Samurai S

Air-to-water heat pump with inverter rotary compressor

Plug and play

The Samurai S range, for small to medium projects, is designed as a complete solution. These units include all the components needed to install and operate them. Standard components include: differential flow switch, circulating pump, water filter, safety valve and automatic fill valve.

Installation flexibility:

Modular approach

Can function with up to 4 units in cascade. (Fig. 1)

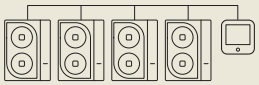
Wide operating ranges

(Fig. 2)

Available pressure

Each unit's fan has an available standard pressure of 30 Pa. (Fig. 3)

Fig. 1



High energy efficiency

SCOP 4.52 SCOP 4.02

High efficiency levels in both cooling and heating modes. In cooling mode it exceeds all Ecodesign Tier 1 requirements, and in heating mode all Tier 2 requirements. Reg 2016 /2281 for cooling, comfort and high-temperature industrial processes (2021).

Fig. 2:

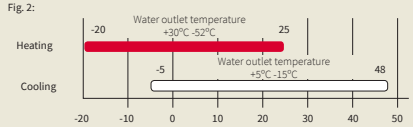
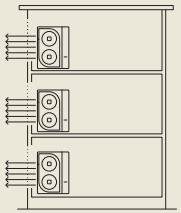
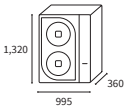


Fig. 3



Heat pump models



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

Samurai S - RHMA-AVN - Heat pump

Heat pump models			RHMA-4AVN	RHMA-5AVN	RHMA-6AVN	RHMA-7AVN
Capacity (Net value)	Cooling (nominal)	kW	11.2	14.30	16.00	17.80
	Heating (nominal)	kW				
EER			10.90	13.10	15.40	18.50
COP			2.79	2.70	2.78	2.56
ESEER			4.10	4.10	4.10	4.10
"SEER cooling for comfort (set point variable)"			4.05/159	4.32/170	4.52/178	4.42/174
SCOP			3.47/136	3.55/139	4.02/158	390/153
Sound power (cooling)	Full load	dB(A)	68	70	70	74
	Low noise	dB(A)	64	65	65	69
"No. and type of compressor/ no. of circuits"			1 - Scroll DC Inverter	1 - Scroll DC Inverter	1 - Scroll DC Inverter	1 - Scroll DC Inverter
Refrigerant			R410A	R410A	R410A	R410A
Refrigerant charge		Kg	2.80	3.30	3.90	4.00
Capacity control		%	n.d.	n.d.	n.d.	n.d.
Heat exchanger type			Plate	Plate	Plate	Plate
Nominal flow rate	(Cooling - Heating)	l/s	0.52-0.56	0.66-0.67	0.75-0.79	0.82-1.03
Available static pressure		kPa	150	130	120	110
Water pipe diameter		inches	1	1	1	1
Fan motor			BLDC - Brushless Directive Current			
Number of fans			2	2	2	2
Working range	Cooling	°C	-5 +48	-5 +48	-5 +48	-5 +48
	Heating	°C	-20 +25	-20 +25	-20 +25	-20 +25
Water production temperatures	Cooling	°C	5 + 15	5 + 15	5 + 15	5 + 15
	Heating	°C	30 + 52	30 + 52	30 + 52	30 + 52
Power supply			1N~200V 50Hz	1N~200V 50Hz	1N~200V 50Hz	1N~200V 50Hz
Consumption	Cooling	kW	4.01	5.28	5.74	6.95
	Heating	kW	3.70	4.30	4.70	6.30
Maximum current (230V)		A	17.10	23.90	26.10	30.70
"Dimensions without hydraulic kit (H x W x D)"		mm	1,320x995x360	1,320x995x360	1,320x995x360	1,320x995x360
Operating weight		Kg	126.0	128.0	141.0	141.0

Hydraulic elements as standard

Control included:

Wired remote controller

Included