

Personalized comfort for offices and shopping malls
 Discreet solution in centralized facilities with **closed water loop**
Easy installation in false ceiling

DESCRIPTION

Heat Pumps and Cooling Units **RXH and IXH series** are units of compact construction, water-air, designed for the air-conditioning of premises.

SERIES

RXH Series

Water-air horizontal compact **cooling** unit.

IXH Series

Water-air reversible horizontal compact **heat pump**.

RANGE

RXH - IXH series: 1 cooling circuit, 1 compressor, 10 models:
 25 / 30 / 40M / 40 / 50 / 65 / 80 / 95 / 120 / 155.

OPERATING LIMITS

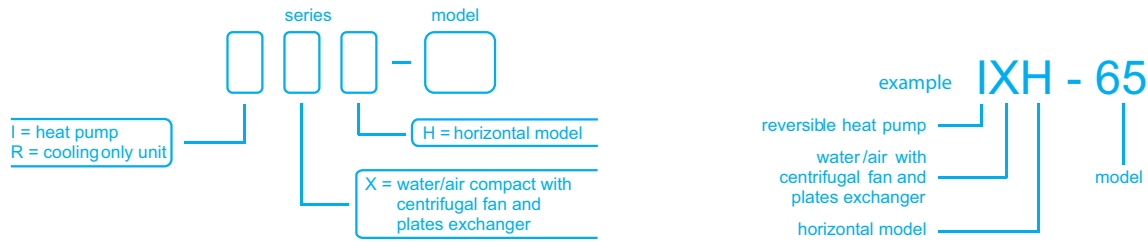
Series	Operating mode	Air		Water	
		Max.	Min.	Max.	Min.
IXH / RXH	Refrigeration	21°C WB	14°C WB	50°C ①	25°C ①③
IXH	Heat pump	27°C	10°C	25°C ②	10°C ②

① Water outlet

② Water inlet

③ In units with condensing pressure control (optional) operation up to +5 °C.

DESIGNATION



UNITS COMPOSITION

Standard equipment

- Anticorrosion casing in galvanized metal plate covered with polyester paint dried to the furnace.

External circuit

- Exchanger with stainless steel welded plates.

Internal circuit

- Centrifugal fan driven directly by motor (models 25 to 40) or by belts and pulleys (models 50 to 155).
- Air coil with aluminium fins and copper tubes.
- Washable air filter.
- Condensates drain pan.

Cooling circuit

- Piston hermetic compressor with gas discharge silencer and acoustic isolation mounted on anti-vibratory supports. Thermal protection.
- Four ways reverse valve, crankcase heater and liquid vessel (IXH models).

Protections

- High and low pressure pressostats.
- Water flow control (IXH series).
- Main door switch (except model 25).
- Compressor line protection fuses.
- Motor-fan line protection fuses (models 50 to 155).
- Fan thermal protection.
- Control circuit automatic switch.
- Anti-frost safety built-in the control (IXH series).

Electrical panel

- Complete electrical panel, totally wired.
- General ground plug.
- Motor-fan and compressor contactor (models 50 to 155).

GESCLIMA electronic control (see manual)

Control system with microprocessor composed by:

Control board

- HP and LP safeties by pressostats.
- Lack of freon detection test and probes failure.
- Anti-short-cycle timing.
- Communication board to integrate in a building management system BMS with Modbus protocol (optional).

Ambient thermostat: DOMO

- Operating modes: ventilation, cooling, heating and automatic.
- Set points, time and ambient temperature display.
- Modification of operating parameters (set points, differential and timings).
- Time and day scheduling. Night reduction mode.
- Alarm display.

Options

- Coils of copper tubes and copper fins, or aluminium fins with polyurethane coating.
- Options for control and other controls.
- Optional electrical heaters.
- Hot water coils (except in model 25).
- Fouled filter differential pressostat.
- Condensing pressure control.
- Starter kit in monophasic models.
- Rubber anti-vibratory supports.
- Zone Econfort control system:

It allows to control up to 11 independent temperature zones. Including:

- RXH / IXH unit.
- Relays card.
- Motorized grilles or dampers.
- The ECONFORT control includes Zone Thermostats (1 per zone) with the following functions:
 - On/off switch.
 - Display with ambient temperature.
 - Set point selection.
 - Operating leds (green led: cooling; red: heating).

TECHNICAL CHARACTERISTICS

XH Series		25	30	40M	40	50	65	80	95	120	155
Cooling capacities	Cooling capacity ① (kW)	6,9	7,7	10,5	10,5	12,4	16,0	20,9	25,2	32,7	41,3
	Power input ③ (kW)	2,0	2,3	3,3	3,3	3,7	4,8	6,6	7,5	9,9	13,4
	EER performance	3,5	3,3	3,2	3,2	3,3	3,3	3,2	3,4	3,3	3,1
Heating capacities	Heating capacity ② (kW)	8,2	9,0	12,8	12,8	16,0	19,5	24,9	29,1	38,6	48,4
	Power input ③ (kW)	2,0	2,4	3,4	3,4	3,9	5,1	6,7	8,0	10,7	13,8
	COP Performance	4,1	3,7	3,8	3,8	4,1	3,8	3,7	3,6	3,6	3,5
External circuit	Nominal water flow (m³/h)	1,5	1,7	2,3	2,3	2,7	3,5	4,6	5,5	7,2	9,2
	Pressure drop (m.W.G.)	4,9	5,3	9,8	9,8	3,5	5,7	4,4	5,7	4,5	7,3
	Water inlet connection	3/4"	1"	1"	1"	1"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"
	Water outlet connection	3/4"	1"	1"	1"	1"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"
Internal circuit fan	Nominal air flow (m³/h)	1.300	1.500	2.000	2.000	2.500	3.100	4.000	4.600	6.000	7.000
	Avail. static pressure (mm.W.G.)	6	5,5	5	5	5	8	10	7	9	6,5
	Type	Centrifugal									
	Number	1									
	Power (kW)	0,15	0,25	0,25	0,25	0,37	0,55	1,1	1,1	1,1	1,5
	r.p.m.	900	800	800	800	726	910	1.027	867	640	695
Compressor	Type	Piston hermetic									
	Number	1									
	Circuits number	1									
Maximum power input	230 V / I ph / 50 Hz (A)	18,4	24	34,2	--	--	--	--	--	--	--
	230 V / III ph / 50 Hz (A)	--	--	--	23,0	19,9	25,8	33,7	39,7	47,7	57,1
	400 V / III ph / 50 Hz (A)	--	--	--	12,5	16,1	16,6	25,7	24,7	29,7	39,6
Refrigerant	Type	R-407c									
	RXH Load (kg)	1,1	1,1	1,2	1,2	1,2	1,4	2,7	3,0	3,2	3,5
	IXH Load (kg)	2,3	3,0	3,3	3,3	3,6	4,1	4,6	4,7	5,8	6,5
	Climate warming potential (CWP) ④	1652,5									
Dimensions	Length (mm)	1.024	1.162	1.162	1.162	1.408	1.408	1.825	1.825	2.457	2.457
	Width (mm)	866	790	790	790	946	946	1.445	1.445	1.911	1.911
	Height (mm)	431	536	536	536	587	587	701	701	820	820
Weight	RXH (kg)	120	129	146	146	200	205	309	356	431	471
	IXH (kg)	125	134	152	152	209	217	323	371	443	484

① Cooling capacity for inlet/outlet water conditions 30/35 °C and internal temperature 27 °C and 50% of R.H.

② Heating capacity for inlet/outlet water conditions 16/11 °C and internal temperature 21 °C.

③ Total power input by compressor and motorfans under previous conditions.

④ Climate warming potential of one kg of greenhouse-effect fluored gas relative to one kilogram of carbon dioxide over a period of 100 years.

ELECTRICAL HEATER (OPTIONAL)

Available capacities

Assembly of electrical heaters in 1 stage. For more stages, it is necessary to consult possibility of incorporation into the unit and prices.

XH Series	Voltage	230 V / I ph / 50 Hz					
	Power (kW)	1	2	3	4	5	6
25 / 30 / 40M	Current (A)	4,3	8,7	13,0	17,4	21,7	26,1

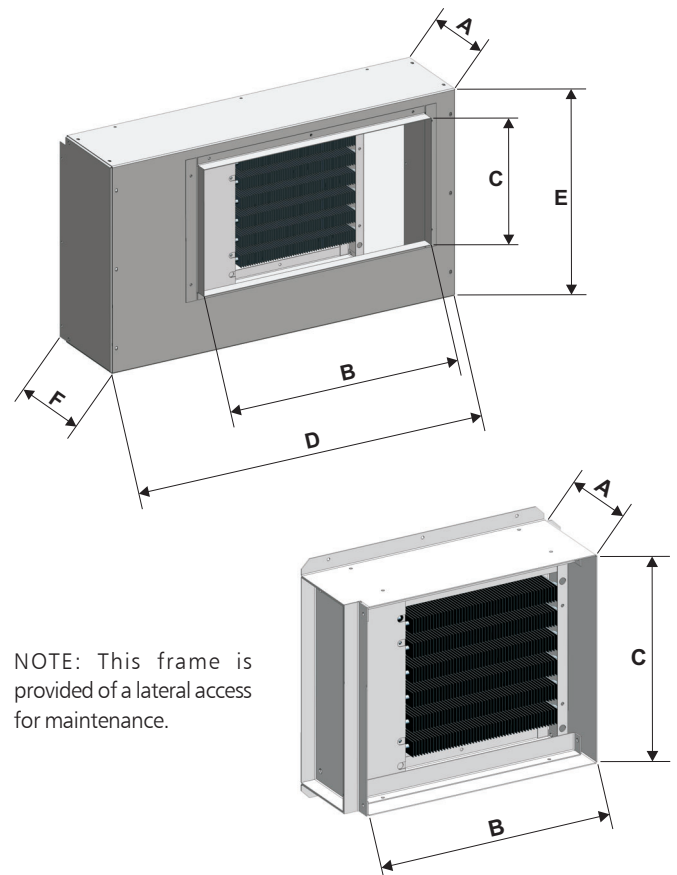
XH Series	Voltage	230 V / III ph / 50 Hz					
	Power (kW)	3	6	9	12	15	18
40	Current (A)	7,5	15,1	22,6	not available		
50 / 65 / 80 / 95	Current (A)	7,5	15,1	22,6	30,1	37,7	not avail.
120 / 155	Current (A)	7,5	15,1	22,6	30,1	37,7	45,2

XH Series	Voltage	400 V / III ph / 50 Hz					
	Power (kW)	3	6	9	12	15	18
40	Current (A)	4,3	8,7	13,0	17,3	21,7	not avail.
50 / 65 / 80 / 95	Current (A)	4,3	8,7	13,0	17,3	21,7	26,0
120 / 155	Current (A)	4,3	8,7	13,0	17,3	21,7	26,0

Frame for electrical heater assembly on fan outlet

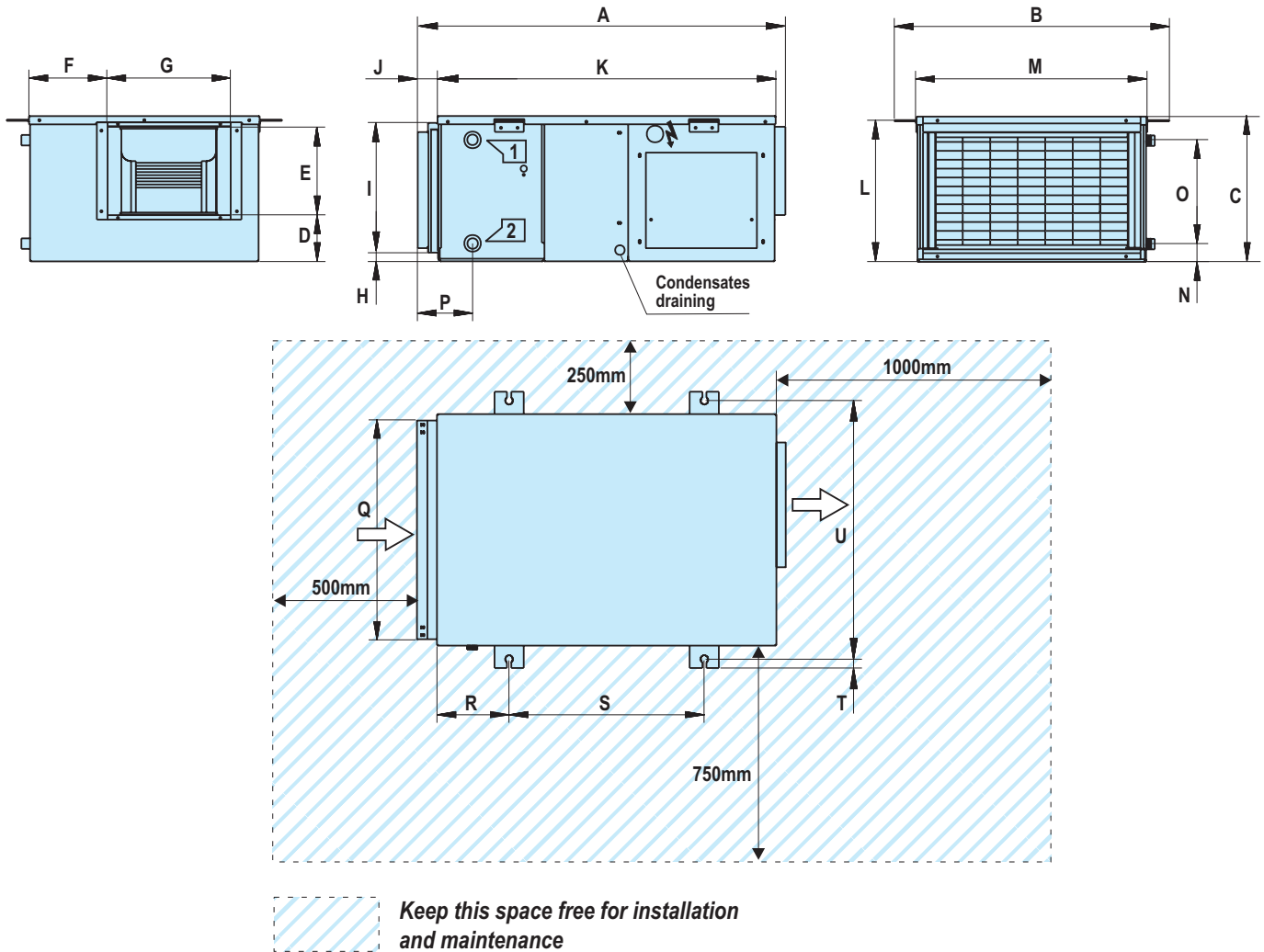
XH Series	Dimensions (mm)					
	A	B	C	D	E	F
25	175	600	265	757	432	197

XH SERIES	Power	Dimensions (mm)		
		A	B	C
30 / 40M	3 to 6 kW	150	432	341
40	3 to 6 kW	150	432	341
	9 to 12 kW	262	432	341
50 / 65 / 80	15 kW	262	482	443
	3 to 6 kW	150	432	341
	9 to 12 kW	262	432	341
95	15 to 18 kW	262	482	443
	3 to 9 kW	150	482	443
120 / 155	12 to 18 kW	262	482	443
	3 to 9 kW	150	547	443



DIMENSIONS SCHEMES

Dimensions RXH / IXH - 25 (mm)

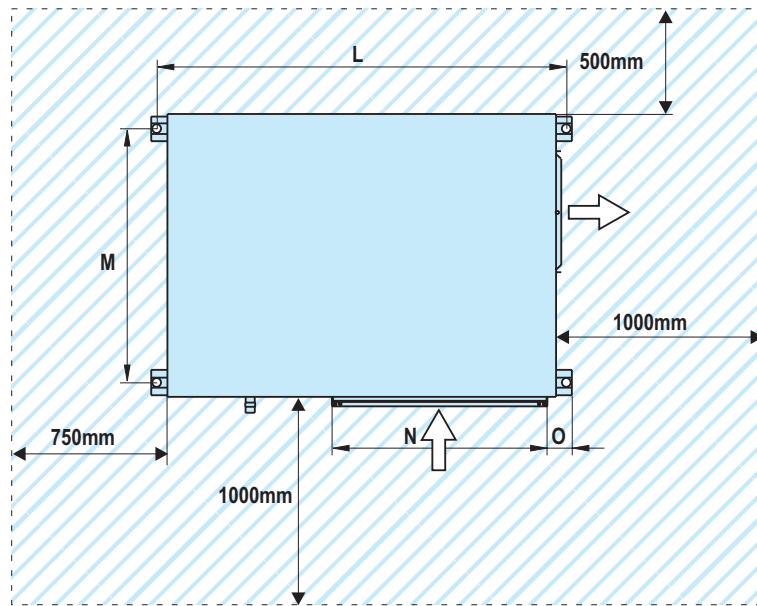
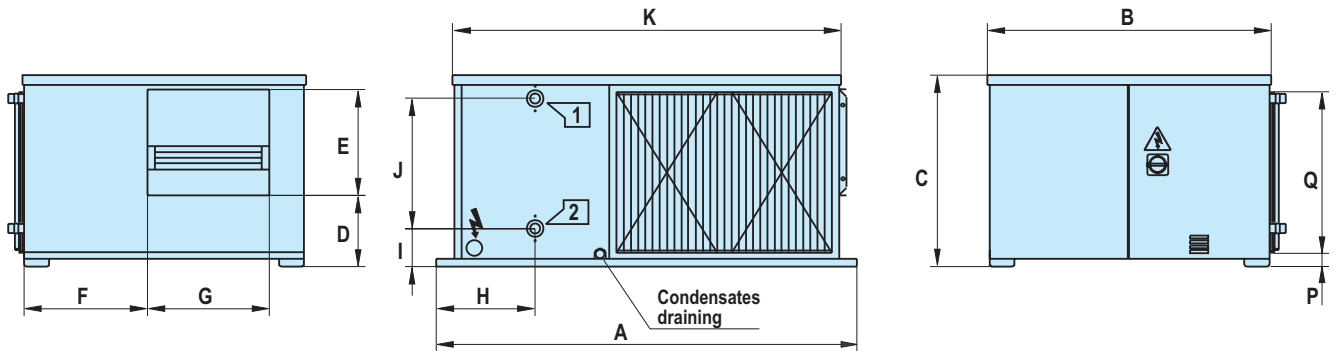


MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
XH - 25	1.024	866	431	131	262	189	497,5	21	393,5	48	952,5	422,5	757,5	68,5	250	179	731,5	198,5	516,5	22	822,5

LEGEND

- Water outlet
 - Water inlet
 - Internal air flow
 - Electrical panel and power supply
- Antivibratory anchor diameter: 18mm

Dimensions RXH / IXH - 30 / 40 / 50 / 65 (mm)



Keep this space free for installation and maintenance

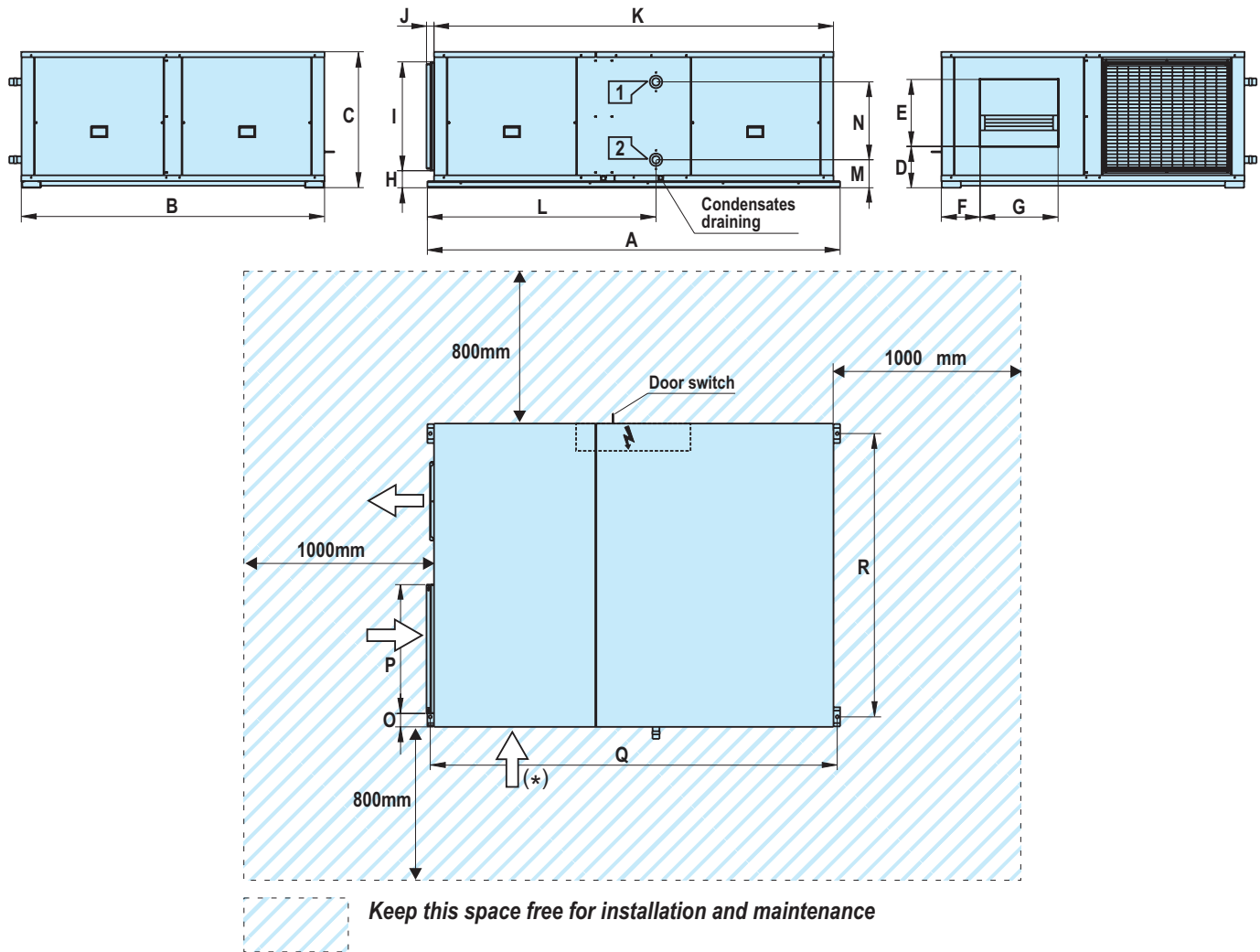
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
XH - 30 / 40	1.162	790	522	200	295	344	337	298	95	348	1.082	1.134	710	655	43	30	452
XH - 50 / 65	1.408	946	571	200	295	344	337	363	95	348	1.328	1.380	872	765	43	30	502

LEGEND

- Water outlet
- Water inlet
- Internal air flow
- Electrical panel and power supply
- Door switch

Antivibratory anchor diameter: 18mm

Dimensions RXH / IXH - 80 / 95 (mm)



MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
XH - 80	1.825	1.445	701	171	297	195	339	96	522	45	1.745	973	159	470	39	604	1.797	1.366
XH - 95	1.825	1.445	701	171	349	159	403	96	522	45	1.745	973	159	470	39	604	1.797	1.366

(*) The air circuit return panel can be located in any of the two positions indicated in the previous drawing, since both panels are easily interchangeable, with the purpose of leaving it in the work site at the convenience of each installation.

LEGEND

- Water outlet
- Water inlet
- Internal air flow
- Electrical panel and power supply
- Door switch

Antivibratory anchor diameter: 18mm