Summary of	HPA-O 3/4 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 3/4 CS Plus		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1.1 kg		
Certification Date	03.12.2018		
Testing basis	HP KEYMARK certification scheme rules rev. no. 5		

Model: HPA-O 3 CS Plus, low temperature, all climates

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2	
	Low temperature
Heat output	2.73 kW
El input	0.58 kW
COP	4.70
Indoor water flow rate	0.40 m³/h

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

Average Climate

EN 12102-1	
	Low temperature
Sound power level outdoor	52 dB(A)

EN 14825

	Low temperature
η_s	166 %
Prated	4.00 kW
SCOP	4.15
Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	3.20 kW
COP Tj = -7°C	2.88
Cdh	0.90
Pdh Tj = +2°C	1.95 kW
COP Tj = +2°C	4.11
Cdh	0.90
Pdh Tj = +7°C	1.63 kW
COP Tj = +7°C	6.06
Cdh	0.90
Pdh Tj = 12°C	1.80 kW
COP Tj = 12°C	8.14
Cdh	0.90
Pdh Tj = Tbiv	3.20 kW
COP Tj = Tbiv	2.88

Pdh Tj = TOL	3.05 kW
COP Tj = TOL	2.07
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	0.47 kW
Annual energy consumption Qhe	1769 kWh

Warmer Climate

EN 14825	
	Low temperature
η_s	204 %
Prated	3.00 kW
SCOP	4.99
Tbiv	2 °C
TOL	2 °C
Pdh Tj = +2°C	3.04 kW
COP Tj = +2°C	3.53

Cdh	0.90
Pdh Tj = +7°C	1.95 kW
COP Tj = +7°C	6.06
Cdh	0.90
Pdh Tj = 12°C	1.69 kW
COP Tj = 12°C	7.72
Cdh	0.90
Pdh Tj = Tbiv	3.04 kW
COP Tj = Tbiv	3.53
Pdh Tj = TOL	3.04 kW
COP Tj = TOL	3.53
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	783 kWh

Colder Climate

EN 14825

	Low temperature
η_s	150 %
Prated	3.00 kW
SCOP	3.72
Tbiv	-15 °C
TOL	-20 °C
Pdh Tj = -7°C	2.05 kW
COP Tj = -7°C	3.20
Cdh	0.90
Pdh Tj = +2°C	1.25 kW
COP Tj = +2°C	4.55
Cdh	0.90
Pdh Tj = +7°C	1.42 kW
COP Tj = +7°C	6.34
Cdh	0.90
Pdh Tj = 12°C	1.76 kW
COP Tj = 12°C	8.00
Cdh	0.90
Pdh Tj = Tbiv	2.76 kW
COP Tj = Tbiv	2.56

Pdh Tj = TOL	2.76 kW
COP Tj = TOL	2.56
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	0.69 kW
Annual energy consumption Qhe	2186 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.76
COP Tj = -15°C (if TOL<-20°C)	2.56
Cdh	0.90

Model: HPA-O 3 CS Plus + HSBB 200 classic, HSBB 200 S classic

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.73 kW	1.92 kW
El input	0.58 kW	0.74 kW
COP	4.70	2.59
Indoor water flow rate	0.40 m³/h	0.67 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	166 %	113 %
Prated	4.00 kW	3.00 kW
SCOP	4.15	2.85
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	3.20 kW	3.05 kW
COP Tj = -7°C	2.88	2.07
Cdh	0.90	0.90
Pdh Tj = +2°C	1.95 kW	1.58 kW
COP Tj = +2°C	4.11	2.93
Cdh	0.90	0.90
Pdh Tj = +7°C	1.63 kW	1.25 kW
COP Tj = +7°C	6.06	4.13
Cdh	0.90	0.90

Pdh Tj = 12°C	1.80 kW	1.54 kW
COP Tj = 12°C	8.14	5.97
Cdh	0.90	0.90
Pdh Tj = Tbiv	3.20 kW	2.37 kW
COP Tj = Tbiv	2.88	2.17
Pdh Tj = TOL	3.05 kW	3.05 kW
COP Tj = TOL	2.07	2.07
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	0.47 kW	2.93 kW
Annual energy consumption Qhe	1769 kWh	2089 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Heating up time	1:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

Model: HPA-O 3 CS Plus + HSBC 200, HSBC 200 S

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.73 kW	1.92 kW
El input	0.58 kW	0.74 kW
COP	4.70	2.59
Indoor water flow rate	0.40 m³/h	0.67 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	166 %	113 %
Prated	4.00 kW	3.00 kW
SCOP	4.15	2.85
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	3.20 kW	3.05 kW
COP Tj = -7°C	2.88	2.07
Cdh	0.90	0.90
Pdh Tj = +2°C	1.95 kW	1.58 kW
COP Tj = +2°C	4.11	2.93
Cdh	0.90	0.90
Pdh Tj = +7°C	1.63 kW	1.25 kW
COP Tj = +7°C	6.06	4.13
Cdh	0.90	0.90

Pdh Tj = 12°C	1.80 kW	1.54 kW
COP Tj = 12°C	8.14	5.97
Cdh	0.90	0.90
Pdh Tj = Tbiv	3.20 kW	2.37 kW
COP Tj = Tbiv	2.88	2.17
Pdh Tj = TOL	3.05 kW	3.05 kW
COP Tj = TOL	2.07	2.07
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	0.47 kW	2.93 kW
Annual energy consumption Qhe	1769 kWh	2089 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Heating up time	1:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

Model: HPA-O 4 CS Plus + HSBC 200, HSBC 200 S

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.73 kW	1.92 kW
El input	0.58 kW	0.74 kW
COP	4.70	2.59
Indoor water flow rate	0.40 m³/h	0.67 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	52 dB(A)	52 dB(A)
Sound power level outdoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	163 %	113 %
Prated	5.00 kW	4.00 kW
SCOP	4.15	2.90
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	4.03 kW	3.40 kW
COP Tj = -7°C	2.67	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	2.53 kW	2.00 kW
COP Tj = +2°C	4.00	2.94
Cdh	0.90	0.90
Pdh Tj = +7°C	1.63 kW	1.30 kW
COP Tj = +7°C	6.06	4.13
Cdh	0.90	0.90

Pdh Tj = 12°C	1.80 kW	1.50 kW
COP Tj = 12°C	8.14	5.97
Cdh	0.90	0.90
Pdh Tj = Tbiv	4.03 kW	3.00 kW
COP Tj = Tbiv	2.67	2.15
Pdh Tj = TOL	2.05 kW	3.40 kW
COP Tj = TOL	4.03	2.05
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	3.69 kW
Annual energy consumption Qhe	2265 kWh	2618 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Heating up time	1:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

Model: HPA-O 4 CS Plus + HSBB 200 classic, HSBB 200 S classic

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.73 kW	1.92 kW
El input	0.58 kW	0.74 kW
COP	4.70	2.59
Indoor water flow rate	0.40 m³/h	0.67 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	52 dB(A)	52 dB(A)
Sound power level outdoor	33 dB(A)	33 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	163 %	113 %
Prated	5.00 kW	4.00 kW
SCOP	4.15	2.90
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	4.03 kW	3.40 kW
COP Tj = -7°C	2.67	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	2.53 kW	2.00 kW
COP Tj = +2°C	4.00	2.94
Cdh	0.90	0.90
Pdh Tj = +7°C	1.63 kW	1.30 kW
COP Tj = +7°C	6.06	4.13
Cdh	0.90	0.90

Pdh Tj = 12°C	1.80 kW	1.50 kW
COP Tj = 12°C	8.14	5.97
Cdh	0.90	0.90
Pdh Tj = Tbiv	4.03 kW	3.00 kW
COP Tj = Tbiv	2.67	2.15
Pdh Tj = TOL	2.05 kW	3.40 kW
COP Tj = TOL	4.03	2.05
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	3.69 kW
Annual energy consumption Qhe	2265 kWh	2618 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	113 %
COP	2.70
Heating up time	1:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

Model: HPA-O 4 CS Plus, low temperature, all climates

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2	
	Low temperature
Heat output	2.73 kW
El input	0.58 kW
COP	4.70
Indoor water flow rate	0.40 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	33 dB(A)

EN 14825	
	Low temperature
η_s	163 %
Prated	5.00 kW
SCOP	4.15
Tbiv	-7 °C
TOL	-10 °C
Pdh Tj = -7°C	4.03 kW
COP Tj = -7°C	2.67
Cdh	0.90
Pdh Tj = +2°C	2.53 kW
COP Tj = +2°C	4.00
Cdh	0.90
Pdh Tj = +7°C	1.63 kW
COP Tj = +7°C	6.06
Cdh	0.90
Pdh Tj = 12°C	1.80 kW

COP Tj = 12°C	8.14
Cdh	0.90
Pdh Tj = Tbiv	4.03 kW
COP Tj = Tbiv	2.67
Pdh Tj = TOL	2.05 kW
COP Tj = TOL	4.03
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	2265 kWh

Warmer Climate

EN 14825	
	Low temperature
η_s	206 %
Prated	3.00 kW
SCOP	5.16

Tbiv	2 °C
TOL	2 °C
Pdh Tj = +2°C	3.48 kW
COP Tj = +2°C	3.23
Cdh	0.90
Pdh Tj = +7°C	2.51 kW
COP Tj = +7°C	5.18
Cdh	0.90
Pdh Tj = 12°C	1.69 kW
COP Tj = 12°C	7.72
Cdh	0.90
Pdh Tj = Tbiv	3.48 kW
COP Tj = Tbiv	3.23
Pdh Tj = TOL	3.48 kW
COP Tj = TOL	3.23
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	889 kWh

Colder Climate

EN 14825	
	Low temperature
η_s	150 %
Prated	4.00 kW
SCOP	3.71
Tbiv	-15 °C
TOL	-20 °C
Pdh Tj = -7°C	2.94 kW
COP Tj = -7°C	3.12
Cdh	0.90
Pdh Tj = +2°C	1.85 kW
COP Tj = +2°C	4.61
Cdh	0.90
Pdh Tj = +7°C	1.42 kW
COP Tj = +7°C	6.34
Cdh	0.90
Pdh Tj = 12°C	1.76 kW

COP Tj = 12°C	8.00
Cdh	0.90
Pdh Tj = Tbiv	3.48 kW
COP Tj = Tbiv	2.52
Pdh Tj = TOL	3.48 kW
COP Tj = TOL	2.52
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	4.27 kW
Annual energy consumption Qhe	2757 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.48
COP Tj = -15°C (if TOL<-20°C)	2.52
Cdh	0.90