

Subtype WPE-I 07.1 Plus H(W)

Certificate Holder	STIEBEL ELTRON GmbH & Co KG
Address	Dr. Stiebel Straße 33
ZIP	37603
City	Holzminden
Country	DE
Certification Body	RISE CERT
Subtype title	WPE-I 07.1 Plus H(W)
Registration number	012-C700369
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R290
Mass of Refrigerant	0.33 kg
Certification Date	20.03.2025
Testing basis	EN 14511:2022, EN 14825:2022, EN 16147:2017+A1:2022, EN 12102:2022
Testing laboratory	Universität Stuttgart, Prüfstelle HLK am Institut für Gebäudeenergetik, Thermotechnik und Energiespeicherung (IGTE), DE

**Model WPE-I 07.1 Plus H 400**

Model name	WPE-I 07.1 Plus H 400
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

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

**Brine/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	3.36 kW	6.41 kW
El input	0.73 kW	2.28 kW
COP	4.62	2.82

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	200 %	154 %
Prated	7.02 kW	6.41 kW
SCOP	5.21	4.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.21 kW	5.67 kW
COP Tj = -7°C	4.57	3.10
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.78 kW	3.45 kW
COP Tj = +2°C	5.34	4.09
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.43 kW	2.22 kW
COP Tj = +7°C	5.84	4.73
Cdh Tj = +7 °C	0.960	0.970

Pdh Tj = 12°C	1.72 kW	1.95 kW
COP Tj = 12°C	5.70	5.61
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3271 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	210 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.46	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.25 kW	3.88 kW
COP Tj = -7°C	5.33	3.82
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	2.59 kW	2.36 kW
COP Tj = +2°C	5.88	4.36
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	1.66 kW	1.95 kW
COP Tj = +7°C	5.93	5.63
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	1.70 kW	1.95 kW
COP Tj = 12°C	5.50	5.69
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3168 kWh	3828 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	203 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.28	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.02 kW	6.41 kW
COP Tj = +2°C	4.22	2.82
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.51 kW	4.12 kW
COP Tj = +7°C	5.22	3.65
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.01 kW	1.83 kW
COP Tj = 12°C	5.98	5.21
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1777 kWh	2083 kWh

**Water/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.19 kW	7.66 kW
El input	0.68 kW	2.26 kW
COP	6.16	3.39

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	264 %	197 %
Prated	8.52 kW	7.66 kW
SCOP	6.79	5.11
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	6.78 kW
COP Tj = -7°C	5.47	3.78
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.59 kW	4.12 kW
COP Tj = +2 °C	7.08	5.21
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	2.95 kW	2.65 kW
COP Tj = +7°C	7.80	6.25
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.93 kW	1.91 kW
COP Tj = 12°C	7.69	6.38
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2593 kWh	3094 kWh

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	277 %	207 %
Prated	8.52 kW	7.66 kW
SCOP	7.12	5.38
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.16 kW	4.64 kW
COP Tj = -7°C	6.91	4.90
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	7.80	5.98
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	7.73	6.93
Cdh Tj = +7 °C	0.930	0.940
Pdh Tj = 12°C	1.94 kW	1.92 kW
COP Tj = 12°C	7.61	6.48
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	2952 kWh	3509 kWh
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**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	262 %	199 %
P <sub>rated</sub>	8.52 kW	7.66 kW
SCOP	6.74	5.16
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh Tj = +2°C</sub>	8.52 kW	7.66 kW
COP T <sub>j = +2°C</sub>	4.94	3.39
C <sub>dh Tj = +2 °C</sub>	0.990	0.990
P <sub>dh Tj = +7°C</sub>	5.48 kW	4.92 kW
COP T <sub>j = +7°C</sub>	6.63	4.62
C <sub>dh Tj = +7 °C</sub>	0.980	0.980
P <sub>dh Tj = 12°C</sub>	2.43 kW	2.19 kW
COP T <sub>j = 12°C</sub>	7.82	6.56
C <sub>dh Tj = +12 °C</sub>	0.950	0.950
P <sub>dh Tj = T<sub>biv</sub></sub>	8.52 kW	7.66 kW
COP T <sub>j = T<sub>biv</sub></sub>	4.94	3.39
P <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	8.52 kW	7.66 kW
COP T <sub>j = TOL or COP T<sub>j = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	4.94	3.39
C <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	0.990	0.990
WTOL	70 °C	70 °C
P <sub>off</sub>	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1689 kWh	1982 kWh

**Model WPE-I 07.1 Plus H 230**

Model name	WPE-I 07.1 Plus H 230
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

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

**Brine/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	3.36 kW	6.41 kW
El input	0.73 kW	2.28 kW
COP	4.62	2.82

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	200 %	154 %
Prated	7.02 kW	6.41 kW
SCOP	5.21	4.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.21 kW	5.67 kW
COP Tj = -7°C	4.57	3.10
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.78 kW	3.45 kW
COP Tj = +2°C	5.34	4.09
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.43 kW	2.22 kW
COP Tj = +7°C	5.84	4.73
Cdh Tj = +7 °C	0.960	0.970

Pdh Tj = 12°C	1.72 kW	1.95 kW
COP Tj = 12°C	5.70	5.61
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3271 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	210 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.46	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.25 kW	3.88 kW
COP Tj = -7°C	5.33	3.82
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	2.59 kW	2.36 kW
COP Tj = +2°C	5.88	4.36
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	1.66 kW	1.95 kW
COP Tj = +7°C	5.93	5.63
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	1.70 kW	1.95 kW
COP Tj = 12°C	5.50	5.69
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3168 kWh	3828 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	203 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.28	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.02 kW	6.41 kW
COP Tj = +2°C	4.22	2.82
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.51 kW	4.12 kW
COP Tj = +7°C	5.22	3.65
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.01 kW	1.83 kW
COP Tj = 12°C	5.98	5.21
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1777 kWh	2083 kWh

**Water/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.19 kW	7.66 kW
El input	0.68 kW	2.26 kW
COP	6.16	3.39

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	264 %	197 %
Prated	8.52 kW	7.66 kW
SCOP	6.79	5.11
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	6.78 kW
COP Tj = -7°C	5.47	3.78
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.59 kW	4.12 kW
COP Tj = +2 °C	7.08	5.21
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	2.95 kW	2.65 kW
COP Tj = +7°C	7.80	6.25
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.93 kW	1.91 kW
COP Tj = 12°C	7.69	6.38
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2593 kWh	3094 kWh

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	277 %	207 %
Prated	8.52 kW	7.66 kW
SCOP	7.12	5.38
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.16 kW	4.64 kW
COP Tj = -7°C	6.91	4.90
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	7.80	5.98
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	7.73	6.93
Cdh Tj = +7 °C	0.930	0.940
Pdh Tj = 12°C	1.94 kW	1.92 kW
COP Tj = 12°C	7.61	6.48
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	2952 kWh	3509 kWh
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**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	262 %	199 %
P <sub>rated</sub>	8.52 kW	7.66 kW
SCOP	6.74	5.16
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh Tj = +2°C</sub>	8.52 kW	7.66 kW
COP T <sub>j</sub> = +2°C	4.94	3.39
C <sub>dh Tj = +2 °C</sub>	0.990	0.990
P <sub>dh Tj = +7°C</sub>	5.48 kW	4.92 kW
COP T <sub>j</sub> = +7°C	6.63	4.62
C <sub>dh Tj = +7 °C</sub>	0.980	0.980
P <sub>dh Tj = 12°C</sub>	2.43 kW	2.19 kW
COP T <sub>j</sub> = 12°C	7.82	6.56
C <sub>dh Tj = +12 °C</sub>	0.950	0.950
P <sub>dh Tj = T<sub>biv</sub></sub>	8.52 kW	7.66 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.94	3.39
P <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	8.52 kW	7.66 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.94	3.39
C <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	0.990	0.990
WTOL	70 °C	70 °C
P <sub>off</sub>	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1689 kWh	1982 kWh

**Model WPE-I 07.1 Plus HW 400 "Profile XL"**

Model name	WPE-I 07.1 Plus HW 400 "Profile XL"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

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

**Brine/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	3.36 kW	6.41 kW
El input	0.73 kW	2.28 kW
COP	4.62	2.82

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	200 %	154 %
Prated	7.02 kW	6.41 kW
SCOP	5.21	4.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.21 kW	5.67 kW
COP Tj = -7°C	4.57	3.10
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.78 kW	3.45 kW
COP Tj = +2°C	5.34	4.09
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.43 kW	2.22 kW
COP Tj = +7°C	5.84	4.73
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	1.72 kW	1.95 kW
COP Tj = 12°C	5.70	5.61
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3271 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Colder Climate</b>		
	Low temperature	Medium temperature
ηs	210 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.46	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.25 kW	3.88 kW
COP Tj = -7°C	5.33	3.82
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	2.59 kW	2.36 kW
COP Tj = +2°C	5.88	4.36
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	1.66 kW	1.95 kW
COP Tj = +7°C	5.93	5.63
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	1.70 kW	1.95 kW
COP Tj = 12°C	5.50	5.69
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3168 kWh	3828 kWh
<b>EN 12102-1   Warmer Climate</b>		
	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Warmer Climate</b>		
	Low temperature	Medium temperature

ηs	203 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.28	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.02 kW	6.41 kW
COP Tj = +2°C	4.22	2.82
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.51 kW	4.12 kW
COP Tj = +7°C	5.22	3.65
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.01 kW	1.83 kW
COP Tj = 12°C	5.98	5.21
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1777 kWh	2083 kWh

**Water/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency ηDHW	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency ηDHW	128 %
COP	3.20

Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.19 kW	7.66 kW
EI input	0.68 kW	2.26 kW
COP	6.16	3.39

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	264 %	197 %
Prated	8.52 kW	7.66 kW
SCOP	6.79	5.11
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	6.78 kW
COP Tj = -7°C	5.47	3.78
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.59 kW	4.12 kW
COP Tj = +2°C	7.08	5.21
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	2.95 kW	2.65 kW
COP Tj = +7°C	7.80	6.25
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.93 kW	1.91 kW
COP Tj = 12°C	7.69	6.38
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW

COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2593 kWh	3094 kWh

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	277 %	207 %
Prated	8.52 kW	7.66 kW
SCOP	7.12	5.38
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.16 kW	4.64 kW
COP Tj = -7°C	6.91	4.90
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	7.80	5.98
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	7.73	6.93
Cdh Tj = +7 °C	0.930	0.940
Pdh Tj = 12°C	1.94 kW	1.92 kW
COP Tj = 12°C	7.61	6.48
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2952 kWh	3509 kWh

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	262 %	199 %
Prated	8.52 kW	7.66 kW
SCOP	6.74	5.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.52 kW	7.66 kW
COP Tj = +2°C	4.94	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.48 kW	4.92 kW
COP Tj = +7°C	6.63	4.62
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.43 kW	2.19 kW
COP Tj = 12°C	7.82	6.56
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1689 kWh	1982 kWh

**Model WPE-I 07.1 Plus HW 230 "Profile XL"**

Model name	WPE-I 07.1 Plus HW 230 "Profile XL"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

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

**Brine/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3,24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	3.36 kW	6.41 kW
El input	0.73 kW	2.28 kW
COP	4.62	2.82

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	200 %	154 %
Prated	7.02 kW	6.41 kW
SCOP	5.21	4.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.21 kW	5.67 kW
COP Tj = -7°C	4.57	3.10
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.78 kW	3.45 kW
COP Tj = +2°C	5.34	4.09
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.43 kW	2.22 kW
COP Tj = +7°C	5.84	4.73
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	1.72 kW	1.95 kW
COP Tj = 12°C	5.70	5.61
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3271 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Colder Climate</b>		
	Low temperature	Medium temperature
ηs	210 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.46	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.25 kW	3.88 kW
COP Tj = -7°C	5.33	3.82
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	2.59 kW	2.36 kW
COP Tj = +2°C	5.88	4.36
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	1.66 kW	1.95 kW
COP Tj = +7°C	5.93	5.63
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	1.70 kW	1.95 kW
COP Tj = 12°C	5.50	5.69
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3168 kWh	3828 kWh
<b>EN 12102-1   Warmer Climate</b>		
	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Warmer Climate</b>		
	Low temperature	Medium temperature

ηs	203 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.28	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.02 kW	6.41 kW
COP Tj = +2°C	4.22	2.82
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.51 kW	4.12 kW
COP Tj = +7°C	5.22	3.65
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.01 kW	1.83 kW
COP Tj = 12°C	5.98	5.21
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1777 kWh	2083 kWh

**Water/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency ηDHW	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency ηDHW	128 %
COP	3.20

Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.20
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	49.8 °C
Mixed water at 40°C	215 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.19 kW	7.66 kW
EI input	0.68 kW	2.26 kW
COP	6.16	3.39

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	264 %	197 %
Prated	8.52 kW	7.66 kW
SCOP	6.79	5.11
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	6.78 kW
COP Tj = -7°C	5.47	3.78
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.59 kW	4.12 kW
COP Tj = +2°C	7.08	5.21
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	2.95 kW	2.65 kW
COP Tj = +7°C	7.80	6.25
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.93 kW	1.91 kW
COP Tj = 12°C	7.69	6.38
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW

COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2593 kWh	3094 kWh

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	277 %	207 %
Prated	8.52 kW	7.66 kW
SCOP	7.12	5.38
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.16 kW	4.64 kW
COP Tj = -7°C	6.91	4.90
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	7.80	5.98
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	7.73	6.93
Cdh Tj = +7 °C	0.930	0.940
Pdh Tj = 12°C	1.94 kW	1.92 kW
COP Tj = 12°C	7.61	6.48
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2952 kWh	3509 kWh

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	262 %	199 %
Prated	8.52 kW	7.66 kW
SCOP	6.74	5.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.52 kW	7.66 kW
COP Tj = +2°C	4.94	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.48 kW	4.92 kW
COP Tj = +7°C	6.63	4.62
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.43 kW	2.19 kW
COP Tj = 12°C	7.82	6.56
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1689 kWh	1982 kWh

**Model WPE-I 07.1 Plus HW 400 "Profile M"**

Model name	WPE-I 07.1 Plus HW 400 "Profile M"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

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

**Brine/Water****EN 16147 | Average Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Colder Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Warmer Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	3.36 kW	6.41 kW
El input	0.73 kW	2.28 kW
COP	4.62	2.82

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	200 %	154 %
Prated	7.02 kW	6.41 kW
SCOP	5.21	4.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.21 kW	5.67 kW
COP Tj = -7°C	4.57	3.10
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.78 kW	3.45 kW
COP Tj = +2°C	5.34	4.09
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.43 kW	2.22 kW
COP Tj = +7°C	5.84	4.73
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	1.72 kW	1.95 kW
COP Tj = 12°C	5.70	5.61
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3271 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Colder Climate</b>		
	Low temperature	Medium temperature
ηs	210 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.46	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.25 kW	3.88 kW
COP Tj = -7°C	5.33	3.82
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	2.59 kW	2.36 kW
COP Tj = +2°C	5.88	4.36
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	1.66 kW	1.95 kW
COP Tj = +7°C	5.93	5.63
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	1.70 kW	1.95 kW
COP Tj = 12°C	5.50	5.69
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3168 kWh	3828 kWh
<b>EN 12102-1   Warmer Climate</b>		
	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Warmer Climate</b>		
	Low temperature	Medium temperature

ηs	203 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.28	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.02 kW	6.41 kW
COP Tj = +2°C	4.22	2.82
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.51 kW	4.12 kW
COP Tj = +7°C	5.22	3.65
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.01 kW	1.83 kW
COP Tj = 12°C	5.98	5.21
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1777 kWh	2083 kWh

**Water/Water****EN 16147 | Average Climate**

Declared load profile	M
Efficiency ηDHW	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Colder Climate**

Declared load profile	M
Efficiency ηDHW	78 %
COP	1.94

Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Warmer Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.19 kW	7.66 kW
EI input	0.68 kW	2.26 kW
COP	6.16	3.39

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	264 %	197 %
Prated	8.52 kW	7.66 kW
SCOP	6.79	5.11
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	6.78 kW
COP Tj = -7°C	5.47	3.78
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.59 kW	4.12 kW
COP Tj = +2°C	7.08	5.21
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	2.95 kW	2.65 kW
COP Tj = +7°C	7.80	6.25
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.93 kW	1.91 kW
COP Tj = 12°C	7.69	6.38
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW

COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2593 kWh	3094 kWh

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	277 %	207 %
Prated	8.52 kW	7.66 kW
SCOP	7.12	5.38
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.16 kW	4.64 kW
COP Tj = -7°C	6.91	4.90
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	7.80	5.98
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	7.73	6.93
Cdh Tj = +7 °C	0.930	0.940
Pdh Tj = 12°C	1.94 kW	1.92 kW
COP Tj = 12°C	7.61	6.48
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2952 kWh	3509 kWh

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	262 %	199 %
Prated	8.52 kW	7.66 kW
SCOP	6.74	5.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.52 kW	7.66 kW
COP Tj = +2°C	4.94	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.48 kW	4.92 kW
COP Tj = +7°C	6.63	4.62
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.43 kW	2.19 kW
COP Tj = 12°C	7.82	6.56
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1689 kWh	1982 kWh

**Model WPE-I 07.1 Plus HW 230 "Profile M"**

Model name	WPE-I 07.1 Plus HW 230 "Profile M"
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

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

**Brine/Water****EN 16147 | Average Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Colder Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Warmer Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	3.36 kW	6.41 kW
El input	0.73 kW	2.28 kW
COP	4.62	2.82

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	200 %	154 %
Prated	7.02 kW	6.41 kW
SCOP	5.21	4.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.21 kW	5.67 kW
COP Tj = -7°C	4.57	3.10
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.78 kW	3.45 kW
COP Tj = +2°C	5.34	4.09
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.43 kW	2.22 kW
COP Tj = +7°C	5.84	4.73
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	1.72 kW	1.95 kW
COP Tj = 12°C	5.70	5.61
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2785 kWh	3271 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Colder Climate</b>		
	Low temperature	Medium temperature
ηs	210 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.46	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.25 kW	3.88 kW
COP Tj = -7°C	5.33	3.82
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	2.59 kW	2.36 kW
COP Tj = +2°C	5.88	4.36
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	1.66 kW	1.95 kW
COP Tj = +7°C	5.93	5.63
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	1.70 kW	1.95 kW
COP Tj = 12°C	5.50	5.69
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3168 kWh	3828 kWh
<b>EN 12102-1   Warmer Climate</b>		
	Low temperature	Medium temperature
Sound power level indoor	38 dB(A)	38 dB(A)
<b>EN 14825   Warmer Climate</b>		
	Low temperature	Medium temperature

ηs	203 %	157 %
Prated	7.02 kW	6.41 kW
SCOP	5.28	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.02 kW	6.41 kW
COP Tj = +2°C	4.22	2.82
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.51 kW	4.12 kW
COP Tj = +7°C	5.22	3.65
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.01 kW	1.83 kW
COP Tj = 12°C	5.98	5.21
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	7.02 kW	6.41 kW
COP Tj = Tbiv	4.22	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.02 kW	6.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.22	2.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1777 kWh	2083 kWh

**Water/Water****EN 16147 | Average Climate**

Declared load profile	M
Efficiency ηDHW	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Colder Climate**

Declared load profile	M
Efficiency ηDHW	78 %
COP	1.94

Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 16147 | Warmer Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	78 %
COP	1.94
Heating up time	3:24 h:min
Standby power input	41.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	223 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.19 kW	7.66 kW
EI input	0.68 kW	2.26 kW
COP	6.16	3.39

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	264 %	197 %
Prated	8.52 kW	7.66 kW
SCOP	6.79	5.11
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	6.78 kW
COP Tj = -7°C	5.47	3.78
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.59 kW	4.12 kW
COP Tj = +2°C	7.08	5.21
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	2.95 kW	2.65 kW
COP Tj = +7°C	7.80	6.25
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.93 kW	1.91 kW
COP Tj = 12°C	7.69	6.38
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW

COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2593 kWh	3094 kWh

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	277 %	207 %
Prated	8.52 kW	7.66 kW
SCOP	7.12	5.38
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.16 kW	4.64 kW
COP Tj = -7°C	6.91	4.90
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	7.80	5.98
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.02 kW	1.81 kW
COP Tj = +7°C	7.73	6.93
Cdh Tj = +7 °C	0.930	0.940
Pdh Tj = 12°C	1.94 kW	1.92 kW
COP Tj = 12°C	7.61	6.48
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2952 kWh	3509 kWh

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	Low temperature	Medium temperature
$\eta_s$	262 %	199 %
Prated	8.52 kW	7.66 kW
SCOP	6.74	5.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.52 kW	7.66 kW
COP Tj = +2°C	4.94	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.48 kW	4.92 kW
COP Tj = +7°C	6.63	4.62
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.43 kW	2.19 kW
COP Tj = 12°C	7.82	6.56
Cdh Tj = +12 °C	0.950	0.950
Pdh Tj = Tbiv	8.52 kW	7.66 kW
COP Tj = Tbiv	4.94	3.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	7.66 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.94	3.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	17 W	17 W
PTO	19 W	19 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1689 kWh	1982 kWh