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### This information was generated by the HP KEYMARK database on 22 Jun 2022

### **Login**

Summary of	Ecodan Power Inverter 11-200D Packaged AA	Reg. No.	037-0034-20		
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 11-200D Packaged AA				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R32				
Mass of Refrigerant	3 kg				
Certification Date	27.07.2020				
Testing basis	HP Keymark scheme rules rev. no. 6				

### Model: PUZ-WM112VAA(-BS) + EHPT20X-M\*D

Configure model			
Model name	PUZ-WM112VAA(-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	11.2 kW	10 kW	
El input	2.38 kW	3.33 kW	
СОР	4.7	3	

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	40 dB(A)	40 dB(A)	
Sound power level outdoor	60 dB(A)	60 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
$\eta_{s}$	215 %	152 %	
Prated	10 kW	10 kW	
SCOP	5.46	3.87	
Tbiv	2 °C	2 °C	
TOL	-25 °C	-25 °C	
Pdh Tj = +2°C	10 kW	10 kW	
COP Tj = +2°C	3.3	1.81	
Cdh Tj = +2 °C	1	1	
Pdh Tj = +7°C	6.4 kW	6.4 kW	
COP Tj = +7°C	4.82	3.13	
Cdh Tj = +7 °C	0.99	0.99	
Pdh Tj = 12°C	4.7 kW	4.4 kW	
COP Tj = 12°C	7.12	5.66	
Cdh Tj = +12 °C	0.98	0.98	





Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2449 kWh	3452 kWh

### **Average Climate**

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	60 dB(A)	60 dB(A)	

EN 14825		
	Low temperature	Medium temperature





	· · · · · · · · · · · · · · · · · · ·	NK database on 22 juli 202.
$\eta_s$	191 %	134 %
Prated	10 kW	10 kW
SCOP	4.86	3.43
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	1
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.56	3.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11
	. —	





WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4251 kWh	6024 kWh

### Domestic Hot Water (DHW)

### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

### Average Climate



EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



### Model: PUZ-WM112VAA(-BS) + EHPT20X-\*M\*D

Configure model		
Model name PUZ-WM112VAA(-BS) + EHPT20X-*M*D		
Application Heating + DHW + low temp		
Units	s 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	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

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	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	215 %	152 %
Prated	10 kW	10 kW
SCOP	5.46	3.87
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
$COP Tj = +2^{\circ}C$	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
$COP Tj = +7^{\circ}C$	4.82	3.13
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.12	5.66
Cdh Tj = +12 °C	0.98	0.98





Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2449 kWh	3452 kWh

### **Average Climate**

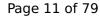
Sound power level outdoor

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

60 dB(A)

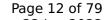
60 dB(A)

EN 14825		
	Low temperature	Medium temperature





This information was gener	aced by the Hi KETMA	NK database on 22 Juli 2022
$\eta_{s}$	191 %	134 %
Prated	10 kW	10 kW
SCOP	4.86	3.43
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = $-7^{\circ}$ C	3.31	2.21
Cdh Tj = -7 °C	0.99	1
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
COP Tj = +2°C	4.56	3.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11
		-





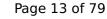
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4251 kWh	6024 kWh

### Domestic Hot Water (DHW)

### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

### Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



### Model: PUZ-WM112VAA(-BS) + EHPX-M\*D

Configure model		
Model name PUZ-WM112VAA(-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	11.2 kW	10 kW	
El input	2.38 kW	3.33 kW	
СОР	4.7	3	

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	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	215 %	152 %
Prated	10 kW	10 kW
SCOP	5.46	3.87
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
$COP Tj = +2^{\circ}C$	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
$COP Tj = +7^{\circ}C$	4.82	3.13
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.12	5.66
Cdh Tj = +12 °C	0.98	0.98





Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2449 kWh	3452 kWh

### **Average Climate**

## Low temperature Medium temperature Sound power level indoor 40 dB(A) 40 dB(A) Sound power level outdoor 60 dB(A) 60 dB(A)

EN 14825		
	Low temperature	Medium temperature





	· · · · · · · · · · · · · · · · · · ·	NK database on 22 juli 202.
$\eta_s$	191 %	134 %
Prated	10 kW	10 kW
SCOP	4.86	3.43
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	1
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.56	3.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11
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### This information was generated by the HP KEYMARK database on 22 Jun 2022

WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4251 kWh	6024 kWh



### Model: PUZ-WM112VAA(-BS) + EHPX-\*M\*D

Configure model		
Model name	PUZ-WM112VAA(-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	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

EN 14511-4	
Shutting off the heat transfer medium flow	naccod
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	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	215 %	152 %
Prated	10 kW	10 kW
SCOP	5.46	3.87
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	4.82	3.13
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.12	5.66
Cdh Tj = +12 °C	0.98	0.98
	1	





Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2449 kWh	3452 kWh

### Average Climate

# EN 12102-1 Low temperature Medium temperature Sound power level indoor 40 dB(A) 40 dB(A) Sound power level outdoor 60 dB(A) 60 dB(A)

EN 14825		
	Low temperature	Medium temperature





	· · · · · · · · · · · · · · · · · · ·	NK database on 22 juli 202.
$\eta_s$	191 %	134 %
Prated	10 kW	10 kW
SCOP	4.86	3.43
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	1
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.56	3.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11
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### This information was generated by the HP KEYMARK database on 22 Jun 2022

WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4251 kWh	6024 kWh



### Model: PUZ-WM112VAA(-BS) + ERPT20X-M\*D

Configure model		
Model name	PUZ-WM112VAA(-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	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

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	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	154 %
Prated	10 kW	10 kW
SCOP	5.58	3.93
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
$COP Tj = +7^{\circ}C$	4.76	3.11
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.12	5.66
Cdh Tj = +12 °C	0.98	0.98





Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2396 kWh	3396 kWh

### **Average Climate**

Sound power level outdoor

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

60 dB(A)

60 dB(A)

EN 14825		
	Low temperature	Medium temperature





ring information has gener	acea by the in Reinn	int database on 22 jun 202
$\eta_s$	195 %	136 %
Prated	10 kW	10 kW
SCOP	4.95	3.48
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.31	2.21
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.7 kW	5.4 kW
COP Tj = +2°C	4.61	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.9 kW	5.2 kW
COP Tj = +7°C	6.68	4.61
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11





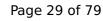
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WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4173 kWh	5932 kWh

### Domestic Hot Water (DHW)

### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

### Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



### Model: PUZ-WM112VAA(-BS) + ERPT20X-\*M\*D

Configure model		
Model name	PUZ-WM112VAA(-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	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

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	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	154 %
Prated	10 kW	10 kW
SCOP	5.58	3.93
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = $+7^{\circ}$ C	6.4 kW	6.4 kW
$COP Tj = +7^{\circ}C$	4.76	3.11
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.12	5.66
Cdh Tj = +12 °C	0.98	0.98



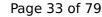


Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2396 kWh	3396 kWh

### **Average Climate**

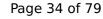
## EN 12102-1 Low temperature Medium temperature Sound power level indoor 40 dB(A) 40 dB(A) Sound power level outdoor 60 dB(A) 60 dB(A)

EN 14825		
	Low temperature	Medium temperature





ring information has gener	acea by the in Reinn	int database on 22 jun 202
$\eta_s$	195 %	136 %
Prated	10 kW	10 kW
SCOP	4.95	3.48
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.31	2.21
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.7 kW	5.4 kW
COP Tj = +2°C	4.61	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.9 kW	5.2 kW
COP Tj = +7°C	6.68	4.61
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11





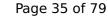
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4173 kWh	5932 kWh

### Domestic Hot Water (DHW)

### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

### Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



### **Model: PUZ-WM112VAA(-BS)**

Configure model		
Model name	PUZ-WM112VAA(-BS)	
Application	Heating (medium temp)	
Units	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	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

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	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	154 %
Prated	10 kW	10 kW
SCOP	5.58	3.93
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	4.76	3.11
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.12	5.66
Cdh Tj = +12 °C	0.98	0.98





Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2396 kWh	3396 kWh

# Average Climate

Sound power level outdoor

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

60 dB(A)

60 dB(A)

EN 14825		
	Low temperature	Medium temperature





This information was gener	acca by the in Reinn	in in database on 22 jan 202
$\eta_{S}$	195 %	136 %
Prated	10 kW	10 kW
SCOP	4.95	3.48
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.31	2.21
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.7 kW	5.4 kW
COP Tj = +2°C	4.61	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.9 kW	5.2 kW
COP Tj = +7°C	6.68	4.61
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11



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#### This information was generated by the HP KEYMARK database on 22 Jun 2022

WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4173 kWh	5932 kWh

# Model: PUZ-WM112YAA(-BS) + EHPT20X-M\*D

Configure model		
Model name PUZ-WM112YAA(-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	3x400V 50Hz	

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

EN 14511-4	
Chutting off the heat transfer medium flow	nassad
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	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	213 %	150 %
Prated	10 kW	10 kW
SCOP	5.41	3.84
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = $+7^{\circ}$ C	6.4 kW	6.4 kW
COP Tj = +7°C	4.85	3.15
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.22	5.67
Cdh Tj = +12 °C	0.98	0.98





10 kW	10 kW
3.3	1.81
10 kW	10 kW
3.3	1.81
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
0 W	0 W
Electricity	Electricity
0 kW	0 kW
2471 kWh	3483 kWh
	3.3  10 kW  3.3  60 °C  22 W  22 W  22 W  0 W  Electricity  0 kW

# Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	60 dB(A)	60 dB(A)	

EN 14825		
	Low temperature	Medium temperature





This information was genera	<u> </u>	
$\eta_{s}$	189 %	133 %
Prated	10 kW	10 kW
SCOP	4.81	3.41
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.55	3.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11





WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4293 kWh	6063 kWh

# Domestic Hot Water (DHW)

#### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

# Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

# Model: PUZ-WM112YAA(-BS) + EHPT20X-\*M\*D

Configure model		
Model name   PUZ-WM112YAA(-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	3x400V 50Hz	

# Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	11.2 kW	10 kW	
El input	2.38 kW	3.33 kW	
СОР	4.7	3	

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	60 dB(A)	60 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	213 %	150 %
Prated	10 kW	10 kW
SCOP	5.41	3.84
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
$COPTj = +2^{\circ}C$	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
$COP Tj = +7^{\circ}C$	4.85	3.15
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.22	5.67
Cdh Tj = +12 °C	0.98	0.98





10 kW	10 kW
3.3	1.81
10 kW	10 kW
3.3	1.81
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
0 W	0 W
Electricity	Electricity
0 kW	0 kW
2471 kWh	3483 kWh
	3.3  10 kW  3.3  60 °C  22 W  22 W  22 W  0 W  Electricity  0 kW

# Average Climate

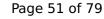
# EN 12102-1 Low temperature Medium temperature Sound power level indoor 40 dB(A) 40 dB(A) Sound power level outdoor 60 dB(A) 60 dB(A)

EN 14825		
	Low temperature	Medium temperature





This information was generated by the HP KEYMARK database on 22 Jun 202			
$\eta_{S}$	189 %	133 %	
Prated	10 kW	10 kW	
SCOP	4.81	3.41	
Tbiv	-7 °C	-7 °C	
TOL	-25 °C	-25 °C	
Pdh Tj = $-7$ °C	8.8 kW	8.8 kW	
COP Tj = $-7$ °C	3.31	2.21	
Cdh Tj = -7 °C	0.99	0.99	
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW	
$COP Tj = +2^{\circ}C$	4.55	3.27	
Cdh Tj = +2 °C	0.99	0.99	
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW	
$COP Tj = +7^{\circ}C$	6.68	4.61	
Cdh Tj = $+7$ °C	0.98	0.98	
Pdh Tj = 12°C	4.6 kW	4.7 kW	
COP Tj = 12°C	9.1	6.35	
Cdh Tj = +12 °C	0.97	0.97	
Pdh Tj = Tbiv	8.8 kW	8.8 kW	
COP Tj = Tbiv	3.31	2.21	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11	





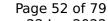
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4293 kWh	6063 kWh

# Domestic Hot Water (DHW)

#### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

# Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



# Model: PUZ-WM112YAA(-BS) + EHPX-M\*D

Configure model		
Model name PUZ-WM112YAA(-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	Power supply 3x400V 50Hz	

# Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	11.2 kW	10 kW	
El input	2.38 kW	3.33 kW	
СОР	4.7	3	

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	60 dB(A)	60 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	213 %	150 %
Prated	10 kW	10 kW
SCOP	5.41	3.84
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	4.85	3.15
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.22	5.67
Cdh Tj = +12 °C	0.98	0.98





10 kW	10 kW
3.3	1.81
10 kW	10 kW
3.3	1.81
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
0 W	0 W
Electricity	Electricity
0 kW	0 kW
2471 kWh	3483 kWh
	3.3  10 kW  3.3  60 °C  22 W  22 W  22 W  0 W  Electricity  0 kW

# Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature





This information was generated by the HP KEYMARK database on 22 jun 2022		
$\eta_s$	189 %	133 %
Prated	10 kW	10 kW
SCOP	4.81	3.41
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.31	2.21
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.7 kW	5.4 kW
COP Tj = +2°C	4.55	3.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11



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#### This information was generated by the HP KEYMARK database on 22 Jun 2022

WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4293 kWh	6063 kWh



# Model: PUZ-WM112YAA(-BS) + EHPX-\*M\*D

Configure model		
Model name PUZ-WM112YAA(-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	3x400V 50Hz	

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

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	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	213 %	150 %
Prated	10 kW	10 kW
SCOP	5.41	3.84
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	4.85	3.15
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.22	5.67
Cdh Tj = +12 °C	0.98	0.98





Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2471 kWh	3483 kWh

# Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	60 dB(A)	60 dB(A)	

EN 14825		
	Low temperature	Medium temperature





This information was genera	<u> </u>	
$\eta_{s}$	189 %	133 %
Prated	10 kW	10 kW
SCOP	4.81	3.41
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.55	3.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11



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#### This information was generated by the HP KEYMARK database on 22 Jun 2022

WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4293 kWh	6063 kWh



# Model: PUZ-WM112YAA(-BS) + ERPT20X-M\*D

Configure model		
Model name	PUZ-WM112YAA(-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 3x400V 50Hz	

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	11.2 kW	10 kW	
El input	2.38 kW	3.33 kW	
СОР	4.7	3	

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	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	154 %
Prated	10 kW	10 kW
SCOP	5.58	3.93
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	4.78	3.12
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.2	5.67
Cdh Tj = +12 °C	0.98	0.98





	<u> </u>	
Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
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	0 kW	0 kW
Annual energy consumption Qhe	2392 kWh	3401 kWh

# **Average Climate**

# EN 12102-1 Low temperature Medium temperature Sound power level indoor 40 dB(A) 40 dB(A) Sound power level outdoor 60 dB(A) 60 dB(A)

EN 14825		
	Low temperature	Medium temperature





	<u>,                                      </u>	KK database on 22 jun 202
$\eta_{s}$	195 %	136 %
Prated	10 kW	10 kW
SCOP	4.95	3.48
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.64	3.32
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11





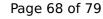
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.22 kW	1.22 kW
Annual energy consumption Qhe	4171 kWh	5936 kWh

# Domestic Hot Water (DHW)

#### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

# Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

# Model: PUZ-WM112YAA(-BS) + ERPT20X-\*M\*D

Configure model		
Model name	PUZ-WM112YAA(-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	3x400V 50Hz	

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.2 kW	10 kW
El input	2.38 kW	3.33 kW
СОР	4.7	3

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	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	154 %
Prated	10 kW	10 kW
SCOP	5.58	3.93
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	4.78	3.12
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.2	5.67
Cdh Tj = +12 °C	0.98	0.98



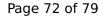


Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2392 kWh	3401 kWh

# **Average Climate**

# EN 12102-1 Low temperature Medium temperature Sound power level indoor 40 dB(A) 40 dB(A) Sound power level outdoor 60 dB(A) 60 dB(A)

EN 14825		
	Low temperature	Medium temperature
	*	•





This information was general	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
$\eta_{s}$	195 %	136 %
Prated	10 kW	10 kW
SCOP	4.95	3.48
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.64	3.32
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11



5936 kWh



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 1.22 kW 1.22 kW

4171 kWh

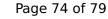
#### Domestic Hot Water (DHW)

Annual energy consumption Qhe

#### Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	161 %	
СОР	3.8	
Heating up time	01:43 h:min	
Standby power input	32 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

# Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	148 %	
СОР	3.49	
Heating up time	02:06 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



# **Model: PUZ-WM112YAA(-BS)**

Configure model		
Model name	PUZ-WM112YAA(-BS)	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

# Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	11.2 kW	10 kW	
El input	2.38 kW	3.33 kW	
СОР	4.7	3	

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	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	220 %	154 %
Prated	10 kW	10 kW
SCOP	5.58	3.93
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10 kW
COP Tj = +2°C	3.3	1.81
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	4.78	3.12
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.7 kW	4.4 kW
COP Tj = 12°C	7.2	5.67
Cdh Tj = +12 °C	0.98	0.98





	<u> </u>	
Pdh Tj = Tbiv	10 kW	10 kW
COP Tj = Tbiv	3.3	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	1.81
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	0 kW	0 kW
Annual energy consumption Qhe	2392 kWh	3401 kWh

# Average Climate

# EN 12102-1 Low temperature Medium temperature Sound power level indoor 40 dB(A) 40 dB(A) Sound power level outdoor 60 dB(A) 60 dB(A)

EN 14825		
	Low temperature	Medium temperature
	*	•





This information was genera	· · · · · · · · · · · · · · · · · · ·	
$\eta_{s}$	195 %	136 %
Prated	10 kW	10 kW
SCOP	4.95	3.48
Tbiv	-7 °C	-7 °C
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Pdh Tj = $-7^{\circ}$ C	8.8 kW	8.8 kW
$COP Tj = -7^{\circ}C$	3.31	2.21
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	5.7 kW	5.4 kW
$COPTj = +2^{\circ}C$	4.64	3.32
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	4.9 kW	5.2 kW
$COPTj = +7^{\circ}C$	6.68	4.61
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.6 kW	4.7 kW
COP Tj = 12°C	9.1	6.35
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.31	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.78 kW	8.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.11



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#### This information was generated by the HP KEYMARK database on 22 Jun 2022

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	1.22 kW	1.22 kW
Annual energy consumption Qhe	4171 kWh	5936 kWh