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Summary of	HPA-O 05.1 CS Premium, HPA-O 07.1 CS Premium	Reg. No.	011-1W0406	
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 05.1 CS Premium, HPA-O 07.1 CS Premium			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R454C			
Mass of Refrigerant	3 kg			
Certification Date	20.05.2021			
Testing basis	HP KEYMARK certification scheme rules rev. 8			



Model: HPA-O 05.1 CS Premium

Configure model		
Model name	HPA-O 05.1 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	3x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	3.31 kW	2.70 kW	
El input	0.61 kW	0.82 kW	
СОР	5.42	3.29	

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

Warmer Climate





EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	208 %	143 %	
Prated	3.00 kW	3.00 kW	
SCOP	5.26	3.66	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	3.03 kW	2.97 kW	
COP Tj = +2°C	4.29	2.86	
Cdh Tj = +2 °C	0.90	0.90	
Pdh Tj = +7°C	3.07 kW	2.72 kW	
COP Tj = +7°C	5.52	3.61	
Cdh Tj = +7 °C	0.90	0.90	
Pdh Tj = 12°C	3.69 kW	3.46 kW	
COP Tj = 12°C	7.51	5.33	
Cdh Tj = +12 °C	0.90	0.90	
Pdh Tj = Tbiv	3.03 kW	2.97 kW	

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COP Tj = Tbiv	4.29	2.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.03 kW	2.97 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.29	2.86
WTOL	75 °C	75 °C
Poff	12 W	12 W
РТО	10 W	10 W
PSB	12 W	12 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	768 kWh	1085 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
Low temperature	Medium temperature	
151 %	126 %	
8.20 kW	7.80 kW	
	Low temperature	





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SCOP	3.84	3.23
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.94 kW	4.70 kW
$COP Tj = -7^{\circ}C$	3.67	2.94
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.00 kW	2.86 kW
$COPTj = +2^{\circ}C$	5.03	4.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	3.21 kW	3.08 kW
$COPTj = +7^{\circ}C$	6.81	5.42
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.74 kW	3.63 kW
COP Tj = 12°C	8.20	6.56
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.94 kW	4.70 kW
COP Tj = Tbiv	3.67	2.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.04 kW	2.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.20
WTOL	75 °C	75 °C
Poff	12 W	12 W
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PTO	10 W	10 W
PSB	12 W	12 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.13 kW	5.19 kW
Annual energy consumption Qhe	5239 kWh	5927 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.00	3.64
COP Tj = -15°C (if TOL $<$ -20°C)	2.93	2.20
Cdh Tj = -15 °C	0.90	0.90

Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	185 %	151 %
Prated	5.50 kW	5.60 kW
SCOP	4.70	3.85
Tbiv	-7 °C	-7 °C





TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.86 kW	4.89 kW
COP Tj = -7°C	3.40	2.64
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.95 kW	3.03 kW
COP Tj = +2°C	4.58	3.80
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.16 kW	2.99 kW
$COPTj = +7^{\circ}C$	6.32	4.84
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.74 kW	3.57 kW
COP Tj = 12°C	8.19	6.09
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.68 kW	4.89 kW
COP Tj = Tbiv	3.40	2.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.43 kW	4.13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.22
WTOL	75 °C	75 °C
Poff	12 W	12 W
РТО	10 W	10 W
PSB	12 W	12 W



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PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	1.50 kW
Annual energy consumption Qhe	2415 kWh	3021 kWh



Model: HPA-O 07.1 CS Premium

Configure model		
Model name	HPA-O 07.1 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	3x230V 50Hz	

Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	3.31 kW	2.70 kW		
El input	0.61 kW	0.82 kW		
COP	5.42	3.29		

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

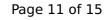
Warmer Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	230 %	163 %
Prated	4.30 kW	4.30 kW
SCOP	5.84	4.14
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.30 kW	4.30 kW
COP Tj = +2°C	4.30	2.93
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	3.10 kW	2.80 kW
$COP Tj = +7^{\circ}C$	5.77	3.90
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.70 kW	3.49 kW
COP Tj = 12°C	7.69	5.53
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.30 kW	4.30 kW

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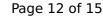


COP Tj = Tbiv	4.30	2.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.30 kW	4.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.30	2.93
WTOL	75 °C	75 °C
Poff	12 W	12 W
РТО	10 W	10 W
PSB	12 W	12 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	984 kWh	1388 kWh

Colder Climate

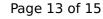
EN 12102-1			
Low temperature Medium temperature			
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
	151 %	128 %
	11.80 kW	11.90 kW
	11.80 kW	11.90 kW





SCOP	3.84	3.26
Tbiv	-7 °C	-7 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.15 kW	7.21 kW
COP Tj = -7°C	3.17	2.70
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.35 kW	4.39 kW
COP Tj = +2°C	5.24	4.31
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.24 kW	3.15 kW
COP Tj = +7°C	7.18	5.99
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.75 kW	3.66 kW
COP Tj = 12°C	8.41	6.88
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.15 kW	7.21 kW
COP Tj = Tbiv	3.17	2.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.25 kW	4.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2.22
WTOL	75 °C	75 °C
Poff	12 W	12 W



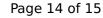


10 W	10 W
12 W	12 W
10 W	10 W
Electricity	Electricity
6.56 kW	6.93 kW
7574 kWh	9005 kWh
6.49	6.29
2.74	2.22
0.90	0.90
	12 W 10 W Electricity 6.56 kW 7574 kWh 6.49 2.74

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
Low temperature	Medium temperature	
192 %	153 %	
8.10 kW	8.00 kW	
4.88	3.90	
-7 °C	-7 °C	
	Low temperature 192 % 8.10 kW 4.88	





TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.13 kW	7.04 kW
COP Tj = -7°C	3.00	2.43
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = $+2$ °C	4.34 kW	4.28 kW
$COPTj = +2^{\circ}C$	4.82	3.79
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	3.19 kW	3.05 kW
$COPTj = +7^{\circ}C$	6.66	5.22
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.75 kW	3.60 kW
COP Tj = 12°C	8.40	6.33
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.13 kW	7.04 kW
COP Tj = Tbiv	3.00	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	6.86 kW	6.53 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.43
WTOL	75 °C	75 °C
Poff	12 W	12 W
РТО	10 W	10 W
PSB	12 W	12 W



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PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.20 kW	1.43 kW
Annual energy consumption Qhe	3413 kWh	4219 kWh