

Summary of	SWCV 122 Inverter	Reg. No.	041-K001-13
Certificate Holder			
Name	ait-deutschland GmbH	ait-deutschland GmbH	
Address	Industriestr. 3	Zip	95359
City	Kasendorf	Country	Germany
Certification Body	BRE Energy & Communi	BRE Energy & Communications Division	
Name of testing laboratory	WPZ	WPZ	
Subtype title	SWCV 122 Inverter		
Heat Pump Type	Brine/Water		
Refrigerant	R407c		
Mass Of Refrigerant	2 kg		
Certification Date	12.05.2017		

Model: SWCV 122(H)(K)3 (3~400V)

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	5.06 kW	4.58 kW	
El input	1.04 kW	1.46 kW	
СОР	4.87	3.13	
Indoor water flow rate	1.27 m³/h	1.27 m³/h	

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	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	201 %	157 %
Prated	11.60 kW	12.40 kW
SCOP	5.22	4.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Pdh Tj = +2°C	6.30 kW	6.80 kW
COP Tj = +2°C	5.27	4.12
Pdh Tj = +7°C	4.10 kW	4.40 kW
COP Tj = +7°C	5.60	4.67
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	15 W	15 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4588 kWh	6220 kWh

Warmer Climate

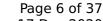
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
Low temperature	Medium temperature	
204 %	158 %	
11.60 kW	12.40 kW	
	Low temperature 204 %	





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SCOP	5.30	4.15
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.50 kW	12.30 kW
COP Tj = +2°C	4.26	2.91
Pdh Tj = +7°C	7.60 kW	8.10 kW
$COP Tj = +7^{\circ}C$	5.12	3.74
Pdh Tj = 12°C	3.40 kW	3.60 kW
COP Tj = 12°C	5.75	4.85
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW





Annual energy consumption Qhe	2924 kWh	3995 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.26
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW



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	<u> </u>	
COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5293 kWh	7177 kWh



Model: SWCV 122H1 (1~230V)

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.06 kW	4.58 kW
El input	1.04 kW	1.46 kW
СОР	4.87	3.13
Indoor water flow rate	1.27 m³/h	1.27 m³/h

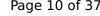
EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	201 %	157 %
Prated	11.60 kW	12.40 kW
SCOP	5.25	4.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Pdh Tj = +2°C	6.30 kW	6.80 kW
COP Tj = +2°C	5.27	4.12
Pdh Tj = +7°C	4.10 kW	4.40 kW
COP Tj = +7°C	5.60	4.67
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





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Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4588 kWh	6220 kWh

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

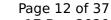
EN 14825		
Low temperature	Medium temperature	
204 %	158 %	
11.60 kW	12.40 kW	
	Low temperature 204 %	



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This information was generated by the HP KEYMARK database on 17 Dec 2020				
SCOP	5.30	4.15		
Tbiv	2 °C	2 °C		
TOL	2 °C	2 °C		
Pdh Tj = +2°C	11.50 kW	12.30 kW		
COP Tj = +2°C	4.26	2.91		
Pdh Tj = +7°C	7.60 kW	8.10 kW		
$COPTj = +7^{\circ}C$	5.12	3.74		
Pdh Tj = 12°C	3.40 kW	3.60 kW		
COP Tj = 12°C	5.75	4.85		
Pdh Tj = Tbiv	11.50 kW	12.30 kW		
COP Tj = Tbiv	4.26	2.91		
Pdh Tj = TOL	11.50 kW	12.30 kW		
COP Tj = TOL	4.26	2.91		
Cdh	0.99	0.99		
WTOL	65 °C	65 °C		
Poff	5 W	5 W		
РТО	15 W	15 W		
PSB	7 W	7 W		
PCK	0 W	0 W		
Supplementary Heater: Type of energy input	electricity	electricity		
Supplementary Heater: PSUP	0.00 kW	0.00 kW		
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Annual energy consumption Qhe	2924 kWh	3995 kWh

Colder Climate

EN 12102-1		
Low temperature Medium temperature		Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.41	4.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW



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Model: WZSV 122(H)(K)3M

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.06 kW	4.58 kW
El input	1.04 kW	1.46 kW
СОР	4.87	3.13
Indoor water flow rate	1.27 m³/h	1.27 m³/h

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

Average Climate



EN 12102-1		
Low temperature Medium temperature		Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	201 %	157 %
Prated	11.60 kW	12.40 kW
SCOP	5.22	4.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Pdh Tj = +2°C	6.30 kW	6.80 kW
COP Tj = +2°C	5.27	4.12
Pdh Tj = +7°C	4.10 kW	4.40 kW
COP Tj = +7°C	5.60	4.67
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





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Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	15 W	15 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4588 kWh	6220 kWh

Warmer Climate

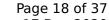
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	204 %	158 %
Prated	11.60 kW	12.40 kW





This information was	generated by the HF	KEYMARK database on 17 Dec 20
SCOP	5.30	4.15
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.50 kW	12.30 kW
$COP Tj = +2^{\circ}C$	4.26	2.91
Pdh Tj = +7°C	7.60 kW	8.10 kW
$COP Tj = +7^{\circ}C$	5.12	3.74
Pdh Tj = 12°C	3.40 kW	3.60 kW
COP Tj = 12°C	5.75	4.85
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW





Annual energy consumption Qhe	2924 kWh	3995 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.26
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW



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COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5293 kWh	7177 kWh



Model: PWZSV 122H3S (3~400V)

Gene	ral Data
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.06 kW	4.58 kW
El input	1.04 kW	1.46 kW
СОР	4.87	3.13
Indoor water flow rate	1.27 m³/h	1.27 m³/h

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

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	201 %	157 %
Prated	11.60 kW	12.40 kW
SCOP	5.22	4.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Pdh Tj = +2°C	6.30 kW	6.80 kW
COP Tj = +2°C	5.27	4.12
Pdh Tj = +7°C	4.10 kW	4.40 kW
COP Tj = +7°C	5.60	4.67
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





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Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4588 kWh	6220 kWh

Warmer Climate

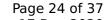
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

Low temperature	Medium temperature
204 %	158 %
11.60 kW	12.40 kW
	204 %





This information was	generated by the HP	KEYMARK database on 17 Dec 202
SCOP	5.30	4.15
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.50 kW	12.30 kW
COP Tj = +2°C	4.26	2.91
Pdh Tj = $+7^{\circ}$ C	7.60 kW	8.10 kW
$COPTj = +7^{\circ}C$	5.12	3.74
Pdh Tj = 12°C	3.40 kW	3.60 kW
COP Tj = 12°C	5.75	4.85
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	15 W	15 W
PSB	7 W	7 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW





Annual energy consumption Qhe	2924 kWh	3995 kWh	

Colder Climate

EN 12102-1		
Low temperature Medium temperature		
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.26
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW



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	<u> </u>	
COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5293 kWh	7177 kWh



Model: PWZSV 122H2S (3~230V)

General Data	
Power supply	3x230V 50Hz

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	5.06 kW	4.58 kW	
El input	1.04 kW	1.46 kW	
СОР	4.87	3.13	
Indoor water flow rate	1.27 m³/h	1.27 m³/h	

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	

Average Climate



EN 12102-1		
Low temperature Medium temperature		
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	201 %	157 %
Prated	11.60 kW	12.40 kW
SCOP	5.22	4.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Pdh Tj = +2°C	6.30 kW	6.80 kW
COP Tj = +2°C	5.27	4.12
Pdh Tj = +7°C	4.10 kW	4.40 kW
COP Tj = +7°C	5.60	4.67
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





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Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	15 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4588 kWh	6220 kWh

Warmer Climate

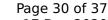
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	204 %	158 %
Prated	11.60 kW	12.40 kW





This information was generated by the HP KEYMARK database on 17 Dec 2020				
SCOP	5.30	4.15		
Tbiv	2 °C	2 °C		
TOL	2 °C	2 °C		
Pdh Tj = +2°C	11.50 kW	12.30 kW		
COP Tj = +2°C	4.26	2.91		
Pdh Tj = +7°C	7.60 kW	8.10 kW		
$COPTj = +7^{\circ}C$	5.12	3.74		
Pdh Tj = 12°C	3.40 kW	3.60 kW		
COP Tj = 12°C	5.75	4.85		
Pdh Tj = Tbiv	11.50 kW	12.30 kW		
COP Tj = Tbiv	4.26	2.91		
Pdh Tj = TOL	11.50 kW	12.30 kW		
COP Tj = TOL	4.26	2.91		
Cdh	0.99	0.99		
WTOL	65 °C	65 °C		
Poff	5 W	5 W		
РТО	15 W	15 W		
PSB	7 W	7 W		
PCK	0 W	0 W		
Supplementary Heater: Type of energy input	electricity	electricity		
Supplementary Heater: PSUP	0.00 kW	0.00 kW		
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Annual energy consumption Qhe	2924 kWh	3995 kWh	

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.26
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
COP Tj = +2°C	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW



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Model: PWZSV 122H1S (1~230V)

General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	5.06 kW	4.58 kW	
El input	1.04 kW	1.46 kW	
СОР	4.87	3.13	
Indoor water flow rate	1.27 m³/h	1.27 m³/h	

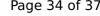
EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

Average Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	201 %	157 %
Prated	11.60 kW	12.40 kW
SCOP	5.22	4.12
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.30 kW	11.10 kW
COP Tj = -7°C	4.52	3.18
Pdh Tj = +2°C	6.30 kW	6.80 kW
COP Tj = +2°C	5.27	4.12
Pdh Tj = +7°C	4.10 kW	4.40 kW
COP Tj = +7°C	5.60	4.67
Pdh Tj = 12°C	2.70 kW	2.60 kW
COP Tj = 12°C	5.78	5.06
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91





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Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4588 kWh	6220 kWh

Warmer Climate

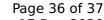
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	204 %	158 %
Prated	11.60 kW	12.40 kW



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SCOP	5.30	4.15
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.50 kW	12.30 kW
COP Tj = +2°C	4.26	2.91
Pdh Tj = +7°C	7.60 kW	8.10 kW
$COP Tj = +7^{\circ}C$	5.12	3.74
Pdh Tj = 12°C	3.40 kW	3.60 kW
COP Tj = 12°C	5.75	4.85
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
РСК	0 W	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW





Annual energy consumption Qhe	2924 kWh	3995 kWh	

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	208 %	162 %
Prated	11.60 kW	12.40 kW
SCOP	5.40	4.26
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.10 kW	7.60 kW
COP Tj = -7°C	5.26	3.94
Pdh Tj = +2°C	4.30 kW	4.70 kW
$COP Tj = +2^{\circ}C$	5.62	4.58
Pdh Tj = +7°C	2.80 kW	3.00 kW
COP Tj = +7°C	6.01	5.11
Pdh Tj = 12°C	2.70 kW	2.60 kW



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COP Tj = 12°C	5.44	4.98
Pdh Tj = Tbiv	11.50 kW	12.30 kW
COP Tj = Tbiv	4.26	2.91
Pdh Tj = TOL	11.50 kW	12.30 kW
COP Tj = TOL	4.26	2.91
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5293 kWh	7177 kWh