

Subtype WPE-I 87 H 400 Premium

Certificate Holder	STIEBEL ELTRON GmbH & Co KG
Address	Dr. Stiebel Straße 33
ZIP	37603
City	Holzminden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	WPE-I 87 H 400 Premium
Registration number	011-1W0335
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	9 kg
Certification Date	05.10.2020
Testing basis	HP KEYMARK certification scheme rules rev. 7

Model WPE-I 87 H 400 Premium

Model name	WPE-I 87 H 400 Premium
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

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

Brine/Water

EN 14511-4 | Heating

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

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	199 %	157 %
Prated	84.67 kW	79.00 kW
SCOP	5.17	4.13
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	74.90 kW	69.88 kW
COP Tj = -7°C	4.26	3.00
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	45.59 kW	42.54 kW
COP Tj = +2°C	5.14	4.08
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	29.31 kW	27.35 kW
COP Tj = +7°C	5.81	4.94
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	24.37 kW	24.08 kW
COP Tj = 12°C	5.65	5.16
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	33804 kWh	39457 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	204 %	165 %
Prated	84.67 kW	79.00 kW
SCOP	5.30	4.32
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	51.25 kW	48.52 kW
COP Tj = -7°C	5.06	3.85
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	31.20 kW	29.11 kW
COP Tj = +2°C	5.81	4.83
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	24.49 kW	24.11 kW
COP Tj = +7°C	5.85	5.20
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	24.39 kW	24.22 kW
COP Tj = 12°C	5.66	5.27
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	84.67 kW	79.00 kW
COP Tj = Tbiv	3.97	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	84.67 kW	79.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.97	2.72
WTOL	65 °C	65 °C
Poff	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	39378 kWh	45048 kWh
P _{dh} T _j = -15°C (if TOL	84.67	79.00
COP T _j = -15°C (if TOL	3.97	2.72
C _{dh} T _j = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	202 %	160 %
Prated	84.67 kW	79.00 kW
SCOP	5.25	4.21
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	84.67 kW	79.00 kW
COP T _j = +2°C	3.97	2.72
C _{dh} T _j = +2 °C	0.90	0.90
P _{dh} T _j = +7°C	54.43 kW	50.79 kW
COP T _j = +7°C	4.85	3.60
C _{dh} T _j = +7 °C	0.90	0.90
P _{dh} T _j = 12°C	24.19 kW	24.07 kW
COP T _j = 12°C	5.85	5.16
C _{dh} T _j = +12 °C	0.90	0.90
P _{dh} T _j = T _{biv}	84.67 kW	79.00 kW
COP T _j = T _{biv}	3.97	2.72
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	84.67 kW	79.00 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.97	2.72
WTOL	65 °C	65 °C
P _{off}	9 W	9 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	21524 kWh	23056 kWh