Subtype Ecodan Zubadan 8/11 AA	
Certificate Holder	Mitsubishi Electric Air Conditioning Systems Europe LTD
Address	Nettlehill Road, Houston Industrial Estate
ZIP	EH54 5EQ
City	Livingston
Country	GB
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)
Subtype title	Ecodan Zubadan 8/11 AA
Registration number	037-0058-20
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	4.6 kg
Certification Date	09.04.2020
Testing basis	HP Keymark scheme rules rev. no. 7
Testing laboratory	SZU Brno, CZ

Model PUHZ-SHW80VAA(-BS) + EHST20C-M*D

Model name	PUHZ-SHW80VAA(-BS) + EHST20C-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	133 %
Prated	9.6 kW	9 kW

SCOP	4.31	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	3.15	2.13
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.05	3.29
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.66
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4602 kWh	5465 kWh

Model PUHZ-SHW80VAA(-BS) + EHST20C-*M*D

Model name	PUHZ-SHW80VAA(-BS) + EHST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	133 %
Prated	9.6 kW	9 kW

SCOP	4.31	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	3.15	2.13
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.05	3.29
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.66
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4602 kWh	5465 kWh

Model PUHZ-SHW80VAA(-BS) + ERST20C-*M*D	
Model name	PUHZ-SHW80VAA(-BS) + ERST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	172 %	135 %

Prated	9.6 kW	9 kW
SCOP	4.38	3.45
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.08	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.66
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4531 kWh	5393 kWh

Model PUHZ-SHW80VAA(-BS) + EHSC-M*D	
Model name	PUHZ-SHW80VAA(-BS) + EHSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	133 %
Prated	9.6 kW	9 kW
SCOP	4.31	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	3.15	2.13
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.05	3.29
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	5.4 kW

COP Tj = +7°C	5.62	4.66
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4602 kWh	5465 kWh

Model PUHZ-SHW80VAA(-BS) + EHSC-*M*D	
Model name	PUHZ-SHW80VAA(-BS) + EHSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	169 %	133 %
Prated	9.6 kW	9 kW
SCOP	4.31	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	3.15	2.13
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.05	3.29
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	5.4 kW

COP Tj = +7°C	5.62	4.66
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4602 kWh	5465 kWh

Model PUHZ-SHW80VAA(-BS) + ERSC-M*D	
Model name	PUHZ-SHW80VAA(-BS) + ERSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	172 %	135 %
Prated	9.6 kW	9 kW
SCOP	4.38	3.45
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.08	3.31
Cdh Tj = +2 °C	0.99	0.99

Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.66
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4531 kWh	5393 kWh

Model PUHZ-SHW80VAA(-BS) + ERSC-*M*D	
Model name	PUHZ-SHW80VAA(-BS) + ERSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	172 %	135 %
Prated	9.6 kW	9 kW
SCOP	4.38	3.45
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.08	3.31
Cdh Tj = +2 °C	0.99	0.99

Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.66
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4531 kWh	5393 kWh

Model PUHZ-SHW112VAA(-BS) + EHST20C-M*D	
Model name	PUHZ-SHW112VAA(-BS) + EHST20C-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	171 %	135 %
Prated	13.9 kW	12.7 kW

SCOP	4.34	3.46
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.08	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6618 kWh	7588 kWh

Model PUHZ-SHW112VAA(-BS) + EHST20C-*M*D	
Model name	PUHZ-SHW112VAA(-BS) + EHST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

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

EN 14511-2 | Heating	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate	Low temperature	Medium temperature
ηs	171 %	135 %
Prated	13.9 kW	12.7 kW

SCOP	4.34	3.46
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.08	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6618 kWh	7588 kWh

Model PUHZ-SHW112VAA(-BS) + ERST20C-*M*D	
Model name	PUHZ-SHW112VAA(-BS) + ERST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	173 %	137 %

Prated	13.9 kW	12.7 kW
SCOP	4.39	3.5
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.11	3.34
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6539 kWh	7498 kWh

Model PUHZ-SHW112VAA(-BS) + EHSC-M*D	
Model name	PUHZ-SHW112VAA(-BS) + EHSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate

	Low temperature	Medium temperature
ηs	171 %	135 %
Prated	13.9 kW	12.7 kW
SCOP	4.34	3.46
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.08	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW

COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6618 kWh	7588 kWh

Model PUHZ-SHW112VAA(-BS) + EHSC-*M*D	
Model name	PUHZ-SHW112VAA(-BS) + EHSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate

	Low temperature	Medium temperature
ηs	171 %	135 %
Prated	13.9 kW	12.7 kW
SCOP	4.34	3.46
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.08	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW

COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6618 kWh	7588 kWh

Model PUHZ-SHW112VAA(-BS) + ERSC-M*D	
Model name	PUHZ-SHW112VAA(-BS) + ERSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	173 %	137 %
Prated	13.9 kW	12.7 kW
SCOP	4.39	3.5
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.11	3.34
Cdh Tj = +2 °C	0.99	0.99

Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6539 kWh	7498 kWh

Model PUHZ-SHW112VAA(-BS) + ERSC-*M*D	
Model name	PUHZ-SHW112VAA(-BS) + ERSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	173 %	137 %
Prated	13.9 kW	12.7 kW
SCOP	4.39	3.5
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.11	3.34
Cdh Tj = +2 °C	0.99	0.99

Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6539 kWh	7498 kWh

Model PUHZ-SHW80YAA(-BS) + EHST20C-M*D

Model name	PUHZ-SHW80YAA(-BS) + EHST20C-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	167 %	132 %
Prated	9.6 kW	9 kW

SCOP	4.26	3.36
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.02	3.27
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.64
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4659 kWh	5527 kWh

Model PUHZ-SHW80YAA(-BS) + EHST20C-*M*D

Model name	PUHZ-SHW80YAA(-BS) + EHST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	167 %	132 %
Prated	9.6 kW	9 kW

SCOP	4.26	3.36
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.02	3.27
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.64
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4659 kWh	5527 kWh

Model PUHZ-SHW80YAA(-BS) + ERST20C-*M*D	
Model name	PUHZ-SHW80YAA(-BS) + ERST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	172 %	134 %

Prated	9.6 kW	9 kW
SCOP	4.37	3.44
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.09	3.31
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.64
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4539 kWh	5413 kWh

Model PUHZ-SHW80YAA(-BS) + EHSC-M*D	
Model name	PUHZ-SHW80YAA(-BS) + EHSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	167 %	132 %
Prated	9.6 kW	9 kW
SCOP	4.26	3.36
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.02	3.27
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5 kW	5.4 kW

COP Tj = +7°C	5.62	4.64
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4659 kWh	5527 kWh

Model PUHZ-SHW80YAA(-BS) + EHSC-*M*D	
Model name	PUHZ-SHW80YAA(-BS) + EHSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	167 %	132 %
Prated	9.6 kW	9 kW
SCOP	4.26	3.36
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.02	3.27
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5 kW	5.4 kW

COP Tj = +7°C	5.62	4.64
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4659 kWh	5527 kWh

Model PUHZ-SHW80YAA(-BS) + ERSC-M*D	
Model name	PUHZ-SHW80YAA(-BS) + ERSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	172 %	134 %
Prated	9.6 kW	9 kW
SCOP	4.37	3.44
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.09	3.31
Cdh Tj = +2 °C	0.98	0.98

Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.64
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4539 kWh	5413 kWh

Model PUHZ-SHW80YAA(-BS) + ERSC-*M*D	
Model name	PUHZ-SHW80YAA(-BS) + ERSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	8 kW	8 kW
El input	1.72 kW	2.96 kW
COP	4.65	2.7

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	172 %	134 %
Prated	9.6 kW	9 kW
SCOP	4.37	3.44
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	8.5 kW	8 kW
COP Tj = -7°C	3.15	2.13
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	5.2 kW	4.9 kW
COP Tj = +2°C	4.09	3.31
Cdh Tj = +2 °C	0.98	0.98

Pdh Tj = +7°C	5 kW	5.4 kW
COP Tj = +7°C	5.62	4.64
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.53	5.92
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	8.5 kW	8 kW
COP Tj = Tbiv	3.15	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.36 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.05
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	1.24 kW	1.07 kW
Annual energy consumption Qhe	4539 kWh	5413 kWh

Model PUHZ-SHW112YAA(-BS) + EHST20C-M*D

Model name	PUHZ-SHW112YAA(-BS) + EHST20C-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	135 %
Prated	13.9 kW	12.7 kW

SCOP	4.31	3.44
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.06	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6667 kWh	7621 kWh

Model PUHZ-SHW112YAA(-BS) + EHST20C-*M*D	
Model name	PUHZ-SHW112YAA(-BS) + EHST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	169 %	135 %
Prated	13.9 kW	12.7 kW

SCOP	4.31	3.44
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.06	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6667 kWh	7621 kWh

Model PUHZ-SHW112YAA(-BS) + ERST20C-*M*D	
Model name	PUHZ-SHW112YAA(-BS) + ERST20C-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	
EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	145 %
COP	3.41
Heating up time	01:58 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 l

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	173 %	137 %

Prated	13.9 kW	12.7 kW
SCOP	4.39	3.49
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.12	3.33
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6538 kWh	7517 kWh

Model PUHZ-SHW112YAA(-BS) + EHSC-M*D	
Model name	PUHZ-SHW112YAA(-BS) + EHSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	135 %
Prated	13.9 kW	12.7 kW
SCOP	4.31	3.44
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.06	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW

COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6667 kWh	7621 kWh

Model PUHZ-SHW112YAA(-BS) + EHSC-*M*D	
Model name	PUHZ-SHW112YAA(-BS) + EHSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	135 %
Prated	13.9 kW	12.7 kW
SCOP	4.31	3.44
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.06	3.31
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5 kW	4.7 kW

COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6667 kWh	7621 kWh

Model PUHZ-SHW112YAA(-BS) + ERSC-M*D	
Model name	PUHZ-SHW112YAA(-BS) + ERSC-M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	173 %	137 %
Prated	13.9 kW	12.7 kW
SCOP	4.39	3.49
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.12	3.33
Cdh Tj = +2 °C	0.99	0.99

Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6538 kWh	7517 kWh

Model PUHZ-SHW112YAA(-BS) + ERSC-*M*D	
Model name	PUHZ-SHW112YAA(-BS) + ERSC-*M*D
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	11.2 kW	11.2 kW
El input	2.51 kW	4.13 kW
COP	4.46	2.71

EN 12102-1 | 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 | Average Climate		
	Low temperature	Medium temperature
ηs	173 %	137 %
Prated	13.9 kW	12.7 kW
SCOP	4.39	3.49
Tbiv	-7 °C	-7 °C
TOL	-28 °C	-28 °C
Pdh Tj = -7°C	12.3 kW	11.2 kW
COP Tj = -7°C	3.15	2.12
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	7.5 kW	6.8 kW
COP Tj = +2°C	4.12	3.33
Cdh Tj = +2 °C	0.99	0.99

Pdh Tj = +7°C	5 kW	4.7 kW
COP Tj = +7°C	5.56	4.79
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	5.6 kW	5.3 kW
COP Tj = 12°C	7.45	6.12
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12.3 kW	11.2 kW
COP Tj = Tbiv	3.15	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.8 kW	10.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.03
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	2.1 kW	1.8 kW
Annual energy consumption Qhe	6538 kWh	7517 kWh