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Summary of	WPL 09 I(K)CS classic	Reg. No.	011-1W0223
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		
Name of testing laboratory	VDE Prüf- und Zertifizierungsinstitut GmbH		
Subtype title	WPL 09 I(K)CS classic		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.2 kg		
Certification Date	04.09.2019		
Testing basis	HP KEYMARK certification scheme rules rev. no. 5		

Model: WPL 09 IKCS classic

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.06 kW	2.09 kW
El input	0.44 kW	0.81 kW
COP	4.68	2.59
Indoor water flow rate	0.40 m³/h	0.40 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	175 %	128 %
Prated	4.70 kW	4.50 kW
SCOP	4.46	3.28
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.17 kW	3.94 kW
COP Tj = -7°C	3.09	2.22
Pdh Tj = +2°C	2.86 kW	2.54 kW
COP Tj = +2°C	4.29	3.10
Pdh Tj = +7°C	2.08 kW	2.04 kW
COP Tj = +7°C	6.24	4.53
Pdh Tj = 12°C	2.02 kW	1.97 kW
COP Tj = 12°C	8.31	6.44
Pdh Tj = Tbiv	4.17 kW	3.94 kW
COP Tj = Tbiv	3.09	2.22

Pdh Tj = TOL	4.06 kW	2.96 kW
COP Tj = TOL	2.71	1.94
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.64 kW	1.54 kW
Annual energy consumption Qhe	2187 kWh	2837 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	198 %	136 %
Prated	2.62 kW	2.40 kW

SCOP	5.01	3.47
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.62 kW	2.37 kW
COP Tj = +2°C	3.76	2.28
Pdh Tj = +7°C	2.07 kW	1.84 kW
COP Tj = +7°C	5.19	3.35
Pdh Tj = 12°C	2.00 kW	1.94 kW
COP Tj = 12°C	7.92	5.39
Pdh Tj = Tbiv	2.62 kW	2.37 kW
COP Tj = Tbiv	3.76	2.28
Pdh Tj = TOL	2.62 kW	2.37 kW
COP Tj = TOL	3.76	2.28
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.03 kW

Annual energy consumption Qhe	698 kWh	923 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	150 %	116 %
Prated	6.80 kW	6.70 kW
SCOP	3.83	2.98
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.11 kW	4.05 kW
COP Tj = -7°C	3.37	2.57
Cdh	0.90	0.90
Pdh Tj = +2°C	3.01 kW	2.60 kW
COP Tj = +2°C	5.17	3.55
Cdh	0.90	0.90
Pdh Tj = +7°C	2.09 kW	2.07 kW

COP Tj = +7°C	7.26	5.31
Cdh	0.90	0.90
Pdh Tj = 12°C	2.02 kW	1.99 kW
COP Tj = 12°C	8.96	7.11
Cdh	0.90	0.90
Pdh Tj = Tbiv	4.11 kW	4.05 kW
COP Tj = Tbiv	3.37	2.57
Pdh Tj = TOL	2.35 kW	6.00 kW
COP Tj = TOL	2.99	1.00
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.45 kW	3.50 kW
Annual energy consumption Qhe	4382 kWh	5547 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.11	4.05
COP Tj = -15°C (if TOL<-20°C)	3.37	2.57
Cdh	0.90	0.90

Model: WPL 09 ICS classic

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.06 kW	2.10 kW
El input	0.44 kW	0.80 kW
COP	4.68	2.64
Indoor water flow rate	0.40 m³/h	0.40 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	178 %	130 %
Prated	4.80 kW	4.50 kW
SCOP	4.53	3.32
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.22 kW	3.98 kW
COP Tj = -7°C	3.22	2.27
Pdh Tj = +2°C	2.88 kW	2.55 kW
COP Tj = +2°C	4.33	3.16
Pdh Tj = +7°C	2.08 kW	2.04 kW
COP Tj = +7°C	6.28	4.53
Pdh Tj = 12°C	2.02 kW	1.97 kW
COP Tj = 12°C	8.35	6.44
Pdh Tj = Tbiv	4.22 kW	3.98 kW
COP Tj = Tbiv	3.22	2.27

Pdh Tj = TOL	4.11 kW	3.79 kW
COP Tj = TOL	2.84	1.85
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.69 kW	0.71 kW
Annual energy consumption Qhe	2187 kWh	2804 kWh

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	198 %	136 %
Prated	2.64 kW	2.40 kW

SCOP	5.03	3.48
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	2.64 kW	2.39 kW
COP Tj = +2°C	3.83	2.33
Pdh Tj = +7°C	2.07 kW	1.84 kW
COP Tj = +7°C	5.19	3.35
Pdh Tj = 12°C	2.00 kW	1.94 kW
COP Tj = 12°C	7.92	5.39
Pdh Tj = Tbiv	2.64 kW	2.39 kW
COP Tj = Tbiv	3.83	2.33
Pdh Tj = TOL	2.64 kW	2.39 kW
COP Tj = TOL	3.83	2.33
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.01 kW

Annual energy consumption Qhe	70 kWh	921 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	155 %	119 %
Prated	6.90 kW	6.80 kW
SCOP	3.94	3.04
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.16 kW	4.10 kW
COP Tj = -7°C	3.48	2.63
Pdh Tj = +2°C	3.03 kW	2.62 kW
COP Tj = +2°C	5.34	3.64
Pdh Tj = +7°C	2.09 kW	2.07 kW
COP Tj = +7°C	7.26	5.31
Pdh Tj = 12°C	2.02 kW	1.99 kW

COP Tj = 12°C	8.96	7.11
Pdh Tj = Tbiv	4.16 kW	4.10 kW
COP Tj = Tbiv	3.48	2.63
Pdh Tj = TOL	5.00 kW	3.16 kW
COP Tj = TOL	1.00	2.50
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	56 W	56 W
PTO	21 W	21 W
PSB	56 W	56 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.54 kW	3.28 kW
Annual energy consumption Qhe	4321 kWh	5515 kWh