Summary of	HPA-O 6/8 CS Plus	Reg. No.	011-1W0284
Certificate Holder			
Name	STIEBEL ELTRON GmbH & Co KG		
Address	Dr. Stiebel Straße 33	Zip	37603
City	Holzminden	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	RISE Research Institutes of Sweden AB		
Subtype title	HPA-O 6/8 CS Plus		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2 kg		
Certification Date	03.12.2018		
Testing basis	HP KEYMARK certification scheme rules rev. no. 5		

Model: HPA-O 6 CS Plus + HSBB 200, HSBB 200 S

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73
Indoor water flow rate	0.80 m³/h	1.34 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	27 dB(A)	27 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	177 %	125 %
Prated	6.80 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	6.02 kW	5.10 kW
COP Tj = -7°C	2.90	1.97
Cdh	0.90	0.90
Pdh Tj = +2°C	3.89 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh	0.90	0.90

Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh	0.90	0.90
Pdh Tj = Tbiv	6.02 kW	6.10 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL	6.30 kW	5.10 kW
COP Tj = TOL	2.89	1.97
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	30 W	30 W
PSB	17 W	17 W
PCK	5 W	5 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.50 kW	7.55 kW
Annual energy consumption Qhe	3120 kWh	4865 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l
Heating up time	01:50 h:min

Model: HPA-O 6 CS Plus, low temperature, all climates

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2	
	Low temperature
Heat output	4.86 kW
El input	1.02 kW
COP	4.76
Indoor water flow rate	1.34 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

EN 14825	
	Low temperature
η_s	177 %
Prated	6.80 kW
SCOP	4.50
Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	6.02 kW
COP Tj = -7°C	2.90
Cdh	0.90
Pdh Tj = +2°C	3.89 kW
COP Tj = +2°C	4.35
Cdh	0.90
Pdh Tj = +7°C	3.50 kW
COP Tj = +7°C	6.60
Cdh	0.90
Pdh Tj = 12°C	3.39 kW

COP Tj = 12°C	6.78
Cdh	0.90
Pdh Tj = Tbiv	6.02 kW
COP Tj = Tbiv	2.90
Pdh Tj = TOL	6.30 kW
COP Tj = TOL	2.80
Cdh	0.90
WTOL	60 °C
Poff	17 W
PTO	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	0.50 kW
Annual energy consumption Qhe	3120 kWh

Warmer Climate

EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

EN 14825

	Low temperature
η_s	213 %
Prated	6.30 kW
SCOP	5.41
Tbiv	2 °C
TOL	2 °C
Pdh Tj = +2°C	6.30 kW
COP Tj = +2°C	3.60
Cdh	0.90
Pdh Tj = +7°C	4.10 kW
COP Tj = +7°C	5.25
Cdh	0.90
Pdh Tj = 12°C	3.37 kW
COP Tj = 12°C	6.61
Cdh	0.90
Pdh Tj = Tbiv	6.30 kW
COP Tj = Tbiv	3.60
Pdh Tj = TOL	6.30 kW
COP Tj = TOL	3.60
Cdh	0.90

WTOL	60 °C
Poff	17 W
PTO	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	1556 kWh

Colder Climate

EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

EN 14825	
	Low temperature
η_s	151 %
Prated	5.80 kW
SCOP	3.85
Tbiv	-15 °C
TOL	-20 °C

Pdh Tj = -7°C	3.51 kW
COP Tj = -7°C	3.30
Cdh	0.90
Pdh Tj = +2°C	2.28 kW
COP Tj = +2°C	4.55
Cdh	0.90
Pdh Tj = +7°C	2.79 kW
COP Tj = +7°C	5.81
Cdh	0.90
Pdh Tj = 12°C	3.39 kW
COP Tj = 12°C	6.71
Cdh	0.90
Pdh Tj = Tbiv	5.80 kW
COP Tj = Tbiv	2.79
Pdh Tj = TOL	4.50 kW
COP Tj = TOL	2.40
Cdh	0.90
WTOL	60 °C
Poff	17 W
PTO	30 W
PSB	17 W

PCK	5 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	5.80 kW
Annual energy consumption Qhe	3713 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80
COP Tj = -15°C (if TOL<-20°C)	2.70
Cdh	0.90

Model: HPA-O 8 CS Plus + HSBB 200, HSBB 200S

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73
Indoor water flow rate	0.80 m³/h	1.34 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 14825		
	Low temperature	**Medium temperature**

η_s	177 %	125 %
Prated	9.19 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	8.13 kW	5.10 kW
COP Tj = -7°C	2.72	1.97
Cdh	0.90	0.90
Pdh Tj = +2°C	5.22 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh	0.90	0.90
Pdh Tj = Tbiv	8.13 kW	6.10 kW
COP Tj = Tbiv	2.72	2.28
Pdh Tj = TOL	7.92 kW	5.10 kW
COP Tj = TOL	2.64	1.97

Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	30 W	30 W
PSB	17 W	17 W
PCK	5 W	5 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.27 kW	7.55 kW
Annual energy consumption Qhe	4218 kWh	4865 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	27 dB(A)	27 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l
Heating up time	01:50 h:min

Model: HPA-O 8 CS Plus, low temperature, all climates

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2	
	Low temperature
Heat output	4.86 kW
El input	1.02 kW
COP	4.76
Indoor water flow rate	1.34 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 14825	
	Low temperature

η_s	177 %
Prated	9.19 kW
SCOP	4.50
Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	8.13 kW
COP Tj = -7°C	2.72
Cdh	0.90
Pdh Tj = +2°C	5.22 kW
COP Tj = +2°C	4.35
Cdh	0.90
Pdh Tj = +7°C	3.50 kW
COP Tj = +7°C	6.60
Cdh	0.90
Pdh Tj = 12°C	3.39 kW
COP Tj = 12°C	6.78
Cdh	0.90
Pdh Tj = Tbiv	8.13 kW
COP Tj = Tbiv	2.72
Pdh Tj = TOL	7.92 kW
COP Tj = TOL	2.64

Cdh	0.90
WTOL	60 °C
Poff	17 W
PTO	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	1.27 kW
Annual energy consumption Qhe	4218 kWh

EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

Warmer Climate

EN 14825	
	Low temperature
η_s	215 %
Prated	7.60 kW
SCOP	5.44
Tbiv	2 °C

TOL	2 °C
Pdh Tj = +2°C	7.60 kW
COP Tj = +2°C	3.44
Cdh	0.90
Pdh Tj = +7°C	4.89 kW
COP Tj = +7°C	5.15
Cdh	0.90
Pdh Tj = 12°C	3.37 kW
COP Tj = 12°C	6.61
Cdh	0.90
Pdh Tj = Tbiv	7.60 kW
COP Tj = Tbiv	3.44
Pdh Tj = TOL	7.60 kW
COP Tj = TOL	3.44
Cdh	0.90
WTOL	60 °C
Poff	17 W
PTO	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	electricity

Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	1867 kWh

EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

Colder Climate

EN 14825	
	Low temperature
η_s	147 %
Prated	8.70 kW
SCOP	3.75
Tbiv	-15 °C
TOL	-20 °C
Pdh Tj = -7°C	5.27 kW
COP Tj = -7°C	3.17
Cdh	0.90
Pdh Tj = +2°C	3.21 kW
COP Tj = +2°C	4.46
Cdh	0.90

Pdh Tj = +7°C	2.79 kW
COP Tj = +7°C	5.81
Cdh	0.90
Pdh Tj = 12°C	3.39 kW
COP Tj = 12°C	6.71
Cdh	0.90
Pdh Tj = Tbiv	7.10 kW
COP Tj = Tbiv	2.54
Pdh Tj = TOL	5.80 kW
COP Tj = TOL	2.19
Cdh	0.90
WTOL	60 °C
Poff	17 W
PTO	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	electricity
Supplementary Heater: PSUP	8.70 kW
Annual energy consumption Qhe	5722 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.10
COP Tj = -15°C (if TOL<-20°C)	2.54

Cdh	0.90

EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

Model: HPA-O 6 CS Plus + HSBC 200, HSBC 200S

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73
Indoor water flow rate	0.80 m³/h	1.34 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	27 dB(A)	27 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	177 %	125 %
Prated	6.80 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	6.02 kW	5.10 kW
COP Tj = -7°C	2.90	1.97
Cdh	0.90	0.90
Pdh Tj = +2°C	3.89 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh	0.94	0.90

Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh	0.90	0.90
Pdh Tj = Tbiv	6.02 kW	6.10 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL	6.30 kW	5.10 kW
COP Tj = TOL	2.80	1.97
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	30 W	30 W
PSB	17 W	17 W
PCK	5 W	5 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.50 kW	7.55 kW
Annual energy consumption Qhe	3120 kWh	4865 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l
Heating up time	01:50 h:min

Model: HPA-O 8 CS Plus + HSBC 200, HSBC 200S

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73
Indoor water flow rate	0.80 m³/h	1.34 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 14825		
	Low temperature	**Medium temperature**

η_s	177 %	125 %
Prated	9.19 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	8.13 kW	5.10 kW
COP Tj = -7°C	2.72	1.97
Cdh	0.90	0.90
Pdh Tj = +2°C	5.22 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh	0.90	0.90
Pdh Tj = Tbiv	8.13 kW	6.10 kW
COP Tj = Tbiv	2.72	2.28
Pdh Tj = TOL	7.92 kW	5.10 kW
COP Tj = TOL	2.64	1.97

Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	30 W	30 W
PSB	17 W	17 W
PCK	5 W	5 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.27 kW	7.55 kW
Annual energy consumption Qhe	4218 kWh	4865 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	27 dB(A)	27 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l
Heating up time	01:50 h:min