

HYDRONIC UNITS

i-SACS-S 0011÷0061



Air-to-water reversible Heat Pumps with frequency driven compressor, split version 4,4 - 15,9 kW

Unit Description

i-SACS-S is the Climaveneta range of air-cooled reversible heat pumps with R410A refrigerant and frequency driven compressor (inverter), available in the split version. The unit is composed by an external condensing unit (i-SACS-S unit) and a dedicated hydronic group for the production of cold and hot water (HM module). This can be used for both internal and external use, avoiding the use of glycol with a significant improvement of system's performances. The inverter allows to modulate the unit's capacity according to the real energy demand, reducing the inrush currents and ensuring the maximum efficiency at all working conditions.

Versions

i-SACS-S	Condensing unit with inverter compressor
HM	Hydronic module

Features

External access to control with anti-tamper device (HM hydronic module).
DC inverter compressor with self-adaptive capacity adjustment.
User interface with display.
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure loss, fitted with heating element for frost protection.
Structure and base in hot-dip galvanised steel with epoxy powder paint finish.
The hydraulic circuit in the HM hydronic module is composed by:
Water circulator.
Differential pressure switch.
Expansion tank.
Safety valve.
Air vent valve.
Manual filling assembly.
Pressure gauge.

Main accessories

- Removable metal mesh water filter kit
- Rubber anti-vibration mounting kit
- External main switch kit

Commands

The new generation electronic controller allows to manage the chiller by using the inverter technology, designed by Climaveneta for improving the whole system's efficiency. A dedicated algorithm of control allows to manage the compressor's workload by modulating its capacity according the operating conditions. The inverter increases the unit's efficiency at part load and allows to achieve ESEER values higher than 20% compared to non-inverter traditional units.

NEW!

i-SACS-S

Models	0011	0021	0031	0041	0051	0061
HEAT PUMP MODEL						
Nominal Cooling capacity(1)	kW	5,4	5,9	7,5	8,5	11,1
Total absorbed power(1)	kW	2,1	2,6	2,9	4,0	5,0
EER		2,54	2,23	2,59	2,13	2,21
ESEER		3,60	3,40	3,67	3,35	3,48
Nominal Heating power(2)	kW	6,5	6,9	7,8	11,1	13,8
Total absorbed power(2)	kW	2,6	2,4	2,9	4,6	5,1
COP		2,47	2,82	2,69	2,41	2,70
Absorbed current	A	28,2	28,8	29,4	29,4	29,6
Operational weight	kg	64	67	81	97	99
No. fans	Nr./No.	1	1	1	2	2
Airflow	m ³ /h	2400	3000	5000	5000	6000
Compressor type		DC Inverter	DC Inverter	DC Inverter	DC Inverter	DC Inverter
Refrigerant		R410A	R410A	R410A	R410A	R410A
Gas fittings in/out	inches	1/4" / 1/2"	3/8" / 5/8"	3/8" / 5/8"	3/8" / 5/8"	3/8" / 5/8"
Sound pressure level(3)	db(A)	58	58	63	63	63
Sound power	db(A)	68	69	74	74	74
Electrical power supply	V-Ph-Hz	230V~50Hz	230V~50Hz	230V~50Hz	400V-3N~50Hz	400V-3N~50Hz
DIMENSION						
L	(mm)	845	895	990	990	940
H	(mm)	695	860	960	960	1245
P	(mm)	335	302	340	340	340

The data refer to

1 Evaporator water (in/out) 12/7°C, condenser air (in) 35°C, based on Eurovent standard

2 Condenser water (in/out) 40/45°C, evaporator air (in) 7°C (r.h. 87%), based on Eurovent standard

3 Noise level measured at 1 m in open field conditions

HM

Models	0011	0021	0031	0041	0051	0061
HEAT PUMP MODEL						
Useful head	kPa	62	55	62	61	53
Nominal water flow	m ³ /h	0,75	0,97	1,24	1,46	1,97
Absorbed current	A	1	1	1	1	1
Operational weight	kg	34	34	35	37	40
Refrigerant		R410A	R410A	R410A	R410A	R410A
Gas fittings in/out	inches	1/2" / 1/4"	5/8" / 3/8"	5/8" / 3/8"	5/8" / 3/8"	5/8" / 3/8"
Hydraulic connections	inches	3/4"	3/4"	3/4"	1 1/4"	1 1/4"
Electrical power supply	V-Ph-Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
DIMENSION						
L	(mm)	340	340	340	340	340
H	(mm)	815	815	815	815	815
P	(mm)	250	250	250	250	250

Dimension

