

Page 1 of 37

#### This information was generated by the HP KEYMARK database on 18 Mar 2022

#### Login

Summary of	SWCV 122 Inverter	Reg. No.	041-K001-13	
Certificate Holder				
Name	ait-deutschland GmbH			
Address	Industriestr. 3	Zip	95359	
City	Kasendorf	Country	Germany	
Certification Body	BRE Global Limited			
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)

Configure model			
Model name SWCV 122(H)(K)3 (3~400V)			
Application	Heating (medium temp)		
Units	Indoor		
Climate Zone	Colder Climate + Warmer Climate		
Reversibility	No		
Cooling mode application (optional)	n/a		

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

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	
$\eta_{s}$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

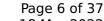
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	204 %	158 %
Prated	11.60 kW	12.40 kW
		,





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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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
$\eta_{S}$	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 = $+7^{\circ}$ 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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	5293 kWh	7177 kWh

CEN heat pump KEYMARK



## Model: SWCV 122H1 (1~230V)

Configure model		
Model name	SWCV 122H1 (1~230V)	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

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	

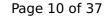
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

## **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
$\eta_{s}$	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



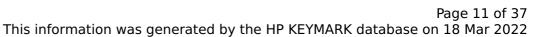


Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input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

## Warmer Climate

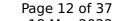
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
Low temperature Medium temperature		
$\eta_{S}$	204 %	158 %
Prated	11.60 kW	12.40 kW
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		The database off to Mai 2022
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
$COP Tj = +7^{\circ}C$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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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## 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
$\eta_{s}$	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



# $$\operatorname{\textit{Page}}\ 13$$ of 37 This information was generated by the HP KEYMARK database on 18 Mar 2022

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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	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: WZSV 122(H)(K)3M

Configure model		
Model name	WZSV 122(H)(K)3M	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

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

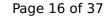
EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	

## 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
$\eta_{s}$	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



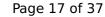


Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input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

## Warmer Climate

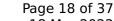
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	204 %	158 %
Prated	11.60 kW	12.40 kW





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
$COPTj = +2^{\circ}C$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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
$\eta_{S}$	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 = $+7^{\circ}$ 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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# $$\operatorname{\textit{Page}}\ 19$ of 37$$ This information was generated by the HP KEYMARK database on 18 Mar 2022

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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	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)

Configure model		
Model name	PWZSV 122H3S (3~400V)	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

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	

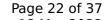
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

## **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
$\eta_{s}$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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

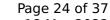
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	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 = $+7^{\circ}$ 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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW





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## Colder Climate

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

EN 14825		
	Low temperati	ure Medium temperature
$\eta_{s}$	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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# $$\operatorname{\textit{Page}}\xspace$ 25 of 37 This information was generated by the HP KEYMARK database on 18 Mar 2022

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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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 122H2S (3~230V)

Configure model		
Model name	PWZSV 122H2S (3~230V)	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

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

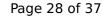
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

## **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
$\eta_{s}$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	4588 kWh	6220 kWh

## Warmer Climate

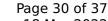
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	204 %	158 %
Prated	11.60 kW	12.40 kW
	·	





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
$COP Tj = +7^{\circ}C$	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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	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
$\eta_{s}$	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



 $$\operatorname{\textit{Page}}\ 31$$  of 37 This information was generated by the HP KEYMARK database on 18 Mar 2022

	•	
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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	5293 kWh	7177 kWh



## Model: PWZSV 122H1S (1~230V)

Configure model		
Model name	PWZSV 122H1S (1~230V)	
Application	Heating (medium temp)	
Units	Indoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

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

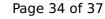
EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed

## **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
$\eta_{s}$	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



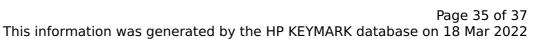


Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	5 W	5 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	o w	0 W
Supplementary Heater: Type of energy input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

## Warmer Climate

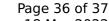
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	204 %	158 %
Prated	11.60 kW	12.40 kW





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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	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	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW





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## 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
$\eta_{s}$	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



# $$\operatorname{\textit{Page}}\xspace$ 37 of 37 This information was generated by the HP KEYMARK database on 18 Mar 2022

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 or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.26	2.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	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	5293 kWh	7177 kWh