Heavy*gel*

INDUSTRIAL WATER CHILLERS

HGL

PROFILE

The **Heavy***gel* compact industrial chillers of the **HGL** series have been designed to cope with the most demanding cooling requirements of high outputs in various industrial processes. They are air-cooled units with axial fans for external installation and equipped with screw compressors.

- The **HGL** series comes in configuration without any pump (**N**) for connection to GPH pumping stations.
- **Tropicalization fitted as standard** for continuous operation in environments up to **+45°C**
- The **Heavy***gel* series uses **ecological gas,** in respect of the European directives for environmental protection
- Electronic controller with microprocessor with easy-to-use immediate interface, fitted with self diagnosis for complete management of the cooling unit.

mod.
HGL660/2AN

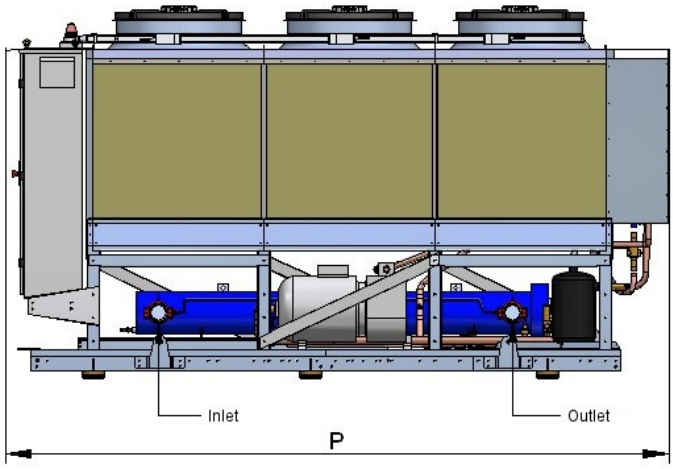
- Possibility of connecting **Remote-assistance** with **Frigel Service** via GSM**.**
- High efficiency screw **compressors**, with control of the cooling capacity supplied by means of proportional regulation.
- **Fans** with **direct current (brushless)** motor with speed control. Unlike the traditional step or TRIAC systems, these fans significantly reduce noise, increase the machine reliability and lifetime , reducing **the electric consumption of the fans by more than a third**.
- The particular design of the **Heavy***gel* chillers permits simplicity of use and easy maintenance of all the parts.
- Possible combination with the air blast fluid coolers of the **Ecodry***gel* series to create **free-cooling** type cooling systems.
- The choice of components, the assembly procedures and the strict final testing of 100% of the production guarantee continuous operating cycles with excellent reliability even in the most difficult conditions.
- The range includes 6 models with a cooling output ranging from **328** to **919 kW.**

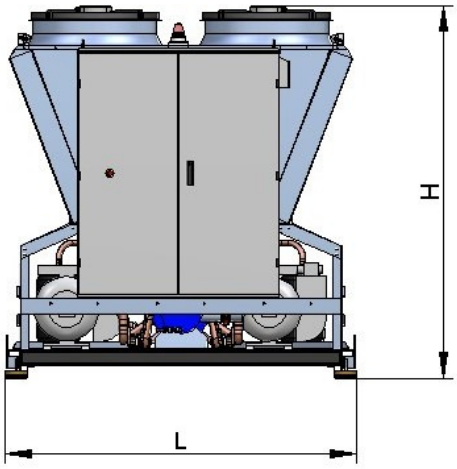
TECHNICAL DATA

Microgel			HGL					
Model			**360/2**	**400/2**	**540/2**	**660/2**	**800/2**	**950/2**
Cooling capacity	*15/25	kW	328	421	535	620	763	919
	*10/35	kW	262	337	428	496	610	735
	*7/32	kW	244	313	398	461	567	684
Cooling capacity "T" version	*10/35	kW	197	253	321	372	458	551
	*10/52	kW	157	202	257	298	366	441
Compressor	No.		2	2	2	2	2	2
	nom. HP		40	50	65	80	100	120
Evaporator	nom.	m^3/h	45,1	58,0	73,6	85,3	104,9	126,4
	Δp	bar	2	1	1	1	2	2
Fans	No.		6	6	8	8	10	12
	kW		2,5	2,5	2,5	2,5	2,5	2,5
Total Max Load Values	kW		132	148	181	22	251	302
	A - 460		183	203	278	31	374	437
	A - 380		245	335	36	450	526	162
Sound level @ 10 mt.	dB (A)		54	54	55	56	57	58
Connections	Victaulic ®		DN100		DN150		DN150	DN150
Width - L	mm		4300		5400		6450	7550
Depht - P	mm		2250		2250		2250	2250
Height - H	mm		2400		2400		2400	2400
Net weight	Kg		3300	3500	4000	4015	5005	5725

[*] Cooling water temperature / Ambient temperature (°C)

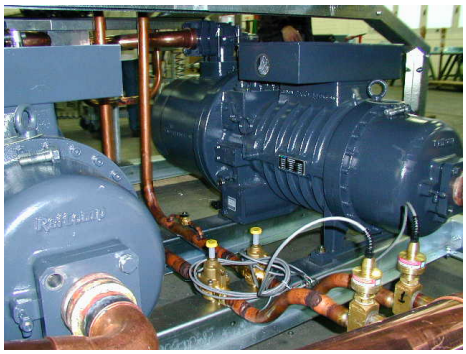
Supply : 380-460 Volt ± 15% - 60Hz - UL/ULC versions on request





TECHNICAL FEATURES

- **REFRIGERATION EQUIPMENT**



  - screw rotary compressors
  - shell & tube evaporators
  - copper pipe condensers with aluminium fins, designed to withstand extreme climatic conditions (maximum temperature +45°C)
  - die-cast aluminium axial fans with direct current (brushless) motor with speed control
  - operating temperature can be set from 0°C to +30°C

- **WATER DISTRIBUTION EQUIPMENT**

  - chiller pump, fitted with a high resistance mechanical seal and tropicalized motor
  - completely insulated pipes, tank, connection parts and manifolds

- **ELECTRICAL AND CONTROL EQUIPMENT**

  - separate thermal protection on each compressor, pump and fan
  - main switch with door lock
  - emergency stop
  - in line with EN 60204/1 standards
  - microprocessor control for regulating and controlling all the functions and displaying the alarms.

- **FRAME**

  - galvanised steel

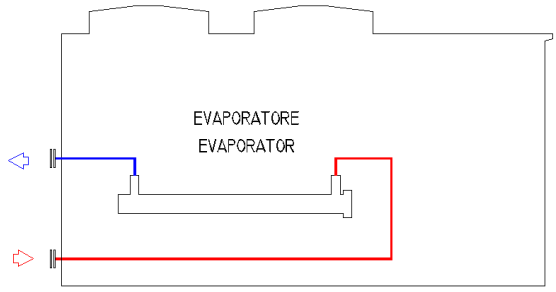
Ordering code Example: HGL660/2AM	**HGL**		**660**		**/2**	**A**		**N**
	---	Series	---		Cooling capacity	**A** =	Axial fans	**N** = without pump

ACCESSORIES AND OPTIONALS

- **PMR Heavy*gel***
  Remote control panel for operating the cooling unit remotely.

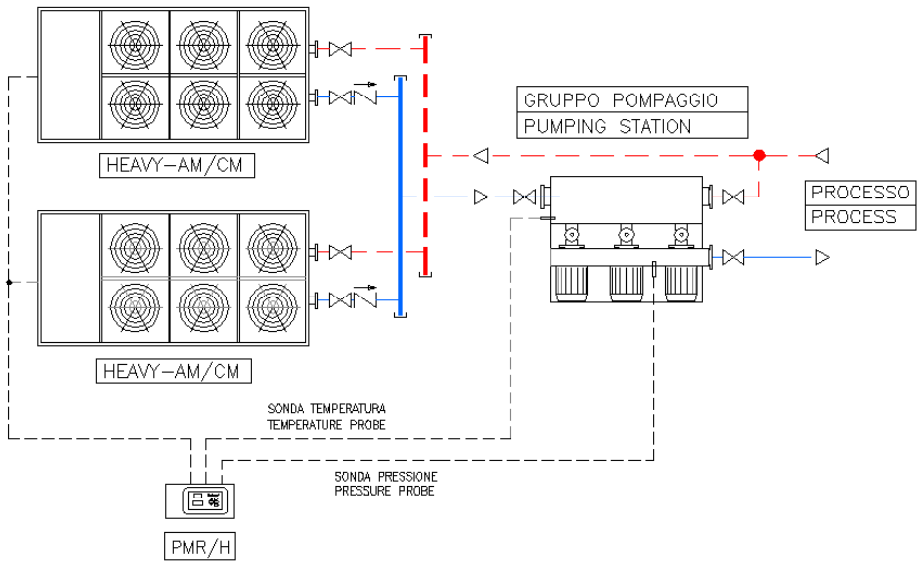
- *Epoxy* coating on condenser's aluminium fins for installation in aggressive environments.

CONFIGURATION



Heavy*gel* (**N**)
type configuration
for systems with
external tank, chiller pump,
process pump(s)

INSTALLATION DIAGRAM



Example of connecting
several **Heavy***gel* (**M**) in
parallel
for systems with
external tank and process
pump(s)