

Subtype HPA-O 6/8 CS Plus

Certificate Holder	STIEBEL ELTRON GmbH & Co KG
Address	Dr. Stiebel Straße 33
ZIP	37603
City	Holzminden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	HPA-O 6/8 CS Plus
Registration number	011-1W0284
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2 kg
Certification Date	03.12.2018
Testing basis	HP KEYMARK certification scheme rules rev. no. 5

**Model HPA-O 6 CS Plus + HSBB 200, HSBB 200 S**

Model name	HPA-O 6 CS Plus + HSBB 200, HSBB 200 S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.70
Heating up time	01:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	177 %	125 %

Prated	6.80 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	6.02 kW	5.10 kW
COP Tj = -7°C	2.90	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.89 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.02 kW	6.10 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.89	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	7.55 kW
Annual energy consumption Qhe	3120 kWh	4865 kWh

**Model HPA-O 6 CS Plus, low temperature, all climates**

Model name	HPA-O 6 CS Plus, low temperature, all climates
Application	Heating (low temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	
EI input	1.02 kW	
COP	4.76	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	
Prated	6.80 kW	
SCOP	4.50	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	6.02 kW	
COP Tj = -7°C	2.90	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	3.89 kW	
COP Tj = +2°C	4.35	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	3.50 kW	
COP Tj = +7°C	6.60	

Cdh Tj = +7 °C	0.90
Pdh Tj = 12°C	3.39 kW
COP Tj = 12°C	6.78
Cdh Tj = +12 °C	0.90
Pdh Tj = Tbiv	6.02 kW
COP Tj = Tbiv	2.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
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	3120 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	151 %	
Prated	5.80 kW	
SCOP	3.85	
Tbiv	-15 °C	
TOL	-20 °C	
Pdh Tj = -7°C	3.51 kW	
COP Tj = -7°C	3.30	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	2.28 kW	
COP Tj = +2°C	4.55	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	2.79 kW	
COP Tj = +7°C	5.81	
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	3.39 kW	
COP Tj = 12°C	6.71	
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	5.80 kW	
COP Tj = Tbiv	2.79	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
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	5.80 kW
Annual energy consumption Qhe	3713 kWh
Pdh Tj = -15°C (if TOL)	5.80
COP Tj = -15°C (if TOL)	2.70
Cdh Tj = -15 °C	0.90

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	213 %	
Prated	6.30 kW	
SCOP	5.41	
Tbiv	2 °C	
TOL	2 °C	
Pdh Tj = +2°C	6.30 kW	
COP Tj = +2°C	3.60	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	4.10 kW	
COP Tj = +7°C	5.25	
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	3.37 kW	
COP Tj = 12°C	6.61	
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	6.30 kW	
COP Tj = Tbiv	3.60	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.60	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	

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	1556 kWh

**Model HPA-O 8 CS Plus + HSBB 200, HSBB 200S**

Model name	HPA-O 8 CS Plus + HSBB 200, HSBB 200S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.70
Heating up time	01:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	177 %	125 %

Prated	9.19 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	8.13 kW	5.10 kW
COP Tj = -7°C	2.72	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.22 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.13 kW	6.10 kW
COP Tj = Tbiv	2.72	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.92 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	1.27 kW	7.55 kW
Annual energy consumption Qhe	4218 kWh	4865 kWh

**Model HPA-O 8 CS Plus, low temperature, all climates**

Model name	HPA-O 8 CS Plus, low temperature, all climates
Application	Heating (low temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	
EI input	1.02 kW	
COP	4.76	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	
Prated	9.19 kW	
SCOP	4.50	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	8.13 kW	
COP Tj = -7°C	2.72	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	5.22 kW	
COP Tj = +2°C	4.35	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	3.50 kW	
COP Tj = +7°C	6.60	

Cdh Tj = +7 °C	0.90
Pdh Tj = 12°C	3.39 kW
COP Tj = 12°C	6.78
Cdh Tj = +12 °C	0.90
Pdh Tj = Tbiv	8.13 kW
COP Tj = Tbiv	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
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	1.27 kW
Annual energy consumption Qhe	4218 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	147 %	
Prated	8.70 kW	
SCOP	3.75	
Tbiv	-15 °C	
TOL	-20 °C	
Pdh Tj = -7°C	5.27 kW	
COP Tj = -7°C	3.17	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	3.21 kW	
COP Tj = +2°C	4.46	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	2.79 kW	
COP Tj = +7°C	5.81	
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	3.39 kW	
COP Tj = 12°C	6.71	
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	7.10 kW	
COP Tj = Tbiv	2.54	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
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	8.70 kW
Annual energy consumption Qhe	5722 kWh
Pdh Tj = -15°C (if TOL)	7.10
COP Tj = -15°C (if TOL)	2.54
Cdh Tj = -15 °C	0.90

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	215 %	
Prated	7.60 kW	
SCOP	5.44	
Tbiv	2 °C	
TOL	2 °C	
Pdh Tj = +2°C	7.60 kW	
COP Tj = +2°C	3.44	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	4.89 kW	
COP Tj = +7°C	5.15	
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	3.37 kW	
COP Tj = 12°C	6.61	
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	7.60 kW	
COP Tj = Tbiv	3.44	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.60 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.44	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	

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	1867 kWh

**Model HPA-O 6 CS Plus + HSBC 200, HSBC 200S**

Model name	HPA-O 6 CS Plus + HSBC 200, HSBC 200S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.70
Heating up time	01:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	177 %	125 %

Prated	6.80 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	6.02 kW	5.10 kW
COP Tj = -7°C	2.90	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.89 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.94	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.02 kW	6.10 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	7.55 kW
Annual energy consumption Qhe	3120 kWh	4865 kWh

**Model HPA-O 8 CS Plus + HSBC 200, HSBC 200S**

Model name	HPA-O 8 CS Plus + HSBC 200, HSBC 200S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.70
Heating up time	01:50 h:min
Standby power input	35.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	245 l

**EN 14511-4 | Heating**

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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	177 %	125 %

Prated	9.19 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	8.13 kW	5.10 kW
COP Tj = -7°C	2.72	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.22 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.13 kW	6.10 kW
COP Tj = Tbiv	2.72	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.92 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	1.27 kW	7.55 kW
Annual energy consumption Qhe	4218 kWh	4865 kWh

**Model HPA-O 6 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile M"**

Model name	HPA-O 6 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile M"
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water**
**EN 16147 | Average Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	93 %
COP	2.13
Heating up time	01:16 h:min
Standby power input	39.6 W
Reference hot water temperature	53.9 °C
Mixed water at 40°C	262 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	125 %

Prated	6.80 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	6.02 kW	5.10 kW
COP Tj = -7°C	2.90	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.89 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.02 kW	6.10 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.89	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	7.55 kW
Annual energy consumption Qhe	3120 kWh	4865 kWh

**Model HPA-O 6 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile L"**

Model name	HPA-O 6 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile L"
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	102 %
COP	2.43
Heating up time	2:15 h:min
Standby power input	37.7 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	253 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	125 %

Prated	6.80 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	6.02 kW	5.10 kW
COP Tj = -7°C	2.90	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.89 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.02 kW	6.10 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.89	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	7.55 kW
Annual energy consumption Qhe	3120 kWh	4865 kWh

**Model HPA-O 8 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile M"**

Model name	HPA-O 8 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile M"
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water**
**EN 16147 | Average Climate**

Declared load profile	M
Efficiency $\eta_{DHW}$	93 %
COP	2.12
Heating up time	1:16 h:min
Standby power input	39.6 W
Reference hot water temperature	53.9 °C
Mixed water at 40°C	262 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	125 %

Prated	9.19 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	8.13 kW	5.10 kW
COP Tj = -7°C	2.72	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.22 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.13 kW	6.10 kW
COP Tj = Tbiv	2.72	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.92 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	1.27 kW	7.55 kW
Annual energy consumption Qhe	4218 kWh	4865 kWh

**Model HPA-O 8 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile L"**

Model name	HPA-O 8 CS Plus + HSBB/HSBC 180 (S) Plus (GB) "Profile L"
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	n/a
Off-peak product	n/a

**Outdoor Air/Water**
**EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	102 %
COP	2.43
Heating up time	2:15 h:min
Standby power input	37.7 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	253 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
COP	4.76	2.73

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	125 %

Prated	9.19 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	8.13 kW	5.10 kW
COP Tj = -7°C	2.72	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.22 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.60 kW
COP Tj = +7°C	6.60	4.56
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.39 kW	3.30 kW
COP Tj = 12°C	6.78	5.98
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.13 kW	6.10 kW
COP Tj = Tbiv	2.72	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.92 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
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	1.27 kW	7.55 kW
Annual energy consumption Qhe	4218 kWh	4865 kWh

**Model HPA-O 8 CS Plus Int**

Model name	HPA-O 8 CS Plus Int
Application	Heating (low temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	n/a
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.86 kW	
EI input	1.02 kW	
COP	4.76	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	177 %	
Prated	9.19 kW	
SCOP	4.50	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	8.13 kW	
COP Tj = -7°C	2.72	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	5.22 kW	
COP Tj = +2°C	4.35	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	3.50 kW	
COP Tj = +7°C	6.60	

Cdh Tj = +7 °C	0.90
Pdh Tj = 12°C	3.39 kW
COP Tj = 12°C	6.78
Cdh Tj = +12 °C	0.90
Pdh Tj = Tbiv	8.13 kW
COP Tj = Tbiv	2.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
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	1.27 kW
Annual energy consumption Qhe	4218 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	147 %	
Prated	8.70 kW	
SCOP	3.75	
Tbiv	-15 °C	
TOL	-20 °C	
Pdh Tj = -7°C	5.27 kW	
COP Tj = -7°C	3.17	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	3.21 kW	
COP Tj = +2°C	4.46	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	2.79 kW	
COP Tj = +7°C	5.81	
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	3.39 kW	
COP Tj = 12°C	6.71	
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	7.10 kW	
COP Tj = Tbiv	2.54	

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90
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	8.70 kW
Annual energy consumption Qhe	5722 kWh
Pdh Tj = -15°C (if TOL	7.10
COP Tj = -15°C (if TOL	2.54
Cdh Tj = -15 °C	0.90

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	215 %	
Prated	7.60 kW	
SCOP	5.44	
Tbiv	2 °C	
TOL	2 °C	
Pdh Tj = +2°C	7.60 kW	
COP Tj = +2°C	3.44	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	4.89 kW	
COP Tj = +7°C	5.15	
Cdh Tj = +7 °C	0.90	
Pdh Tj = 12°C	3.37 kW	
COP Tj = 12°C	6.61	
Cdh Tj = +12 °C	0.90	
Pdh Tj = Tbiv	7.60 kW	
COP Tj = Tbiv	3.44	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.60 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.44	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	

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	1867 kWh