

MODULAR AIR CONDENSED CHILLERS FOR INTERNAL INSTALLATION



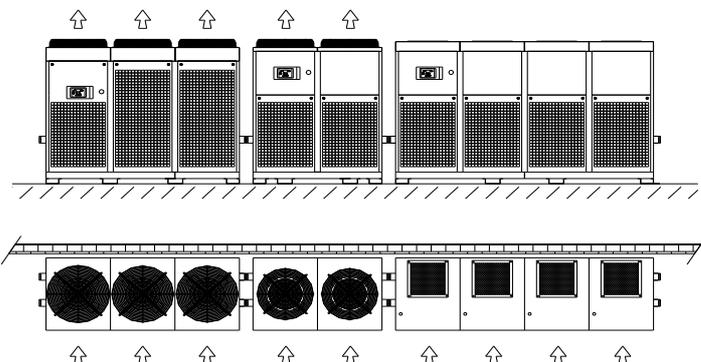
RC

HFC 407 C
ecological refrigerant



PROFILE

The modular RC air condensed CHILLERS, have been designed to produce process cooled water for the cooling of industrial plants on closed or open circuit. They are completely independent units consisting of a hydraulic circuit complete with closed accumulation tank, circulator and electric pump. The special construction guarantees high efficiency thanks to a very low power consumption even in extreme conditions of use (tropical climates with ambient temperature up to +45°C). In particular the oversizing of the heat exchangers enables the compressor to work under excellent conditions raising the cooling capacity. The chiller is controlled by a NOVA FRIGO microprocessor governing both the evaporating and the condensing pressures and to survey precise measures of the system parameters. It is possible to control the units by a "MULTICHILLER" board which, after checking the thermal load, adjusts the introduction of each compressor. The results are: stability and precision of the process temperature, balanced operation of compressors and, as a consequence, a higher energy saving, thus avoiding useless current startings.



TECHNICAL FEATURES

Steel main frame of pre-galvanized, aluminium steel treated and painted with epoxy powder.

Gas condenser with an extensive exchange surface, with copper piping and aluminium fins (6 ranks).

Gas evaporator it's a plate heat exchanger, with AISI 316 stainless steel, copper braze welded plates. It is placed inside a shell of thermo-insulating material to avoid the condensing and the heat exchange towards outside.

AISI 304 stainless steel tank, thermo-insulated with closed cell foam material to avoid the condensing and the heat exchange towards outside.

PATENTED MODULARITY

These products have been designed according to an INDUSTRIAL PATENT deposited and certified in the most important countries all over the world. Such an invention, technologically in the lead, grants TOTAL MODULARITY which allows the cooling, hydraulic, mechanical and electric coupling of units even of different capacity.

CONTROLLED BY MICROPROCESSOR

The RC series units are equipped with an innovative multi-function microprocessor control specially designed by NOVA FRIGO to optimize the modular systems operation and control for cooling.

Each unit or system can be equipped with remote control panel that allows the complete management of unit linked.

MODULAR AIR CONDENSED CHILLERS FOR INTERNAL INSTALLATION

TECHNICAL DATA

Mod. (1)	Cooling (2)		Heating		Compressor		EER	Gas	Pumps				Fans		Tank	Pipe connection	Sound level (3)	Dimensions			Net weight	
	kW	kcal/h	kW	kcal/h	n°	kW			kW/kW (2)	tipo	n°	kW	m³/h	bar				n°	kW	m³/h		l
RC 030	27,0	23.220	31,9	27.430	1	4,8	5,6	R407c	1	0,75	3,6	2,7	1	1,5	8.000	96	3"	56	1.090	1.110	2.190	530
RC 050	50,2	43.200	59,2	50.910	1	9,1	5,5	R407c	1	1,1	7,2	2,7	2	3,0	16.000	193	3"	59	1.990	1.110	2.190	790
RC 080	78,0	67.080	92,0	79.120	2	13,8	5,7	R407c	1	1,9	10,8	2,7	3	4,5	24.000	193	3"	60	2.890	1.110	2.190	1.180
RC 120	118,6	102.000	140,0	120.400	2	21,6	5,5	R407c	1	2,2	16,8	2,7	4	6,0	32.000	193	3"	63	3.790	1.110	2.190	1.550

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

COOLING CIRCUIT

Metal cartridge water filter fitted on the return line of the hydraulic plant as well as on the tank automatic filling. It stops impurities which could damage the plate exchanger or the pump.

Flowmeter it controls the flow rate as protection of the plate exchanger.

Hydraulic connections placed sideways, they're already arranged for the modular coupling of more units with "Victaulic" DN80 roll forming.

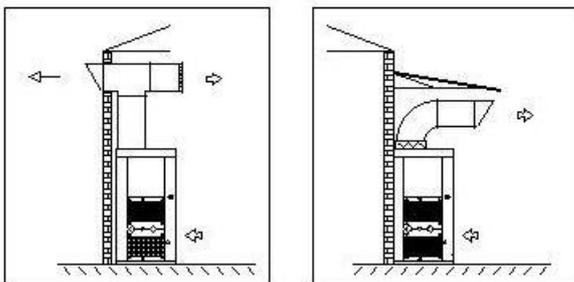
Safety valve fitted on tank to avoid eventual overpressure in case of operator's wrong manoeuvring.

Automatic air discharge valve to eliminate air locks into the hydraulic circuit.

Water drain complete drainage of the evaporator tank.



EXAMPLES OF INSTALLATION



NOVA FRIGO Engineering S.r.l.

Via Montebello, 5/D
 25017 - LONATO (BS) - ITALIA
 Tel: (+39) 030 99 13 250
 Fax: (+39) 030 99 19 043
 e-mail: info@novafrigo.it
www.novafrigo.it