

This information was generated by the HP KEYMARK database on 23 Jun 2022

[Login](#)

Summary of	WPL-A 09/12 HK 400 Plus	Reg. No.	011-1W0440
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	WPL-A 09/12 HK 400 Plus		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	5.5 kg		
Certification Date	14.10.2021		
Testing basis	HP KEYMARK certification scheme rules rev. 8		

Model: WPL-A 09 HK 400 Plus

Configure model	
Model name	WPL-A 09 HK 400 Plus
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	8.66 kW	7.90 kW
El input	1.88 kW	2.75 kW
COP	4.61	2.87

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

This information was generated by the HP KEYMARK database on 23 Jun 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	187 %	128 %
Prated	7.90 kW	8.14 kW
SCOP	4.76	3.28
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.90 kW	8.14 kW
COP Tj = +2°C	3.75	2.78
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.76 kW	8.04 kW
COP Tj = +7°C	4.77	3.40
Cdh Tj = +7 °C	0.990	0.900
Pdh Tj = 12°C	9.09 kW	9.03 kW
COP Tj = 12°C	5.41	4.48
Cdh Tj = +12 °C	0.980	0.900
Pdh Tj = Tbiv	7.90 kW	8.14 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP $T_j = T_{biv}$	3.75	2.78
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.90 kW	8.14 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.75	2.78
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$		
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	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	2218 kWh	3314 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	133 %	112 %

This information was generated by the HP KEYMARK database on 23 Jun 2022

Prated	14.53 kW	15.94 kW
SCOP	3.40	2.88
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	8.80 kW	9.65 kW
COP Tj = -7°C	3.27	2.82
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.19 kW	7.58 kW
COP Tj = +2°C	4.08	3.55
Cdh Tj = +2 °C	0.980	0.900
Pdh Tj = +7°C	9.02 kW	8.57 kW
COP Tj = +7°C	5.21	4.46
Cdh Tj = +7 °C	0.980	0.900
Pdh Tj = 12°C	9.10 kW	9.06 kW
COP Tj = 12°C	5.53	4.88
Cdh Tj = +12 °C	0.980	0.900
Pdh Tj = Tbiv	8.80 kW	9.65 kW
COP Tj = Tbiv	3.27	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.38 kW	7.53 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.54	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

This information was generated by the HP KEYMARK database on 23 Jun 2022

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	14.53 kW	15.94 kW
Annual energy consumption Qhe	10540 kWh	13625 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	159 %	125 %
Prated	10.29 kW	11.45 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

SCOP	4.04	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.10 kW	10.13 kW
COP Tj = -7°C	3.11	2.56
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.30 kW	7.75 kW
COP Tj = +2°C	3.93	3.31
Cdh Tj = +2 °C	0.990	0.900
Pdh Tj = +7°C	8.92 kW	8.38 kW
COP Tj = +7°C	5.04	4.14
Cdh Tj = +7 °C	0.980	0.900
Pdh Tj = 12°C	9.10 kW	9.05 kW
COP Tj = 12°C	5.53	4.74
Cdh Tj = +12 °C	0.980	0.900
Pdh Tj = Tbiv	9.10 kW	10.13 kW
COP Tj = Tbiv	3.11	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.52 kW	9.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.94	2.26
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C

This information was generated by the HP KEYMARK database on 23 Jun 2022

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	1.77 kW	2.05 kW
Annual energy consumption Q _{he}	5265 kWh	7377 kWh

Model: WPL-A 12 HK 400 Plus

Configure model	
Model name	WPL-A 12 HK 400 Plus
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	8.66 kW	7.90 kW
El input	1.88 kW	2.75 kW
COP	4.61	2.87

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	55 dB(A)	55 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	188 %	128 %
Prated	8.10 kW	8.14 kW
SCOP	4.77	3.28
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.10 kW	8.14 kW
COP Tj = +2°C	3.74	2.78
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.76 kW	8.04 kW
COP Tj = +7°C	4.77	3.40
Cdh Tj = +7 °C	0.990	0.900
Pdh Tj = 12°C	9.09 kW	9.03 kW
COP Tj = 12°C	5.41	4.48
Cdh Tj = +12 °C	0.980	0.900
Pdh Tj = Tbiv	8.10 kW	8.41 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP $T_j = T_{biv}$	3.74	2.78
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.10 kW	8.14 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.74	2.78
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$		
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	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	2271 kWh	3314 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	133 %	115 %

This information was generated by the HP KEYMARK database on 23 Jun 2022

Prated	18.44 kW	19.19 kW
SCOP	3.39	2.94
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	11.16 kW	11.61 kW
COP Tj = -7°C	3.15	2.69
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.13 kW	7.49 kW
COP Tj = +2°C	4.16	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	9.05 kW	8.61 kW
COP Tj = +7°C	5.25	4.53
Cdh Tj = +7 °C	0.980	0.900
Pdh Tj = 12°C	9.10 kW	9.06 kW
COP Tj = 12°C	5.55	4.91
Cdh Tj = +12 °C	0.980	0.900
Pdh Tj = Tbiv	11.16 kW	11.61 kW
COP Tj = Tbiv	3.15	2.69
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.29 kW	9.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.47	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		

This information was generated by the HP KEYMARK database on 23 Jun 2022

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	18.44 kW	19.19 kW
Annual energy consumption Q _{he}	13397 kWh	16099 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)		
COP T _j = -15°C (if TOL<-20°C)		
C _{dh} T _j = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	159 %	130 %
Prated	12.80 kW	13.42 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

SCOP	4.05	3.32
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.30 kW	11.87 kW
COP Tj = -7°C	2.84	2.43
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.24 kW	7.67 kW
COP Tj = +2°C	4.01	3.42
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.94 kW	8.41 kW
COP Tj = +7°C	5.08	4.19
Cdh Tj = +7 °C	0.980	0.900
Pdh Tj = 12°C	9.10 kW	9.05 kW
COP Tj = 12°C	5.55	4.76
Cdh Tj = +12 °C	0.980	0.900
Pdh Tj = Tbiv	11.32 kW	11.87 kW
COP Tj = Tbiv	2.84	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.58 kW	11.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.16
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C

This information was generated by the HP KEYMARK database on 23 Jun 2022

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	2.22 kW	2.32 kW
Annual energy consumption Qhe	6537 kWh	8358 kWh