

## COOLING UNITS

Industrial Frigo cooling systems are one volume units fitted with a pump and a tank. They have been designed so as to gain maximum efficiency, thanks to their low energy consumption given any working condition ( COP 6kW/kW).

They are built so as to allow for adding new units of a similar or different cooling capacity at a later time. Many models are built with a frame in galvanized sheet iron that makes them suitable for outdoor fitting. Cooling units are divided into 11 main groups:



RANGE	VERSION	GAS	COOLING CAPACITY	
GRA	Water cooling units by air condensation, modular and tropical version	R407C (ecological)	19,9 - 832 kW	17.100 - 715.000 Kcal/h
GR1A	Water cooling units by air condensation, modular version	R407C (ecological)	28 - 1500 kW	24.000 - 1.290.000 Kcal/h
GR2A	Water cooling units by air condensation	R407C (ecological)	2,2 - 118 kW	1.800 - 101.000 Kcal/h
GRW	Water cooling units by water condensation	R407C (ecological)	7,2 - 832 kW	6.200 - 715.000 Kcal/h
GRD	Air cooling units with air or water condensation	R407C (ecological)	13,0 - 124 kW	11.200 - 107.000 Kcal/h
GTW	Water cooling systems by water condensation with temperature control function	R407C (ecological)	7,2 - 51 kW	6.200 - 43.900 Kcal/h
GBA	Water cooling units by air condensation for low temperatures process	R404a (ecological)	15,5 - 92.8 kW	13.300 - 79.800 Kcal/h
GFA	Air cooling units by air condensation for over tropicalised climate	R134a	8,4 - 966 kW	7.200 - 831.000 Kcal/h
RFA	Water cooling units by air condensation, modular and tropical version	R22	24,9 - 756 kW	21.500 - 650.000 Kcal/h
RF1A	Water cooling units by air condensation, modular version	R22	115 - 756 kW	99.000 - 650.000 Kcal/h
RF2A	Water cooling units by air condensation	R22	2,8 - 144 kW	2.400 - 124.000 Kcal/h

## AIR BLAST COOLERS

In order to gain a considerable energy, working-fluid-cooling systems capable of exploiting ambient air have been designed.

These are single volume units made up of an air blast cooler fitted with a pump, fans and a control board. The cooling capacity of these systems is increased by adding two or more modules together, which may have a similar or different cooling capacity. The modules may be combined at different times.

All models are galvanised and thus, suitable even for an external fitting. Air blast coolers are divided into 2 main groups:



RANGE	VERSION	COOLING CAPACITY	
BRW/HP	Air-water and glycol in closed circuit	22-1.000kW	19.000-860.000 Kcal/h
BRG/HP	Air-water in open circuit (gravitational dumping, without glycol)	80-450 kW	68.800-387.000 Kcal/h

The gravitational discharge version that is being produced since 1997, was designed so as to avoid addition of an anti-freezing fluid to the process fluid, as in some production processes it is not employable.

## WATER AND OIL TEMPERATURE CONTROL UNITS

Temperature controllers are one volume units encompassing one or more heating zone (this is either electrically or gas heated) and a cooling zone; they are connected by a hydraulic circuit fitted with a delivery electro-pump.

The units are equipped with a sophisticated electronic adjusting system, such as the static units that control heating and the electronic instrument equipped with a serial entry.

Temperature controllers are divided into three main groups:



RANGE	VERSION	HEATING CAPACITY
CTW	Pressure and depression water up to +95°C	3 - 36 kW
CTWP	Pressurized water up to +180°C	9 - 27 kW
CTOH	Diathermic oil up to +300°C	9 - 36 kW

It is important to underline the unique and innovative products such as temperature controllers working with water in pressure and depression. Simultaneously and those working with pressurized water, that have enable Industrial Frigo to present itself as a trend setter on the market for these units.

## ECONOMISING INTEGRATED SYSTEMS

Industrial Frigo long term experience has enabled us to design a range of economising integrated systems that helps reduce energy consumption and thus, running costs considerably. These systems are fitted with high efficiency cooling units, sophisticated temperature control units, and special air/water air blast coolers.

These systems by exploiting ambient air cool down complete industrial plants fully or partially replacing traditional cooling units.

Electronic devices Electronic devices control such systems, rendering the process fully automatic. There are several custom made versions suitable to satisfy the most peculiar requests. Technical-sales staff are available to evaluate and offer the best possible solution you might need.



RANGE	VERSION	No. of HYDRAULIC CIRCUITS	No. of TEMPERATURE LEVELS
RB	Air condensed cooling unit and air blast cooler	1	1
RBW	Water condensed cooling unit and air blast cooler	1	1
BR	Air blast cooler and air condensed cooling unit	2	1
RBB	Air condensed cooling unit and double air blast cooler	2	2
RBBW	Water condensed cooling unit and double air blast cooler	2	2
BTR	Air blast cooler and thermo-cooling water condensed unit	1	SEVERAL
STR	Sire 1 + thermo-cooling water condensed unit	1	SEVERAL
SIRE-1	Air blast cooler fitted with a water condensed chiller	1	1