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Login

Summary of	WPL 13/17 ACS classic	Reg. No.	011-1W0062	
Certificate Holder				
Name	STIEBEL ELTRON GmbH & Co K	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 13/17 ACS classic	WPL 13/17 ACS classic		
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410A			
Mass of Refrigerant	2 kg			
Certification Date	19.01.2017	19.01.2017		
Testing basis	HP KEYMARK certification scheme rules rev. no. 6			



Model: WPL 13 ACS classic + HSBC 200, HSBC 200S

Configure model		
Model name WPL 13 ACS classic + HSBC 200, HSBC 200S		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

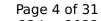
EN 14511-2		
Low temperature Medium temperature		
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
СОР	4.76	2.73

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	27 dB(A)	27 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

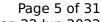
EN 14825		
	Low temperature	Medium temperature
η_{s}	177 %	125 %
Prated	6.80 kW	7.55 kW
SCOP	4.50	3.21
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-7 °C
Pdh Tj = -7°C	6.02 kW	5.10 kW
COP Tj = -7°C	2.90	1.97
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.89 kW	4.10 kW
COP Tj = +2°C	4.35	3.25
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +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	2.80	1.97
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	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

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	113 %	
СОР	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 I	



Model: WPL 17 ACS classic + HSBC 200, HSBC 200S

Configure model		
Model name WPL 17 ACS classic + HSBC 200, HSBC 200S		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
Low temperature Medium temperature		
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
СОР	4.76	2.73

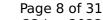
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	27 dB(A)	27 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{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
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	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

Domestic Hot Water (DHW)



EN 16147		
Declared load profile	L	
Efficiency ηDHW	113 %	
СОР	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 I	



Model: WPL 13 ACS classic + HSBB 200, HSBB 200 S

Configure model			
Model name	WPL 13 ACS classic + HSBB 200, HSBB 200 S		
Application	Heating + DHW + low temp		
Units	Indoor + Outdoor		
Climate Zone	n/a		
Reversibility	Yes		
Cooling mode application (optional)	n/a		

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.86 kW	4.31 kW	
El input	1.02 kW	1.58 kW	
СОР	4.76	2.73	

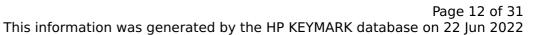
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	27 dB(A)	27 dB(A)	
Sound power level outdoor	57 dB(A)	57 dB(A)	

Low temperature 177 % 6.80 kW 4.50 -7 °C	Medium temperature 125 % 7.55 kW 3.21
6.80 kW 4.50	7.55 kW
4.50	
	3.21
-7 °C	
	-5 °C
-10 °C	-7 °C
6.02 kW	5.10 kW
2.90	1.97
0.90	0.90
3.89 kW	4.10 kW
4.35	3.25
0.90	0.90
3.50 kW	2.60 kW
6.60	4.56
0.90	0.90
	-10 °C 6.02 kW 2.90 0.90 3.89 kW 4.35 0.90 3.50 kW 6.60





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
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	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

Domestic Hot Water (DHW)



EN 16147	
Declared load profile	L
Efficiency ηDHW	113 %
СОР	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 I

Model: WPL 13 ACS classic, low temperature, all climates

Configure model		
Model name	WPL 13 ACS classic, low temperature, all climates	
Application	Heating (low temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2	
	Low temperature
Heat output	4.86 kW
El input	1.02 kW
СОР	4.76

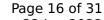
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

EN 14825	
	Low temperature
η_{s}	213 %
Prated	6.30 kW
SCOP	5.41
Tbiv	2 °C
TOL	2 °C
Pdh Tj = +2°C	6.30 kW
$COP Tj = +2^{\circ}C$	3.60
Cdh Tj = +2 °C	0.90
Pdh Tj = +7°C	4.10 kW
$COP Tj = +7^{\circ}C$	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



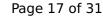


COP Tj = Tbiv	3.60
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.60
WTOL	60 °C
Poff	17 W
РТО	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	1556 kWh

Colder Climate

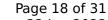
EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

Low temperature
151 %
5.80 kW





Tol. -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 6.71 Cdh Tj = +12 °C 6.71 Cdh Tj = Tol °C 0.90 Pdh Tj = Tol °C 5.80 kW COP Tj = Tbiv 5.80 kW COP Tj = Tol or Pdh Tj = Tdesignh if TOL < Tdesignh 4.50 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.40 WTOL 60 °C Poff 1.7 W	SCOP	3.85
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 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Tbiv	-15 °C
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 3.81 Cdh Tj = +7 °C 5.81 Cdh Tj = +2°C 0.90 Pdh Tj = 12°C 0.90 Pdh Tj = Tol or Pdh Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 WTOL 0.90 4.50 kW COP Tj = Tol or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 San kw COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 0.90 WTOL 0.90	TOL	-20 °C
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 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = -7°C	3.51 kW
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 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	COP Tj = -7°C	3.30
COP Tj = +2°C	Cdh Tj = -7 °C	0.90
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 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = $+2^{\circ}$ C	2.28 kW
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 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	COP Tj = +2°C	4.55
COP Tj = +7°C	Cdh Tj = +2 °C	0.90
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 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Pdh Tj = $+7^{\circ}$ C	2.79 kW
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 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	$COP Tj = +7^{\circ}C$	5.81
COP Tj = 12°C 6.71 Cdh Tj = +12 °C 0.90 Pdh Tj = Tbiv 5.80 kW COP Tj = Tbiv 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	Cdh Tj = +7 °C	0.90
Cdh Tj = +12 °C 0.90 Pdh Tj = Tbiv 5.80 kW COP Tj = Tbiv 2.70 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 WTOL 60 °C	Pdh Tj = 12°C	3.39 kW
Pdh Tj = Tbiv COP Tj = Tbiv 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.40 WTOL 60 °C	COP Tj = 12°C	6.71
COP Tj = Tbiv 2.70 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.40 WTOL 60 °C	Cdh Tj = +12 °C	0.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.40 WTOL	Pdh Tj = Tbiv	5.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh WTOL 60 °C	COP Tj = Tbiv	2.70
WTOL 60 °C	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
Poff 17 W	WTOL	60 °C
	Poff	17 W

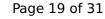




РТО	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	5.80 kW
Annual energy consumption Qhe	3713 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80
COP Tj = -15°C (if TOL<-20°C)	2.70
Cdh Tj = -15 °C	0.90

EN 12102-1		
	Low temperature	
Sound power level outdoor	57 dB(A)	

EN 14825	
	Low temperature
η_{s}	177 %
Prated	6.80 kW
SCOP	4.50
Tbiv	-7 °C





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TOL	-10 °C
Pdh Tj = -7°C	6.02 kW
$COP Tj = -7^{\circ}C$	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
$COP Tj = +7^{\circ}C$	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
WTOL	60 °C
Poff	17 W
РТО	30 W
PSB	17 W



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PCK	5 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.50 kW
Annual energy consumption Qhe	3120 kWh



Model: WPL 17 ACS classic + HSBB 200, HSBB 200S

Configure model		
Model name	WPL 17 ACS classic + HSBB 200, HSBB 200S	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.86 kW	4.31 kW
El input	1.02 kW	1.58 kW
СОР	4.76	2.73

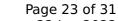
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	27 dB(A)	27 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{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 = $+2^{\circ}$ 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
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	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

Domestic Hot Water (DHW)



EN 16147		
Declared load profile	L	
Efficiency ηDHW	113 %	
СОР	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 I	

Model: WPL 17 ACS classic, low temperature, all climates

Configure model	
Model name WPL 17 ACS classic, low temperature, all climates	
Application	Heating (low temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2	
	Low temperature
Heat output	4.86 kW
El input	1.02 kW
СОР	4.76

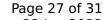
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

EN 14825	
	Low temperature
η_{s}	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
$COP Tj = +7^{\circ}C$	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



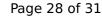


COP Tj = Tbiv	3.44
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.44
WTOL	60 °C
Poff	17 W
PTO	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	1867 kWh

Colder Climate

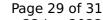
EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

EN 14825	
Low temperature	
147 %	
8.70 kW	
_	





SCOP	3.75
Tbiv	-15 °C
TOL	-20 °C
Pdh Tj = -7°C	5.27 kW
$COP Tj = -7^{\circ}C$	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 = $+7^{\circ}$ C	2.79 kW
$COP Tj = +7^{\circ}C$	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
WTOL	60 °C
Poff	17 W

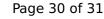




PTO	30 W
PSB	17 W
PCK	5 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	8.70 kW
Annual energy consumption Qhe	5722 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.10
COP Tj = -15°C (if TOL<-20°C)	2.54
Cdh Tj = -15 °C	0.90

EN 12102-1	
	Low temperature
Sound power level outdoor	57 dB(A)

EN 14825	
Low temperature	
177 %	
9.19 kW	
4.50	
-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
$COP Tj = +7^{\circ}C$	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
WTOL	60 °C
Poff	17 W
РТО	30 W
PSB	17 W
	,



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PCK	5 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	1.27 kW
Annual energy consumption Qhe	4218 kWh