

## Subtype WPF 35

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 35
Registration number	011-1W0029
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	10 kg
Certification Date	19.09.2016
Testing basis	Heat pump scheme rules KEYMARK Rev 1.1

## Model WPF 35

Model name	WPF 35
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	No

## 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	60 dB(A)	60 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	200 %	133 %
Prated	38.00 kW	34.00 kW
SCOP	5.19	3.52
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.10 kW	34.50 kW
COP Tj = -7°C	4.84	2.95
Pdh Tj = +2°C	38.60 kW	35.80 kW
COP Tj = +2°C	5.20	3.50
Pdh Tj = +7°C	39.00 kW	36.70 kW
COP Tj = +7°C	5.56	2.92
Pdh Tj = 12°C	39.30 kW	37.50 kW
COP Tj = 12°C	5.96	4.42
Pdh Tj = Tbiv	38.00 kW	34.10 kW
COP Tj = Tbiv	4.75	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	38.00 kW	34.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.78	2.82

Rated airflow rate	0 m <sup>3</sup> /h	0 m <sup>3</sup> /h
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	15136 kWh	20029 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	60 dB(A)	60 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	208 %	139 %
Prated	47.00 kW	43.00 kW
SCOP	5.41	3.66
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	38.80 kW	35.80 kW
COP Tj = -7°C	5.38	3.48
Cdh Tj = -7 °C		
Pdh Tj = +2°C	39.10 kW	36.70 kW
COP Tj = +2°C	5.67	3.91
Cdh Tj = +2 °C		
Pdh Tj = +7°C	39.30 kW	37.40 kW
COP Tj = +7°C	5.90	4.32
Cdh Tj = +7 °C		
Pdh Tj = 12°C	39.30 kW	37.90 kW
COP Tj = 12°C	5.94	4.66
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	38.60 kW	35.30 kW
COP Tj = Tbiv	5.26	3.25
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	38.60 kW	34.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.26	2.82
Rated airflow rate	0 m <sup>3</sup> /h	0 m <sup>3</sup> /h
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	8.40 kW	9.15 kW
Annual energy consumption Qhe	21594 kWh	28986 kWh

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	60 dB(A)	60 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	199 %	132 %
Prated	38.00 kW	34.00 kW
SCOP	5.17	3.50
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = -7°C	0.00 kW	0.00 kW
COP Tj = -7°C	0.00	0.00
Pdh Tj = +2°C	38.00 kW	34.10 kW
COP Tj = +2°C	4.78	2.82
Pdh Tj = +7°C	38.50 kW	35.20 kW
COP Tj = +7°C	5.12	3.24
Pdh Tj = 12°C	39.10 kW	37.00 kW
COP Tj = 12°C	5.69	4.08
Pdh Tj = Tbiv	38.00 kW	34.10 kW
COP Tj = Tbiv	4.78	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	38.00 kW	34.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.78	2.82
Rated airflow rate	0 m <sup>3</sup> /h	0 m <sup>3</sup> /h
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	7 W	74 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	9834 kWh	13033 kWh