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#### This information was generated by the HP KEYMARK database on 21 Jun 2022

#### **Login**

Summary of	HPA-O 13 Premium, HPA-O 13 C Premium	Reg. No.	011-1W0232
Certificate Holder			
Name	sme 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 Premium, HPA-O 13 C Premium		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	4.7 kg		
Certification Date	08.01.2018		

# **Model: HPA-O 13 Premium**

Configure model		
Model name	HPA-O 13 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	3x400V 50Hz	

# Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	7.84 kW	7.36 kW		
El input	1.54 kW	2.33 kW		
СОР	5.09	3.16		

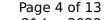
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Shutting on the heat transfer medium now	passeu	
Complete power supply failure	passed	
Starting and operating test	passed	

# **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
$\eta_{s}$	182 %	141 %
Prated	15.00 kW	15.00 kW
SCOP	4.63	3.59
Tbiv	-5 °C	-5 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	12.80 kW	13.80 kW
COP Tj = -7°C	2.98	2.48
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.30 kW	8.40 kW
$COP Tj = +2^{\circ}C$	4.72	3.51
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.00 kW	7.80 kW
$COP Tj = +7^{\circ}C$	6.16	4.61
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW





This information was generated by the HP KEYMARK database on 21 Jun 2022  $COP Tj = 12^{\circ}C$ 8.11 6.66 Cdh Tj = +12 °C 1.00 1.00 Pdh Tj = Tbiv11.80 kW 12.50 kW COP Tj = Tbiv 3.16 2.59 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 10 W 10 W PTO 10 W 10 W **PSB** 10 W 10 W **PCK** 38 W 38 W Supplementary Heater: Type of energy input Electricity Electricity Supplementary Heater: PSUP 0.21 kW 0.00 kW

### Warmer Climate

Annual energy consumption Qhe

EN 14825		
Low temperature	Medium temperature	
219 %	163 %	
8.00 kW	8.00 kW	
5.54	4.14	
	Low temperature 219 % 8.00 kW	

6689 kWh

8620 kWh





This information was genera		<u> </u>
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	8.30 kW	8.40 kW
COP Tj = +2°C	4.14	2.74
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = $+7^{\circ}$ C	7.90 kW	7.50 kW
$COPTj = +7^{\circ}C$	5.47	3.64
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW
COP Tj = 12°C	7.72	6.11
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	8.30 kW	8.40 kW
COP Tj = Tbiv	4.14	2.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.90 kW	18.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.31
WTOL	65 °C	65 °C
Poff	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity





Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1930 kWh	2581 kWh

# Colder Climate

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	159 %	130 %
Prated	21.00 kW	22.00 kW
SCOP	4.05	3.33
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	12.60 kW	13.30 kW
COP Tj = -7°C	3.13	2.67
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.30 kW	8.30 kW
COP Tj = +2°C	5.15	3.92
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.00 kW	7.90 kW
COP Tj = +7°C	6.57	5.12
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW





	<b>,</b> -	TIR database on 21 jun 2022
COP Tj = 12°C	8.11	6.95
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	14.10 kW	15.20 kW
COP Tj = Tbiv	2.90	2.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.70 kW	18.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.66	2.37
WTOL	65 °C	65 °C
Poff	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	20.59 kW	22.15 kW
Annual energy consumption Qhe	12796 kWh	16285 kWh
Pdh Tj = -15°C (if TOL<-20°C)	16.70	18.30
COP Tj = $-15$ °C (if TOL< $-20$ °C)	2.66	2.37
Cdh Tj = -15 °C	1.00	1.00

# **Model: HPA-O 13 C Premium**

Configure model		
Model name	HPA-O 13 C 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	3x400V 50Hz	

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	7.84 kW	7.36 kW	
El input	1.54 kW	2.33 kW	
СОР	5.09	3.16	

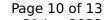
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

# **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
$\eta_{s}$	187 %	144 %
Prated	15.00 kW	15.00 kW
SCOP	4.76	3.67
Tbiv	-5 °C	-5 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	12.80 kW	13.80 kW
COP Tj = -7°C	2.98	2.48
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.30 kW	8.40 kW
COP Tj = +2°C	4.72	3.51
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.00 kW	7.80 kW
COP Tj = +7°C	6.16	4.61
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW





COP Tj = 12°C	8.11	6.66
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	11.80 kW	12.50 kW
COP Tj = Tbiv	3.16	2.59
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	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.21 kW	0.00 kW
Annual energy consumption Qhe	6513 kWh	8444 kWh

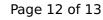
# Warmer Climate

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	246 %	177 %
Prated	8.00 kW	8.00 kW
SCOP	6.22	4.51





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Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	8.30 kW	8.40 kW
COP Tj = +2°C	4.14	2.74
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = $+7^{\circ}$ C	7.90 kW	7.50 kW
$COPTj = +7^{\circ}C$	5.47	3.64
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW
COP Tj = 12°C	7.72	6.11
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	8.30 kW	8.40 kW
COP Tj = Tbiv	4.14	2.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.90 kW	18.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.31
WTOL	65 °C	65 °C
Poff	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
РСК	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity





Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1718 kWh	2369 kWh

# Colder Climate

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	160 %	131 %
Prated	21.00 kW	22.00 kW
SCOP	4.08	3.35
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	12.60 kW	13.30 kW
COP Tj = -7°C	3.13	2.67
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.30 kW	8.30 kW
COP Tj = +2°C	5.15	3.92
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	8.00 kW	7.90 kW
COP Tj = +7°C	6.57	5.12
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	9.10 kW	9.00 kW



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COP Tj = 12°C	8.11	6.95
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	14.10 kW	15.20 kW
COP Tj = Tbiv	2.90	2.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.70 kW	18.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.66	2.37
WTOL	65 °C	65 °C
Poff	10 W	10 W
РТО	10 W	10 W
PSB	10 W	10 W
PCK	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	20.59 kW	22.15 kW
Annual energy consumption Qhe	12690 kWh	16179 kWh
Pdh Tj = -15°C (if TOL<-20°C)	16.70	18.30
COP Tj = $-15$ °C (if TOL< $-20$ °C)	2.66	2.37
Cdh Tj = -15 °C	1.00	1.00