Subtype WPF 20	
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	WPF 20
Registration number	011-1W0275
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	5.99 kg
Certification Date	24.01.2019

Model WPF 20

Model name	WPF 20
Application	Heating (medium temp)
Units	Indoor, Outdoor
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 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	21.50 kW	20.10 kW
El input	4.61 kW	7.08 kW
COP	4.66	2.84

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	192 %	131 %
Prated	22.00 kW	20.00 kW
SCOP	5.00	3.48
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	21.50 kW	20.20 kW
COP Tj = -7°C	4.72	2.96
Pdh Tj = +2°C	21.70 kW	20.70 kW
COP Tj = +2°C	5.06	3.48
Pdh Tj = +7°C	21.80 kW	21.00 kW
COP Tj = +7°C	5.41	3.88
Pdh Tj = 12°C	22.00 kW	21.30 kW

COP Tj = 12°C	5.80	4.36
Pdh Tj = Tbiv	21.50 kW	20.10 kW
COP Tj = Tbiv	4.66	2.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.50 kW	20.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.66	2.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	74 W	74 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	8904 kWh	11988 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	201 %	137 %
Prated	27.00 kW	25.00 kW
SCOP	5.23	3.62
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	21.80 kW	20.70 kW
COP Tj = -7°C	5.24	3.46
Cdh Tj = -7 °C		
Pdh Tj = +2°C	21.90 kW	21.00 kW
COP Tj = +2°C	5.51	3.87
Cdh Tj = +2 °C		
Pdh Tj = +7°C	21.90 kW	21.30 kW
COP Tj = +7°C	5.74	4.26
Cdh Tj = +7 °C		
Pdh Tj = 12°C	22.00 kW	21.50 kW
COP Tj = 12°C	5.78	4.60
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	21.70 kW	20.50 kW
COP Tj = Tbiv	5.12	3.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.50 kW	21.10 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.66	2.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	74 W	74 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.11 kW	4.00 kW
Annual energy consumption Qhe	12535 kWh	17067 kWh

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	188 %	128 %
Prated	22.00 kW	20.00 kW
SCOP	4.90	3.40
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	21.50 kW	20.10 kW
COP Tj = +2°C	4.66	2.84
Pdh Tj = +7°C	21.70 kW	20.50 kW
COP Tj = +7°C	4.99	3.24
Pdh Tj = 12°C	21.90 kW	21.10 kW
COP Tj = 12°C	5.54	4.03
Pdh Tj = Tbiv	21.50 kW	20.10 kW
COP Tj = Tbiv	4.66	2.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.50 kW	20.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.66	2.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	74 W	74 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5871 kWh	7884 kWh