

This information was generated by the HP KEYMARK database on 18 Mar 2022

[Login](#)

[Login](#)

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
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

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
COP Tj = +7°C	6.32	4.84
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.74 kW	3.57 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

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
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	1.07 kW	1.50 kW
Annual energy consumption Qhe	2415 kWh	3021 kWh

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

This information was generated by the HP KEYMARK database on 18 Mar 2022

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
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

This information was generated by the HP KEYMARK database on 18 Mar 2022

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	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	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
η_s	151 %	126 %
Prated	8.20 kW	7.80 kW
SCOP	3.84	3.23
T _{biv}	-7 °C	-7 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	4.94 kW	4.70 kW
COP T _j = -7°C	3.67	2.94

This information was generated by the HP KEYMARK database on 18 Mar 2022

Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.00 kW	2.86 kW
COP Tj = +2°C	5.03	4.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.21 kW	3.08 kW
COP Tj = +7°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
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

This information was generated by the HP KEYMARK database on 18 Mar 2022

Annual energy consumption Q_{he}	5239 kWh	5927 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	4.00	3.64
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.93	2.20
$C_{dh} T_j = -15^{\circ}\text{C}$	0.90	0.90

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

Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

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	192 %	153 %
Prated	8.10 kW	8.00 kW
SCOP	4.88	3.90
Tbiv	-7 °C	-7 °C
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
COP Tj = +2°C	4.82	3.79
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.19 kW	3.05 kW
COP Tj = +7°C	6.66	5.22
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.75 kW	3.60 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

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
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	1.20 kW	1.43 kW
Annual energy consumption Qhe	3413 kWh	4219 kWh

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

This information was generated by the HP KEYMARK database on 18 Mar 2022

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°C	3.10 kW	2.80 kW
COP Tj = +7°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
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

This information was generated by the HP KEYMARK database on 18 Mar 2022

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	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	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
η_s	151 %	128 %
Prated	11.80 kW	11.90 kW
SCOP	3.84	3.26
T _{biv}	-7 °C	-7 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	7.15 kW	7.21 kW
COP T _j = -7°C	3.17	2.70

This information was generated by the HP KEYMARK database on 18 Mar 2022

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
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	6.56 kW	6.93 kW

This information was generated by the HP KEYMARK database on 18 Mar 2022

Annual energy consumption Q_{he}	7574 kWh	9005 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	6.49	6.29
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.74	2.22
$C_{dh} T_j = -15^{\circ}\text{C}$	0.90	0.90