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Summary of	Ecodan Zubadan 8/11/14	Reg. No.	037-0059-20
Certificate Holder			
Name	Mitsubishi Electric Air Conditioning Systems Europe LTD		
Address	Nettlehill Road, Houston Industrial Estate	Zip	EH54 5EQ
City	Livingston	Country	United Kingdom
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)		
Subtype title	Ecodan Zubadan 8/11/14		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	5.5 kg		
Certification Date	09.04.2020		
Testing basis	HP Keymark scheme rules rev. no. 7		

# Model: PUAZ-SHW80VHA(-BS) + EHST20C-M\*C

Configure model	
Model name	PUHZ-SHW80VHA(-BS) + EHST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	171 %	131 %
Prated	9.6 kW	9 kW
SCOP	4.36	3.35
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.26	3.22
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

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Pdh Tj = 12°C	7.4 kW	7.1 kW
COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4553 kWh	5548 kWh

## Domestic Hot Water (DHW)

### Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW80VHA(-BS) + EHST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW80VHA(-BS) + EHST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	171 %	131 %
Prated	9.6 kW	9 kW
SCOP	4.36	3.35
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.26	3.22
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

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Pdh Tj = 12°C	7.4 kW	7.1 kW
COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4553 kWh	5548 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW80VHA(-BS) + ERST20C-M\*C

Configure model	
Model name	PUHZ-SHW80VHA(-BS) + ERST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	174 %	133 %
Prated	9.6 kW	9 kW
SCOP	4.44	3.4
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.31	3.25
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

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Pdh Tj = 12°C	7.4 kW	7.1 kW
COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4472 kWh	5467 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW80VHA(-BS) + ERST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW80VHA(-BS) + ERST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	174 %	133 %
Prated	9.6 kW	9 kW
SCOP	4.44	3.4
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.31	3.25
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

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COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4472 kWh	5467 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW80VHA(-BS) + EHSC-M\*C

## Configure model

Model name	PUHZ-SHW80VHA(-BS) + EHSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	171 %	131 %
Prated	9.6 kW	9 kW
SCOP	4.36	3.35
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.26	3.22
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

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Pdh Tj = 12°C	7.4 kW	7.1 kW
COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4553 kWh	5548 kWh

# Model: PUAZ-SHW80VHA(-BS) + EHSC-\*M\*C

## Configure model

Model name	PUHZ-SHW80VHA(-BS) + EHSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	171 %	131 %
Prated	9.6 kW	9 kW
SCOP	4.36	3.35
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.26	3.22
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

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Pdh Tj = 12°C	7.4 kW	7.1 kW
COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4553 kWh	5548 kWh

# Model: PUAZ-SHW80VHA(-BS) + ERSC-M\*C

## Configure model

Model name	PUHZ-SHW80VHA(-BS) + ERSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

### EN 14511-4

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

## Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	174 %	133 %
Prated	9.6 kW	9 kW
SCOP	4.44	3.4
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.31	3.25
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.4 kW	7.1 kW
COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4472 kWh	5467 kWh

# Model: PUAZ-SHW80VHA(-BS) + ERSC-\*M\*C

## Configure model

Model name	PUHZ-SHW80VHA(-BS) + ERSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.83 kW
COP	4.65	2.82

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	174 %	133 %
Prated	9.6 kW	9 kW
SCOP	4.44	3.4
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	2.91	2.04
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.31	3.25
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.4 kW	4.1 kW
COP Tj = +7°C	5.65	4.59
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.4 kW	7.1 kW
COP Tj = 12°C	7.59	6.72
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	2.91	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.01 kW	7.59 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	1.97
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	1.59 kW	1.41 kW
Annual energy consumption Qhe	4472 kWh	5467 kWh

# Model: PUAZ-SHW112VHA(-BS) + EHST20C-M\*C

Configure model	
Model name	PUHZ-SHW112VHA(-BS) + EHST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
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	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6771 kWh	7998 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112VHA(-BS) + EHST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW112VHA(-BS) + EHST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
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	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6771 kWh	7998 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112VHA(-BS) + ERST20C-M\*C

## Configure model

Model name	PUHZ-SHW112VHA(-BS) + ERST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6691 kWh	7917 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112VHA(-BS) + ERST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW112VHA(-BS) + ERST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
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	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6691 kWh	7917 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112VHA(-BS) + EHSC-M\*C

## Configure model

Model name	PUHZ-SHW112VHA(-BS) + EHSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6771 kWh	7998 kWh



# Model: PUAZ-SHW112VHA(-BS) + EHSC-\*M\*C

## Configure model

Model name	PUHZ-SHW112VHA(-BS) + EHSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6771 kWh	7998 kWh

# Model: PUAZ-SHW112VHA(-BS) + ERSC-M\*C

## Configure model

Model name	PUHZ-SHW112VHA(-BS) + ERSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6691 kWh	7917 kWh

# Model: PUAZ-SHW112VHA(-BS) + ERSC-\*M\*C

## Configure model

Model name	PUHZ-SHW112VHA(-BS) + ERSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.68	4.61
Cdh Tj = +7 °C	0.98	0.98



This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6691 kWh	7917 kWh

# Model: PUAZ-SHW112YHA(-BS) + EHST20C-M\*C

Configure model	
Model name	PUHZ-SHW112YHA(-BS) + EHST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.65
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6770 kWh	7992 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112YHA(-BS) + EHST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW112YHA(-BS) + EHST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.65
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6770 kWh	7992 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112YHA(-BS) + ERST20C-M\*C

Configure model	
Model name	PUHZ-SHW112YHA(-BS) + ERST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.63
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6689 kWh	7918 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112YHA(-BS) + ERST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW112YHA(-BS) + ERST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.63
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6689 kWh	7918 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW112YHA(-BS) + EHSC-M\*C

## Configure model

Model name	PUHZ-SHW112YHA(-BS) + EHSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.65
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6770 kWh	7992 kWh

# Model: PUAZ-SHW112YHA(-BS) + EHSC-\*M\*C

## Configure model

Model name	PUHZ-SHW112YHA(-BS) + EHSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	167 %	128 %
Prated	13.9 kW	12.7 kW
SCOP	4.24	3.28
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.65
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6770 kWh	7992 kWh

# Model: PUAZ-SHW112YHA(-BS) + ERSC-M\*C

## Configure model

Model name	PUHZ-SHW112YHA(-BS) + ERSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.63
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6689 kWh	7918 kWh

# Model: PUAZ-SHW112YHA(-BS) + ERSC-\*M\*C

## Configure model

Model name	PUHZ-SHW112YHA(-BS) + ERSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.19 kW
COP	4.46	2.67

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	169 %	130 %
Prated	13.9 kW	12.7 kW
SCOP	4.29	3.31
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	2.85	1.96
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.04	3.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.8 kW	4.4 kW
COP Tj = +7°C	5.72	4.63
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.51	6.66
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	2.85	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.6 kW	10.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.9
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	2.3 kW	2 kW
Annual energy consumption Qhe	6689 kWh	7918 kWh

# Model: PUAZ-SHW140YHA(-BS) + EHST20C-M\*C

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + EHST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW140YHA(-BS) + EHST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + EHST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW140YHA(-BS) + ERST20C-M\*C

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + ERST20C-M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	165 %	128 %
Prated	17 kW	15.8 kW
SCOP	4.21	3.27
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.03	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW140YHA(-BS) + ERST20C-\*M\*C

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + ERST20C-*M*C
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	165 %	128 %
Prated	17 kW	15.8 kW
SCOP	4.21	3.27
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.03	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.48
Heating up time	01:46 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 l

# Model: PUAZ-SHW140YHA(-BS) + EHSC-M\*C

## Configure model

Model name	PUHZ-SHW140YHA(-BS) + EHSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh



# Model: PUAZ-SHW140YHA(-BS) + EHSC-\*M\*C

## Configure model

Model name	PUHZ-SHW140YHA(-BS) + EHSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

# Model: PUAZ-SHW140YHA(-BS) + ERSC-M\*C

## Configure model

Model name	PUHZ-SHW140YHA(-BS) + ERSC-M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	165 %	128 %
Prated	17 kW	15.8 kW
SCOP	4.21	3.27
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.03	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh

# Model: PUAZ-SHW140YHA(-BS) + ERSC-\*M\*C

## Configure model

Model name	PUHZ-SHW140YHA(-BS) + ERSC-*M*C
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	165 %	128 %
Prated	17 kW	15.8 kW
SCOP	4.21	3.27
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.03	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.99



This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh

# Model: PUAZ-SHW140YHA(-BS) + EHST20C-M\*D

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + EHST20C-M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	138 %
COP	3.25
Heating up time	01:32 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

# Model: PUAZ-SHW140YHA(-BS) + EHST20C-\*M\*D

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + EHST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

## Domestic Hot Water (DHW)

### Average Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	138 %
COP	3.25
Heating up time	01:32 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

# Model: PUAZ-SHW140YHA(-BS) + ERST20C-\*M\*D

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + ERST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	165 %	128 %
Prated	17 kW	15.8 kW
SCOP	4.21	3.27
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.03	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	138 %
COP	3.25
Heating up time	01:32 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

# Model: PUAZ-SHW140YHA(-BS) + EHSC-M\*D

Configure model	
Model name	PUHZ-SHW140YHA(-BS) + EHSC-M*D
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh



# Model: PUAZ-SHW140YHA(-BS) + EHSC-\*M\*D

## Configure model

Model name	PUHZ-SHW140YHA(-BS) + EHSC-*M*D
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	No
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	163 %	127 %
Prated	17 kW	15.8 kW
SCOP	4.16	3.25
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.01	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8446 kWh	10054 kWh

# Model: PUAZ-SHW140YHA(-BS) + ERSC-M\*D

## Configure model

Model name	PUHZ-SHW140YHA(-BS) + ERSC-M*D
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	165 %	128 %
Prated	17 kW	15.8 kW
SCOP	4.21	3.27
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	15 kW	14 kW
COP Tj = -7°C	2.59	1.84
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.03	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.98

This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = 12°C	7.3 kW	7 kW
COP Tj = 12°C	7.47	6.62
Cdh Tj = +12 °C	0.99	0.98
Pdh Tj = Tbiv	15 kW	14 kW
COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.1 kW	13.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.42	1.83
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	2.9 kW	1.9 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh

# Model: PUAZ-SHW140YHA(-BS) + ERSC-\*M\*D

## Configure model

Model name	PUHZ-SHW140YHA(-BS) + ERSC-*M*D
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	3.32 kW	5.62 kW
COP	4.22	2.49

### EN 14511-4

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

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

### EN 14825

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Pdh Tj = +2°C	9.1 kW	8.5 kW
COP Tj = +2°C	4.03	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.9 kW	5.5 kW
COP Tj = +7°C	5.71	4.67
Cdh Tj = +7 °C	0.99	0.98



This information was generated by the HP KEYMARK database on 18 Mar 2022

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.9 kW	1.9 kW
Annual energy consumption Qhe	8344 kWh	9973 kWh