Login

Summary of	HPA-O 13 S Premium, HPA-O 13 CS Premium	Reg. No.	011-1W0231
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		
Subtype title	HPA-O 13 S Premium, HPA-O 13 CS Premium		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	4.7 kg		
Certification Date	08.01.2018		

Model: HPA-O 13 S Premium

Configure model	
Model name	HPA-O 13 S Premium
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.00 kW	7.52 kW
El input	1.66 kW	2.33 kW
COP	4.82	3.23

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 outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	173 %	136 %
Prated	15.00 kW	15.00 kW
SCOP	4.39	3.47
Tbiv	-5 °C	-5 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.00 kW	13.80 kW
COP Tj = -7°C	3.02	2.43
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.00 kW	7.70 kW
COP Tj = +2°C	4.40	3.37
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.10 kW	7.90 kW
COP Tj = +7°C	5.64	4.45
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	9.10 kW	9.00 kW

COP Tj = 12°C	8.11	6.66
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.80 kW	12.40 kW
COP Tj = Tbiv	3.18	2.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.60 kW	13.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	2.28
WTOL	65 °C	65 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	43 W	43 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7055 kWh	8940 kWh

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	206 %	155 %
Prated	8.00 kW	7.00 kW
SCOP	5.21	3.95

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.90 kW	7.40 kW
COP Tj = +2°C	3.89	2.59
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.10 kW	7.70 kW
COP Tj = +7°C	5.10	3.60
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	9.10 kW	9.00 kW
COP Tj = 12°C	7.72	6.11
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.90 kW	7.40 kW
COP Tj = Tbiv	3.89	2.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.60 kW	19.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	2.29
WTOL	65 °C	65 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	43 W	43 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2050 kWh	2367 kWh

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	153 %	126 %
Prated	21.00 kW	22.00 kW
SCOP	3.89	3.23
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	12.80 kW	13.50 kW
COP Tj = -7°C	3.21	2.65
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.10 kW	7.90 kW
COP Tj = +2°C	4.75	3.75
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.20 kW	8.00 kW
COP Tj = +7°C	5.95	4.86
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	9.10 kW	9.00 kW

COP Tj = 12°C	8.11	6.95
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	12.80 kW	13.50 kW
COP Tj = Tbiv	3.21	2.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.40 kW	19.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.38
WTOL	65 °C	65 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	43 W	43 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	21.17 kW	22.26 kW
Annual energy consumption Qhe	13312 kWh	16814 kWh
Pdh Tj = -15°C (if TOL<-20°C)	17.40	19.30
COP Tj = -15°C (if TOL<-20°C)	2.80	2.38
Cdh Tj = -15 °C	0.90	0.90

Model: HPA-O 13 CS Premium

Configure model	
Model name	HPA-O 13 CS Premium
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	8.00 kW	7.52 kW
El input	1.66 kW	2.33 kW
COP	4.82	3.23

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 outdoor	54 dB(A)	54 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	178 %	139 %
Prated	15.00 kW	15.00 kW
SCOP	4.53	3.55
Tbiv	-5 °C	-5 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	13.00 kW	13.80 kW
COP Tj = -7°C	3.02	2.43
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.00 kW	7.70 kW
COP Tj = +2°C	4.40	3.37
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.10 kW	7.90 kW
COP Tj = +7°C	5.64	4.45
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	9.10 kW	9.00 kW

COP Tj = 12°C	8.11	6.66
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.80 kW	12.40 kW
COP Tj = Tbiv	3.18	2.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.60 kW	13.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	2.28
WTOL	65 °C	65 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	43 W	43 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6839 kWh	8723 kWh

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	236 %	174 %
Prated	8.00 kW	7.00 kW
SCOP	5.97	4.44

Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.90 kW	7.40 kW
COP Tj = +2°C	3.89	2.59
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.10 kW	7.70 kW
COP Tj = +7°C	5.10	3.60
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	9.10 kW	9.00 kW
COP Tj = 12°C	7.72	6.11
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.90 kW	7.40 kW
COP Tj = Tbiv	3.89	2.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.60 kW	19.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	2.29
WTOL	65 °C	65 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	43 W	43 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1789 kWh	2107 kWh

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	154 %	137 %
Prated	21.00 kW	22.00 kW
SCOP	3.93	3.25
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	12.80 kW	13.50 kW
COP Tj = -7°C	3.21	2.65
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.10 kW	7.90 kW
COP Tj = +2°C	4.75	3.75
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.20 kW	8.00 kW
COP Tj = +7°C	5.95	4.86
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	9.10 kW	9.00 kW

COP Tj = 12°C	8.11	6.95
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	12.80 kW	13.50 kW
COP Tj = Tbiv	3.21	2.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.40 kW	19.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.38
WTOL	65 °C	65 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	43 W	43 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	21.17 kW	22.26 kW
Annual energy consumption Qhe	13182 kWh	16684 kWh
Pdh Tj = -15°C (if TOL<-20°C)	17.40	19.30
COP Tj = -15°C (if TOL<-20°C)	2.80	2.38
Cdh Tj = -15 °C	0.90	0.90