Subtype WPE-I 17 H 400 Plus	
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 17 H 400 Plus
Registration number	012-C700167
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R452B
Mass of Refrigerant	1.25 kg
Certification Date	09.02.2023
Testing basis	EN 14511:2018, EN 14825:2018, EN 12102:2017.
Testing laboratory	RISE Research Institutes of Sweden

Model WPE-I 17 H 400 Plus

Model name	WPE-I 17 H 400 Plus
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	Yes

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	16.69 kW	15.10 kW
El input	3.77 kW	5.29 kW
COP	4.43	2.85

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	46 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	184 %	140 %
Prated	18.14 kW	19.84 kW
SCOP	4.79	3.70
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.77 kW	15.92 kW
COP Tj = -7°C	4.54	3.16
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	17.06 kW	16.25 kW
COP Tj = +2°C	4.78	3.71
Cdh Tj = +2 °C	0.997	0.998
Pdh Tj = +7°C	17.24 kW	16.46 kW
COP Tj = +7°C	5.01	4.08
Cdh Tj = +7 °C	0.997	0.998

Pdh Tj = 12°C	17.18 kW	16.72 kW
COP Tj = 12°C	5.19	4.50
Cdh Tj = +12 °C	0.997	0.997
Pdh Tj = Tbiv	16.74 kW	16.03 kW
COP Tj = Tbiv	4.50	3.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.69 kW	15.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.998	0.998
WTOL	65 °C	65 °C
Poff	6 W	6 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.45 kW	4.07 kW
Annual energy consumption Qhe	7818 kWh	11065 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	46 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	189 %	144 %
Prated	18.86 kW	19.03 kW
SCOP	4.92	3.80
Tbiv	-18 °C	-16 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	17.13 kW	16.18 kW
COP Tj = -7°C	4.84	3.58
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	17.23 kW	16.42 kW
COP Tj = +2°C	5.03	3.99
Cdh Tj = +2 °C	0.997	0.998
Pdh Tj = +7°C	17.19 kW	16.64 kW
COP Tj = +7°C	5.14	4.36
Cdh Tj = +7 °C	0.997	0.998
Pdh Tj = 12°C	17.19 kW	16.82 kW
COP Tj = 12°C	5.17	4.68
Cdh Tj = +12 °C	0.997	0.997
Pdh Tj = Tbiv	16.88 kW	16.02 kW
COP Tj = Tbiv	4.63	3.31

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.69 kW	15.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.998	0.998
WTOL	65 °C	65 °C
Poff	6 W	6 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.17 kW	3.26 kW
Annual energy consumption Qhe	9456 kWh	12345 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	46 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	185 %	141 %
Prated	19.67 kW	18.61 kW
SCOP	4.84	3.73
Tbiv	4 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	16.69 kW	15.77 kW
COP Tj = +2°C	4.43	2.96
Cdh Tj = +2 °C	0.998	0.998
Pdh Tj = +7°C	17.03 kW	16.10 kW
COP Tj = +7°C	4.76	3.45
Cdh Tj = +7 °C	0.997	0.998
Pdh Tj = 12°C	17.21 kW	16.53 kW
COP Tj = 12°C	5.08	4.20
Cdh Tj = +12 °C	0.997	0.998
Pdh Tj = Tbiv	16.86 kW	15.95 kW
COP Tj = Tbiv	4.61	3.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.69 kW	15.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.43	2.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.998	0.998
WTOL	65 °C	65 °C
Poff	6 W	6 W
PTO	10 W	10 W

PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.98 kW	2.84 kW
Annual energy consumption Qhe	5433 kWh	6658 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	20.95 kW	20.68 kW
El input	3.95 kW	5.61 kW
COP	5.31	3.68

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	213 %	178 %
Prated	21.73 kW	24.86 kW
SCOP	5.51	4.64
Tbiv	-9 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.82 kW	20.94 kW
COP Tj = -7°C	5.41	3.96
Cdh Tj = -7 °C	0.997	0.997
Pdh Tj = +2°C	20.59 kW	21.51 kW
COP Tj = +2°C	5.53	4.68
Cdh Tj = +2 °C	0.996	0.997
Pdh Tj = +7°C	20.31 kW	21.60 kW
COP Tj = +7°C	5.65	5.11
Cdh Tj = +7 °C	0.996	0.997
Pdh Tj = 12°C	19.97 kW	21.41 kW
COP Tj = 12°C	5.75	5.49
Cdh Tj = +12 °C	0.996	0.997
Pdh Tj = Tbiv	20.89 kW	21.03 kW
COP Tj = Tbiv	5.35	4.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.95 kW	20.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.31	3.68

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.78 kW	4.18 kW
Annual energy consumption Qhe	8141 kWh	11062 kWh

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	215 %	182 %
Prated	22.57 kW	24.24 kW
SCOP	5.58	4.76
Tbiv	-19 °C	-17 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	20.53 kW	21.39 kW
COP Tj = -7°C	5.57	4.51
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	20.28 kW	21.58 kW
COP Tj = +2°C	5.66	5.01
Cdh Tj = +2 °C	0.996	0.997
Pdh Tj = +7°C	20.05 kW	21.49 kW
COP Tj = +7°C	5.72	5.37
Cdh Tj = +7 °C	0.996	0.997
Pdh Tj = 12°C	20.01 kW	21.32 kW
COP Tj = 12°C	5.74	5.63
Cdh Tj = +12 °C	0.996	0.997
Pdh Tj = Tbiv	20.79 kW	21.05 kW
COP Tj = Tbiv	5.43	4.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.95 kW	20.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.31	3.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	3.56 kW

Annual energy consumption Qhe	9978 kWh	12556 kWh

EN 14825 | Warmer Climate		
	Low temperature	Medium temperature
ηs	213 %	179 %
Prated	22.45 kW	24.49 kW
SCOP	5.53	4.67
Tbiv	3 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	20.95 kW	20.68 kW
COP Tj = +2°C	5.31	3.68
Cdh Tj = +2 °C	0.997	0.998
Pdh Tj = +7°C	20.64 kW	21.27 kW
COP Tj = +7°C	5.51	4.35
Cdh Tj = +7 °C	0.996	0.997
Pdh Tj = 12°C	20.18 kW	21.58 kW
COP Tj = 12°C	5.69	5.24
Cdh Tj = +12 °C	0.996	0.997
Pdh Tj = Tbiv	20.84 kW	20.99 kW
COP Tj = Tbiv	5.39	4.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.95 kW	20.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.31	3.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.50 kW	3.81 kW
Annual energy consumption Qhe	5427 kWh	7010 kWh