i-MAX

Air/water inverter heat pumps with axial fan

66 kW÷115 kW

Carpentry
Made up of hot-galvanized sheet painted metal.

Compressors
The compressors are a scroll type, mounted on a rubber material acting as a shock absorber. Each one of the two circuits is equipped with a DC inverter compressor. In this way, the capacity of each circuit can be modulated continuously between the minimum capacity of a single inverter compressor and the sum of the maximum capacities of the whole compressors of the same circuit.

User Side Heat Exchanger
The employed user side heat exchanger is made up of AISI 304 stainless steel braze-welded plates type integrating a dual cooling circuit.

Air Side Heat Exchanger
The air side heat exchanger is made up of copper pipes and aluminum fins.

Fan Section
The type of the fan is axial-flow with aluminum aerofoil blades of fibre. The electric fan motor used in this series is modulated by inverter.

Refrigerant Circuit
The refrigerant circuit has been manufactured by means of international primary brands components and according to the UNI EN 13134 Rule concerning welding procedures. The refrigerant gas is R410A. Each refrigerant circuit includes 4 way reverse cycle valve, electronic expansion valve, liquid separator, liquid receivers, auxiliary circuit to reduce the defrosting time, oil recovery circuit, non-return valves, valves of inspection for maintenance and control, safety device (high pressure switch) according to PED regulation, pressure transducers, precision sensors, high capacity filter dryer, mechanical filters.

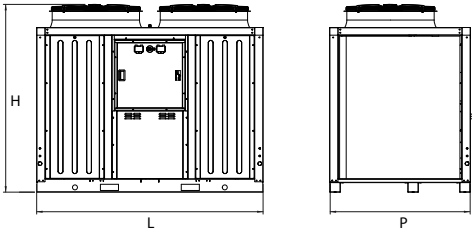
Electric Panel
The electric panel is manufactured according to the actual European Union rules and it contains all the electromechanical and electronic components of regulation and control. The terminal board in the electric panel is supplied with voltage free contacts for: remote ON-OFF, winter/summer commutation, domestic hot water temperature sensor, and for the remote control panel. The addition of the GI optional module allows further management of the plant.

Hydraulic Circuit
Includes: dual refrigerant circuit plate heat exchanger and a single hydraulic circuit, a pressure gauge at the inlet and a fitting on the heat exchanger outlet for evaluating the load losses, service valve and flow switch for protection, automatic air release valve and safety valve (6 bar).

Main accessories

AG	Rubber shock absorbers
CI6	AC inverter pump (GI module included)
CI7	AC ntegrated pump
CM	Modbus interface RS485 activation
DSFR	Sequence control device, phase failure + Minimum and Maximum voltage relay
GI	Internal hardware extension module
HiT2	Multifunction touch screen remote controller
i-CR	Remote wall controller
IM	Protection module
KA	Antifreeze kit
SL	Silencing
SSL	Super Silencing
TR2	Anti-corrosion treatment

Versions		
	i-MAX	Reversible heat pump



Dimensions		0466	0475	0485	0695	06105	06115
L	mm	2.250	2.250	2.250	2.250	2.250	2.250
P	mm	1.170	1.170	1.170	1.170	1.450	1.450
H	mm	1.985	1.985	1.985	1.985	2.010	2.010

i-MAX		0466	0475	0485	0695	06105	06115
Cooling							
Cooling capacity (1)	kW	65,6	74,6	83,9	94,7	105,6	114,3
Power input (1)	kW	22,6	25,7	28,8	32,7	36,2	39,4
EER (1)	W/W	2,9	2,9	2,91	2,9	2,9	2,9
Cooling capacity (2)	kW	79,6	90,2	102,8	113,3	127,3	139,3
Power input (2)	kW	21,8	24,6	28,2	31,0	34,9	38,2
EER (2)	W/W	3,7	3,7	3,7	3,7	3,7	3,7
SEER (5)	W/W	3,8	3,9	3,8	3,8	3,8	3,8
Water flow (1)	L/s	3,1	3,6	4,0	4,5	5,1	5,5
Pressure drop (1)	kPa	32	36	37	34	33	38
Heating							
Heating capacity (3)	kW	68,4	74,7	85,6	93,3	102,5	111,5
Power input (3)	kW	16,9	18,4	21,1	23,9	25,3	28,6
COP (3)	W/W	4,1	4,1	4,1	3,9	4,1	3,9
Heating capacity (4)	kW	65,9	71,0	82,1	88,6	97,1	108,3
Power input (4)	kW	20,5	22,2	25,7	27,7	30,4	36,1
COP (4)	W/W	3,2	3,2	3,2	3,2	3,2	3,0
SCOP (6)	W/W	3,6	3,6	3,5	3,6	3,6	3,5
Water flow (4)	L/s	3,2	3,4	3,9	4,2	4,7	5,2
Use side heat exchanger load losses (4)	kPa	30	31	31	32	27	27
Energy efficiency (Water 35°C/55°C)	Class	A+/A+	A+/A+	A+/A+	A+/A+	A+/A+	A++/A+
Compressor							
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressors	n°	4	4	4	6	6	6
Refrigerant circuits	n°	2	2	2	2	2	2
Refrigerant charge R410A (7)	kg	13,4	14,2	14,3	13,4	14,2	14,3
Fan							
Nominal air flow	m³/s	6,5x2	7x2	7,5x2	8x2	8,5x2	9x2
Hydraulic circuit							
Max pressure hydronic kit	bar	6	6	6	6	6	6
Water connections	inch	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2
Min. water volume (8)	L	200	200	200	260	260	260
Sound level							
Sound power (9)	dB(A)	84 / SL 82,0 / SSL 81,2	84 / SL 82,5 / SSL 81,7	85 / SL 83,0 / SSL 82,2	85 / SL 83,2 / SSL 82,7	85 / SL 83,2/ SSL 82,7	86 / SL 83,7 / SSL 83,2
Sound pressure (10)	dB(A)	52,2	52,2	53,2	53,2	53,2	54,2
Electrical data							
Power supply		400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz
Max. power input	kW	39,9	42,3	46,7	52,3	55,8	63,0
Max. current input	A	60,1	63,5	70,3	78,7	83,9	94,7
Weight							
Gross weight	kg	943	955	1011	1026	1128	1142
Operation weight	kg	923	946	996	1011	1105	1120

Operating conditions:
(1) Cooling: Outdoor air temperature 35°C; inlet/outlet temperature 12/7°C.
(2) Cooling: Outdoor air temperature 35°C; inlet/outlet temperature 23/18°C.
(3) Heating: Outdoor air temperature 7°C DB 6°C WB; inlet/outlet temperature 30/35°C.
(4) Heating: Outdoor air temperature 7°C DB 6°C WB; inlet/outlet temperature 40/45°C.
(5) Cooling: water temperature inlet/outlet 12/7°C.
(6) Heating: normal climatic condition; Tbiv=-7°C; eater temperature inlet/outlet 30/35°C.
(7) Indicative data and subject to change. For the correct data, always refer to the technical label on the unit.
(8) Calculated in the case of the plant water temperature decreased by 10°C for 6 minutes of defrosting.
(9) Condition (3); the value is determined on the basis of measurements taken in accordance with the UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.
(10) Sound pressure level measured at 10 m from the unit, in free field, according to ISO 3744:2010.
N.B. The performance data are indicative and could be subject to change. In addition, the performances declared in apex (1), (2), (3) and (4) refer to the instantaneous power according to EN 14511. The declared data stated in the apex (5) and (6) is determined according to the UNI EN 14825.