

AIR CONDENSED MULTIFUNCTION UNITS



SIGMA AFC

HFC 407 C
refrigerante ecologico



PROFILE

The multifunction air condensed SIGMA - AFC series are designed to produce chilled water and hot water for temperature control plants of the industrial process. Its completely autonomous monoblock refrigeration units consist of a complete hydraulic circuit with duly sealed storage tank and electrical circulation pump. The machines are equipped with condenser plates and, thanks to its size and work, allow the compressor to operate in optimum conditions. The constructive concepts allow employees to achieve high performance, the result of a low power consumption even under extreme conditions. The low noise of these machines allow them to work in production departments.

FLEXIBILITY AND EFFICIENCY

In addition to the production of cold water, with Series SIGMA chillers it is possible to produce process hot water (max 90°C) devoted to thermoregulation of the industrial processes. The machines depending on the chosen version are completed with nr. 1 or nr.2 cold circuit (+6°C / +18°C version C1 and version C2), and with nr. 1 or nr. 2 hot/cold circuits (+6°C / +90°C version H1 and version H2). Thanks to the conformation of water circuits and to the special dimensioning of components, evaporator and condenser, chillers work in optimal conditions thus achieving high cooling efficiency.



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TECHNICAL DATA

SIGMA (singole zone)		Version C1 (+6°C / +18°C) - Version H1 (+6°C / +90°C)							
Model (1)		06-C1 / 06-H1	10-C1 / 10-H1	15-C1 / 15-H1	20-C1 / 20-H1	30-C1 / 30-H1	40-C1 / 40-H1	50-C1 / 50-H1	60-C1 / 60-H1
Cooling capacity (2)	<i>kW</i>	7,2	10,9	17,3	22,5	29,5	33,0	50,2	59,3
Compressor	<i>tipo</i>	SCROLL							
	<i>kW</i>	1,2	2,1	2,9	4,0	5,1	6,9	9,1	11,5
E.E.R.	<i>kW/kW</i>	6	5,2	5,9	5,7	5,9	5,9	5,9	5,9
Gas		R407C							
Water flow	<i>m3/h</i>	1,5	1,5	2,4	3,2	4,3	5,5	7,2	8,4
Recycling pump	<i>kW</i>	0,37	0,37	0,37	0,37	0,45	0,45	0,75	0,75
User pump LP (2,9 bar)	<i>kW</i>	0,45	0,45	0,55	0,75	0,75	1,1	1,5	1,5
User pump HP (4,5 bar)	<i>kW</i>	0,9	0,9	0,9	1,1	1,5	1,5	2,2	2,2
Electrical heating (ver. H1)	<i>kW</i>	6	6	6	9	9	9	12	12
Fans	<i>kW</i>	1	1	1	1	2	2	2	2
Sound level (3)	<i>dB(A)</i>	63	63	66	66	68	68	68	69
Dimensions (L x W x H)	<i>mm</i>	540 x 912 x 1.325				540 x 1.280 x 1.445		540 x 1.580 x 1.545	
Net weight	<i>kg</i>	170	170	180	190	315	330	420	480

SIGMA (double zone)		Versione C2 (+6°C / +18°C) - Versione H2 (+6°C / +90°C)							
Model (1)		06-C2 / 06-H2	10-C2 / 10-H2	15-C2 / 15-H2	20-C2 / 20-H2	30-C2 / 30-H2	40-C2 / 40-H2	50-C2 / 50-H2	60-C2 / 60-H2
Cooling capacity (2)	<i>kW</i>	7,2	10,9	17,3	22,5	29,5	39,0	50,2	59,3
Compressor	<i>tipo</i>	SCROLL							
	<i>kW</i>	1,2	2,1	2,9	4,0	5,1	6,9	9,1	11,5
E.E.R.	<i>kW/kW</i>	6	5,2	5,9	5,7	5,9	5,9	5,9	5,9
Gas		R407C							
Water flow	<i>m3/h</i>	1,5 + 1,5	1,5 + 1,5	2,4 + 2,4	3,2 + 3,2	4,3 + 4,3	5,5 + 5,5	7,2 + 7,2	8,4 + 8,4
Recycling pump	<i>kW</i>	0,37	0,37	0,37	0,37	0,37	0,37	0,37	0,37
User pump LP (2,9 bar)	<i>kW</i>	0,45 + 0,45	0,45 + 0,45	0,55 + 0,55	0,75 + 0,75	0,75 + 0,75	1,1 + 1,1	1,5 + 1,5	1,5 + 1,5
User pump HP (4,5 bar)	<i>kW</i>	0,9 + 0,9	0,9 + 0,9	0,9 + 0,9	1,1 + 1,1	1,5 + 1,5	1,5 + 1,5	2,2 + 2,2	2,2 + 2,2
Electrical heating (ver. H2)	<i>kW</i>	6 + 6	6 + 6	6 + 6	9 + 9	9 + 9	9 + 9	12 + 12	12 + 12
Fans	<i>kW</i>	1	1	1	1	2	2	2	2
Sound level (3)	<i>dB(A)</i>	63	63	66	66	68	68	68	69
Dimensions (L x W x H)	<i>mm</i>	540 x 912 x 1.325				540 x 1.280 x 1.445		540 x 1.580 x 1.545	
Net weight	<i>kg</i>	170	170	180	190	315	330	420	480

(1) - Standard electric alimentation 400V-3Ph-50Hz - Special on request (2) - Water out acqua temperature 15°C - Water cooling temperature 25°C (3) - Sound pressure level at 10 meters

COOLING CIRCUIT WITH DIRECT EXCHANGE

In thermoregulation cooling and / or the maintenance of the temperature occurs for direct exchange (mixing between water circuit temperature control and water cooling circuit).

The advantage, besides the simplification of the hydraulic circuit, is the ability to eliminate the heat jump between the two circuits, thermoregulation and cooling, delivering water at the same temperature as the cooling water one, as limit condition



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