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

#### **Login**

Summary of	Ecodan Power Inverter 12	Reg. No.	037-0051-20		
Certificate Holder	Certificate Holder				
Name	Mitsubishi Electric Air Conditioning Systems Europe LTD				
Address	Nettlehill Road, Houston Industrial Estate Zip EH54 5EQ				
City	Livingston	Country	United Kingdom		
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)				
Subtype title	Ecodan Power Inverter 12				
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				



## Model: PUHZ-SW120VHA(-BS) + EHSC-M\*C

Configure model		
Model name	PUHZ-SW120VHA(-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	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.99	0.99



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

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh



## Model: PUHZ-SW120VHA(-BS) + EHSC-\*M\*C

Configure model		
Model name	PUHZ-SW120VHA(-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	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.99	0.99



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

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh



## Model: PUHZ-SW120VHA(-BS) + EHST20C-M\*C

Configure model	
Model name	PUHZ-SW120VHA(-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

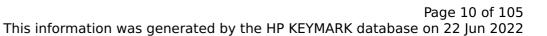
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

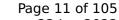
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.99	0.99





Pdh Tj = 12°C	7.7 kW	7.4 kW
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COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.33
Heating up time	01:14 h:min
Standby power input	58 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



## Model: PUHZ-SW120VHA(-BS) + EHST20C-\*M\*C

Configure model	
Model name	PUHZ-SW120VHA(-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

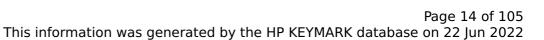
EN 14511-2			
Low temperature Medium temperature			
Heat output	16 kW	15.21 kW	
El input	3.9 kW	6.26 kW	
СОР	4.1	2.43	

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

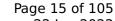
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.99	0.99



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	CEN heat pump
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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



## Model: PUHZ-SW120VHA(-BS) + ERSC-M\*C

Configure model		
Model name   PUHZ-SW120VHA(-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			

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.99	0.99



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

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh



## Model: PUHZ-SW120VHA(-BS) + ERSC-\*M\*C

Configure model		
Model name	PUHZ-SW120VHA(-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	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	0.99	0.99



Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
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Pdh Tj = Tbiv	11.4 kW	10.7 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh

## Model: PUHZ-SW120VHA(-BS) + ERST20C-M\*C

Configure model		
Model name	PUHZ-SW120VHA(-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	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

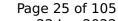
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
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Cdh Tj = +7 °C	0.99	0.99





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Pdh Tj = Tbiv	11.4 kW	10.7 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
РСК	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.33
Heating up time	01:14 h:min
Standby power input	58 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



## Model: PUHZ-SW120VHA(-BS) + ERST20C-\*M\*C

Configure model		
Model name PUHZ-SW120VHA(-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	16 kW	15.21 kW	
El input	3.9 kW	6.26 kW	
СОР	4.1	2.43	

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

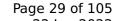
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
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Pdh Tj = -7°C	11.4 kW	10.7 kW
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Cdh Tj = +2 °C	0.99	0.99
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Cdh Tj = +7 °C	0.99	0.99





Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.33
Heating up time	01:14 h:min
Standby power input	58 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



## Model: PUHZ-SW120YHA(-BS) + EHSC-M\*C

Configure model		
Model name PUHZ-SW120YHA(-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		

### Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
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COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99



Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh



## Model: PUHZ-SW120YHA(-BS) + EHSC-\*M\*C

Configure model		
Model name PUHZ-SW120YHA(-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		

### Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2^{\circ}$ C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99



Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh



## Model: PUHZ-SW120YHA(-BS) + EHST20C-M\*C

Configure model		
Model name	PUHZ-SW120YHA(-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	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2^{\circ}$ C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99

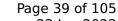


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#### This information was generated by the HP KEYMARK database on 22 Jun 2022

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	

## Model: PUHZ-SW120YHA(-BS) + EHST20C-\*M\*C

Configure model		
Model name PUHZ-SW120YHA(-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		

### Heating

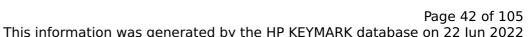
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16 kW	15.21 kW	
El input	3.9 kW	6.26 kW	
СОР	4.1	2.43	

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2^{\circ}$ C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99



Inis information was genera	ated by the HP KEYMA	RK database on 22 Jun 202
Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

2.4 kW

6458 kWh

2.1 kW

7788 kWh

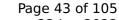
#### Domestic Hot Water (DHW)

CEN heat pump

### Average Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe





EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



## Model: PUHZ-SW120YHA(-BS) + ERSC-M\*C

Configure model			
Model name PUHZ-SW120YHA(-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		

### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	16 kW	15.21 kW		
El input	3.9 kW	6.26 kW		
СОР	4.1	2.43		

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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99



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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7708 kWh



## Model: PUHZ-SW120YHA(-BS) + ERSC-\*M\*C

Configure model			
Model name PUHZ-SW120YHA(-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		

### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	16 kW	15.21 kW		
El input	3.9 kW	6.26 kW		
СОР	4.1	2.43		

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99



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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7708 kWh



## Model: PUHZ-SW120YHA(-BS) + ERST20C-M\*C

Configure model		
Model name	PUHZ-SW120YHA(-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	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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

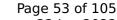
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99



Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7708 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.33
Heating up time	01:14 h:min
Standby power input	58 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	292 I



## Model: PUHZ-SW120YHA(-BS) + ERST20C-\*M\*C

Configure model		
Model name	PUHZ-SW120YHA(-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	16 kW	15.21 kW
El input	3.9 kW	6.26 kW
СОР	4.1	2.43

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	0.99	0.99



Inis information was genera	ted by the HP KEYMAI	RK database on 22 Jun 202
Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

2.4 kW

6377 kWh

2.1 kW

7708 kWh

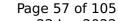
### Domestic Hot Water (DHW)

CEN heat pump

### Average Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe





EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.33	
Heating up time	01:14 h:min	
Standby power input	58 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	292 I	



## Model: PUHZ-SW120VHA(-BS) + EHST20C-M\*D

Configure model		
Model name PUHZ-SW120VHA(-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	1x230V 50Hz	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.2 kW
El input	3.9 kW	6.03 kW
СОР	4.1	2.52

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

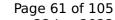
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = $-7$ °C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.9 kW	6.5 kW
$COP Tj = +2^{\circ}C$	4.17	3.11
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	1	0.99





Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	1	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	138 %	
СОР	3.25	
Heating up time	01:29 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	

## Model: PUHZ-SW120VHA(-BS) + EHST20C-\*M\*D

Configure model		
Model name PUHZ-SW120VHA(-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	1x230V 50Hz	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.2 kW
El input	3.9 kW	6.03 kW
СОР	4.1	2.52

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

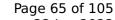
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.9 kW	6.5 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	1	0.99





Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	1	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	138 %	
СОР	3.25	
Heating up time	01:29 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



## Model: PUHZ-SW120VHA(-BS) + EHSC-M\*D

Configure model		
Model name	PUHZ-SW120VHA(-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	1x230V 50Hz	

### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	16 kW	15.2 kW		
El input	3.9 kW	6.03 kW		
СОР	4.1	2.52		

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

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.9 kW	6.5 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	1	0.99



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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	1	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh



## Model: PUHZ-SW120VHA(-BS) + EHSC-\*M\*D

Configure model		
Model name	PUHZ-SW120VHA(-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	1x230V 50Hz	

### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	16 kW	15.2 kW		
El input	3.9 kW	6.03 kW		
СОР	4.1	2.52		

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.9 kW	6.5 kW
COP Tj = +2°C	4.17	3.11
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	1	0.99



Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	1	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6448 kWh	7790 kWh



## Model: PUHZ-SW120VHA(-BS) + ERST20C-\*M\*D

Configure model			
Model name	PUHZ-SW120VHA(-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	1x230V 50Hz	

### Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16 kW	15.2 kW	
El input	3.9 kW	6.03 kW	
СОР	4.1	2.52	

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



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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

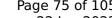
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	1	0.99





Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	1	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh

Domestic Hot Water (DHW)





# $$\operatorname{\textit{Page}}\xspace$ 75 of 105 This information was generated by the HP KEYMARK database on 22 Jun 2022

EN 16147	
Declared load profile	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	01:29 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



## Model: PUHZ-SW120VHA(-BS) + ERSC-M\*D

Configure model	
Model name	PUHZ-SW120VHA(-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 1x230V 50Hz		

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.2 kW
El input	3.9 kW	6.03 kW
СОР	4.1	2.52

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



	EN 12102-1	
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	1	0.99



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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	1	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh



## Model: PUHZ-SW120VHA(-BS) + ERSC-\*M\*D

Configure model	
Model name	PUHZ-SW120VHA(-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	1x230V 50Hz	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.2 kW
El input	3.9 kW	6.03 kW
СОР	4.1	2.52

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.19	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.55	4.47
Cdh Tj = +7 °C	1	0.99



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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.5
Cdh Tj = +12 °C	1	0.99
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	15 W	15 W
РТО	15 W	15 W
PSB	15 W	15 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7710 kWh



## Model: PUHZ-SW120YHA(-BS) + EHST20C-M\*D

Configure model		
Model name PUHZ-SW120YHA(-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

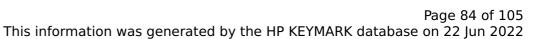
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.2 kW
El input	3.9 kW	6.03 kW
СОР	4.1	2.52

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

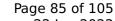
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	1	0.98





Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	1	0.98
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	01:29 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



## Model: PUHZ-SW120YHA(-BS) + EHST20C-\*M\*D

Configure model		
Model name PUHZ-SW120YHA(-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

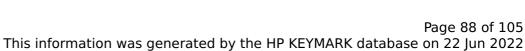
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16 kW	15.2 kW
El input	3.9 kW	6.03 kW
СОР	4.1	2.52

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

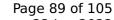
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	1	0.98



Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	1	0.98
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh

### Domestic Hot Water (DHW)

CEN heat pump KEYMARK





EN 16147	
Declared load profile	L
Efficiency ηDHW	138 %
СОР	3.25
Heating up time	01:29 h:min
Standby power input	35 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278



## Model: PUHZ-SW120YHA(-BS) + EHSC-M\*D

Configure model		
Model name	PUHZ-SW120YHA(-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	16 kW	15.2 kW		
El input	3.9 kW	6.03 kW		
СОР	4.1	2.52		

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	1	0.98



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D.H. T. 120C	7.71.00	7.4.134
Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	1	0.98
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh



## Model: PUHZ-SW120YHA(-BS) + EHSC-\*M\*D

Configure model		
Model name	PUHZ-SW120YHA(-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	16 kW	15.2 kW		
El input	3.9 kW	6.03 kW		
СОР	4.1	2.52		

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	125 %
Prated	12.9 kW	12.1 kW
SCOP	4.13	3.21
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	1	0.98



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D.H. T. 120C	7.71.00	7.4.134
Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	1	0.98
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6458 kWh	7788 kWh



## Model: PUHZ-SW120YHA(-BS) + ERST20C-\*M\*D

Configure model		
Model name PUHZ-SW120YHA(-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

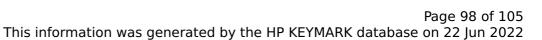
EN 14511-2		
Low temperature Medium temperature		
Heat output	16 kW	15.2 kW
El input	3.9 kW	6.03 kW
СОР	4.1	2.52

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

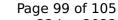
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = +7°C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	1	0.98



	CEN heat pump KEYMARK
5	

Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	1	0.98
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7708 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	138 %	
СОР	3.25	
Heating up time	01:29 h:min	
Standby power input	35 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	278	



## Model: PUHZ-SW120YHA(-BS) + ERSC-M\*D

Configure model		
Model name	PUHZ-SW120YHA(-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		

### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	16 kW	15.2 kW	
El input	3.9 kW	6.03 kW	
СОР	4.1	2.52	

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	164 %	127 %
Prated	12.9 kW	12.1 kW
SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = $+7^{\circ}$ C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	1	0.98



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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	1	0.98
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.14	1.74
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7708 kWh



## Model: PUHZ-SW120YHA(-BS) + ERSC-\*M\*D

Configure model		
Model name	PUHZ-SW120YHA(-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		

### Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	16 kW	15.2 kW		
El input	3.9 kW	6.03 kW		
СОР	4.1	2.52		

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
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SCOP	4.18	3.24
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.4 kW	10.7 kW
COP Tj = -7°C	2.37	1.83
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.5 kW
COP Tj = +2°C	4.18	3.13
Cdh Tj = +2 °C	1	0.99
Pdh Tj = $+7^{\circ}$ C	6.5 kW	6 kW
COP Tj = +7°C	5.63	4.5
Cdh Tj = +7 °C	1	0.98



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Pdh Tj = 12°C	7.7 kW	7.4 kW
COP Tj = 12°C	7.32	6.55
Cdh Tj = +12 °C	1	0.98
Pdh Tj = Tbiv	11.4 kW	10.7 kW
COP Tj = Tbiv	2.37	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.5 kW	10 kW
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WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.4 kW	2.1 kW
Annual energy consumption Qhe	6377 kWh	7708 kWh