COP Tj = 12°C	9.14	7.08
Cdh	0.96	0.95
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	3.10	2.07
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.80	1.80
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	1.32 kW	1.32 kW
Annual energy consumption Qhe	3473 kWh	4837 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

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

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	234 %	141 %
Prated	8.50 kW	8.50 kW
SCOP	5.91	4.05
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	8.50 kW	8.50 kW
COP Tj = +2°C	3.66	1.88
Cdh	0.99	1.00
Pdh Tj = +7°C	5.50 kW	5.50 kW
COP Tj = +7°C	4.91	3.22
Cdh	0.99	0.99
Pdh Tj = 12°C	3.60 kW	3.40 kW
COP Tj = 12°C	7.66	5.76
Cdh	0.97	0.98
Pdh Tj = Tbiv	7.50 kW	7.50 kW
COP Tj = Tbiv	2.94	1.96
Pdh Tj = TOL	6.10 kW	6.10 kW
COP Tj = TOL	1.71	1.71
WTOL	60 °C	60 °C

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

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	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1916 kWh	2799 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	120 %
COP	2.89
Heating up time	4:02 h:min
Standby power input	42.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l

### Warmer Climate

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

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.24
Heating up time	3:42 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 l