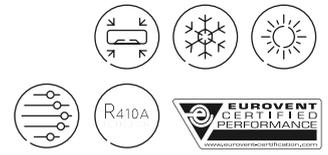


# Samurai S Heat pump

Air condensation – Rotary Inverter compressor



## Plug & play design

The Samurai S range for small projects is ready-to-go. It incorporates everything you need to operate the installation hydraulically: flow regulator, diffuser pump, filter, safety valve.

## Flexible installation

**Modular design:** onboard controls to operate up to 4 units in a cascading system. (Fig. 1)

**Static pressure available:** Each unit has 30 Pa of static pressure available as standard.

## Large operating ranges (Fig. 2)

## Excellent energy performance

Our Inverter technology promises excellent seasonal energy performance in both heat and cooling mode.



Fig. 1

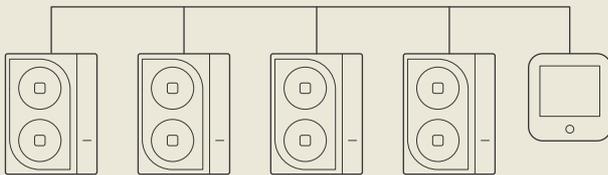
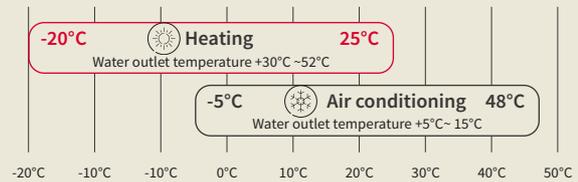
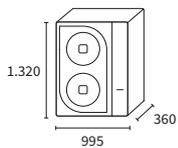


Fig. 2



### Heat pump models

### Controls and accessories included



RHMA-4AVN  
RHMA-5AVN  
RHMA-6AVN  
RHMA-7AVN



Separate wired remote control

## Samurai S – heat pump

	Unit	RHMA-4AVN	RHMA-5AVN	RHMA-6AVN	RHMA-7AVN
<b>Performance</b>					
Rated power Cooling	kW	11.2	14.3	16	17.8
Rated power input Cooling	kW	4.01	5.28	5.74	6.95
EER	-	2.8	2.7	2.8	2.56
SEER	-	4.05	4.32	4.52	4.42
η <sub>s, c</sub>	%	159	170	178	174
Rated power Heating	kW	10.9	13.1	15.4	18.5
Rated power input Heating	kW	3.7	4.3	4.7	6.3
Rated power Heating at -7°C (water outlet 50°C)	kW	7.15	7.89	10.36	12.35
Rated power Heating at -15°C (water outlet 45°C)	kW	5.82	4.99	8.63	10.63
COP	-	3	3.06	3.29	2.94
SCOP	-	3.5	3.6	4.02	3.9
η <sub>s, c</sub>	%	136	139	158	153
Sound pressure level Cooling Standard / Low	dB(A)	68 / 64		70 / 65	74 / 69
Sound pressure level Heating Standard / Low	dB(A)	69 / 66		71 / 67	74 / 70
Sound pressure level 1m Cooling Standard/Low	dB(A)	54 / 52		55 / 53	59 / 54
Sound pressure level 1m Heating Standard/Low	dB(A)	55 / 54		56 / 55	59 / 55
Sound pressure level 10m Cooling Standard/Low	dB(A)	40 / 38		42 / 40	46 / 42
Sound pressure level 10m Heating Standard/Low	dB(A)	41 / 39		43 / 42	46 / 43
Operating ranges at outside Temp°. - Cooling mode	°C			-5~48	
Operating ranges at outside Temp°. - Heating mode	°C			-20~25	
T° at water outlet – Cooling mode	°C			+5~15	
T° at water outlet – Heating mode	°C			30~52	
<b>Dimensions and weight</b>					
Overall dimensions (height x length x width)	mm			1320 x 995 x 360	
Net weight	kg	126	128		141
<b>Compressor</b>					
Type of compressor	-			Hitachi Inverter DC rotary unit	
R410A prefilled on delivery	kg	2.8	3.3	3.9	4
<b>Fans</b>					
Number of fans (BLDC/54)	-			2	
Airflow	m <sup>3</sup> /h			2500~6600	
Total power of fans	kW		0.18		0.22
External static pressure	Pa			0 / 30Pa	
<b>Hydraulic data</b>					
Type of exchanger	-			Braze plated exchanger	
Rated water flow Heating/Cooling	l/s	0.52 / 0.56	0.66 / 0.67	0.75 / 0.79	0.82 / 1.03
Min./max. flow	l/s	1.2 / 2.7	1.2 / 3.4	1.6 / 3.8	1.6 / 4.3
Min. water capacity of the installation – Comfort (Cooling mode)	l	37	48	53	59
Min. water capacity of the installation – Process (Cooling mode)	l	73	93	104	116
Diameter and type of hydraulic connection	inches			1"	
Expansion vessel – not included, to be provided by the installer	L			To be sized by facility	
Pump – HP	kW			0.37	
<b>Electrical data</b>					
Supply voltage	V/Ph/Hz			230 / 1 / 50	
Max. current	A	24		33	36

Note: The power and performance are specified without the pump. Rated cooling conditions: water cycle: 7/12°C – outside temperature: 35°C. Rated heating conditions: water cycle: 40/45°C – outside temperature: 6°C WB. Seasonal energy performance is specified according to European standard EN-14825.

## Optional controls and accessories available



Modular kit: Remote temperature sensor for modular concept (available as an option)