

Subtype WPF 16 basic

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 16 basic
Registration number	011-1W0189
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2.6 kg
Certification Date	04.09.2019

Model WPF 16 basic, all climates

Model name	WPF 16 basic, all climates
Application	Heating (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	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
Defrost test	failed
Starting and operating test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	117 %	117 %
Prated	17.00 kW	16.00 kW
SCOP	4.80	3.18
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.70 kW	15.70 kW
COP Tj = -7°C	4.22	2.59
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	16.80 kW	16.10 kW
COP Tj = +2°C	4.54	3.06
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	16.90 kW	16.30 kW
COP Tj = +7°C	4.87	3.43
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	17.00 kW	16.50 kW
COP Tj = 12°C	5.26	3.88
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	16.60 kW	15.60 kW
COP Tj = Tbiv	4.16	2.48

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.60 kW	15.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.16	2.48
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	78 W	78 W
PSB	3 W	3 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	7440 kWh	10353 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	65 dB(A)	

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	183 %	122 %
Prated	21.00 kW	20.00 kW
SCOP	5.08	3.30
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	16.80 kW	16.10 kW
COP Tj = -7°C	4.71	3.04
Cdh Tj = -7 °C	0.900	0.90
Pdh Tj = +2°C	16.90 kW	16.30 kW
COP Tj = +2°C	4.97	3.42
Cdh Tj = +2 °C	0.900	0.90
Pdh Tj = +7°C	17.00 kW	16.50 kW
COP Tj = +7°C	5.20	3.79
Cdh Tj = +7 °C	0.900	0.90
Pdh Tj = 12°C	17.00 kW	16.60 kW
COP Tj = 12°C	5.23	4.10
Cdh Tj = +12 °C	0.900	0.90
Pdh Tj = Tbiv	16.80 kW	15.90 kW
COP Tj = Tbiv	4.60	2.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.60 kW	15.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.16	2.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	0 W	0 W

PTO	78 W	78 W
PSB	3 W	3 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	21.00 kW	3.90 kW
Annual energy consumption Q _{he}	10600 kWh	14861 kWh
P _{dh} T _j = -15°C (if TOL	16.80	15.90
COP T _j = -15°C (if TOL	4.60	2.84
C _{dh} T _j = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	65 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	178 %	117 %
Prated	17.00 kW	16.00 kW
SCOP	4.98	3.20
T _{biv}	2 °C	2 °C
TOL	-5 °C	-5 °C
P _{dh} T _j = +2°C	16.60 kW	15.60 kW
COP T _j = +2°C	4.16	2.48
C _{dh} T _j = +2 °C	0.900	0.90
P _{dh} T _j = +7°C	16.80 kW	15.90 kW
COP T _j = +7°C	4.47	3.84
C _{dh} T _j = +7 °C	0.900	0.90
P _{dh} T _j = 12°C	16.90 kW	16.40 kW
COP T _j = 12°C	5.00	3.57
C _{dh} T _j = +12 °C	0.900	0.90
P _{dh} T _j = T _{biv}	16.60 kW	15.60 kW
COP T _j = T _{biv}	4.16	2.48
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	16.60 kW	15.60 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.16	2.48
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}		
WTOL	60 °C	60 °C
P _{off}	0 W	0 W
PTO	78 W	78 W
PSB	3 W	3 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	0.00 kW

Annual energy consumption Q_{he}

4778 kWh

6678 kWh

Model WPF 16 basic, average climates

Model name	WPF 16 basic, average climates
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	n/a
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
Defrost test	failed
Starting and operating test	passed

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	Low temperature	Medium temperature
Sound power level indoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

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Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	16.90 kW	16.30 kW
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Pdh Tj = 12°C	17.00 kW	16.50 kW
COP Tj = 12°C	5.26	3.88
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PTO	78 W	78 W
PSB	3 W	3 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	7440 kWh	10353 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	65 dB(A)	

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Pdh Tj = +2°C	16.90 kW	16.30 kW
COP Tj = +2°C	4.97	3.42
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Pdh Tj = +7°C	17.00 kW	16.50 kW
COP Tj = +7°C	5.20	3.79
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Pdh Tj = 12°C	17.00 kW	16.60 kW
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WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	78 W	78 W
PSB	3 W	3 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.94 kW	3.90 kW
Annual energy consumption Q _{he}	10600 kWh	14861 kWh
P _{dh} T _j = -15°C (if TOL	16.80	15.90
COP T _j = -15°C (if TOL	4.60	2.84
C _{dh} T _j = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	65 dB(A)	

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	178 %	117 %
Prated	17.00 kW	16.00 kW
SCOP	4.98	3.20
T _{biv}	2 °C	2 °C
TOL	-5 °C	-5 °C
P _{dh} T _j = +2°C	16.60 kW	15.60 kW
COP T _j = +2°C	4.16	2.48
C _{dh} T _j = +2 °C	0.90	0.90
P _{dh} T _j = +7°C	16.80 kW	15.90 kW
COP T _j = +7°C	4.47	3.84
C _{dh} T _j = +7 °C	0.90	0.90
P _{dh} T _j = 12°C	16.90 kW	16.40 kW
COP T _j = 12°C	5.00	3.57
C _{dh} T _j = +12 °C	0.90	0.90
P _{dh} T _j = T _{biv}	16.60 kW	15.60 kW
COP T _j = T _{biv}	4.16	2.48
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	16.60 kW	15.60 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.16	2.48
WTOL	60 °C	60 °C
P _{off}	0 W	0 W
PTO	78 W	78 W
PSB	3 W	3 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 Q _{he}	4778 kWh	6678 kWh