

# In Touch



## Grasso 5HP

Reciprocating compressors for CO<sub>2</sub> freezing and NH<sub>3</sub> heat pump applications

#### CO<sub>2</sub> (Freezing)

Since the introduction in 2006 the 50 bar Grasso 5HP compressor, developed for use in CO<sub>2</sub> cascade freezing systems, is a well accepted and reliable appearance in the industrial refrigeration market. 4 single stage models from 3 up to 6 cylinders cover a wide range capacities. The extremely low volume flow in relation with the cooling capacity makes this series to a big performer.

#### NH<sub>3</sub> (Heat pump applications)

A logic further development of the Grasso 5HP series is the integration in NH<sub>3</sub> heat pump systems. The 50 bar design makes it possible to condensate up to 82 °C and as a result of that produce high level of water temperatures. Heat pump systems are developing very quick in various segments of industry (Dairy, slaugtherhouses etc.) and contribute in reducing waste heat as well as CO<sub>2</sub> emissions

#### Features of Grasso 5HP series

- ° Compact nodular cast iron compressor housing
- $^{\circ}$  High stage design pressure: 50 bar
- ° Up to 30 pressure difference (Pc Po) models
- ° Heavy duty axial roller bearing
- ° Special design gas tight shaft seal
- ° Counter pressure independed overflow valve
- ° Capacity control steps per cylinder
- ° Suitable for speed control (500 1500 min.-1)
- ° Peek technology for high efficiency and long valve life time

### ° In touch with our products

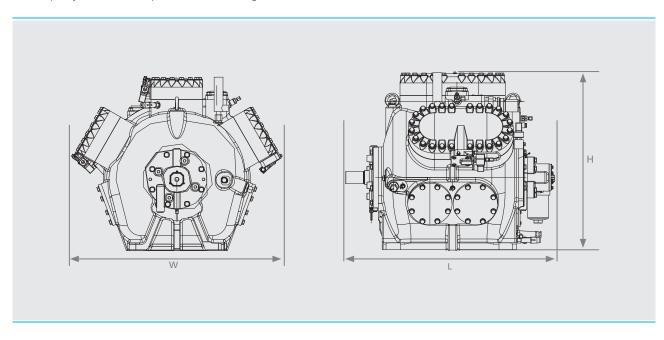
### Technical data and features

Models	Swept Volume* (m³/h)	Cooling cap. (kW)** CO <sub>2</sub>		Dimensions (mm) L W H			Weight (kg)
Single stage		-50/0 °C	-40/-10 °C				
Grasso 35HP	101	88	152	883	861	718	552
Grasso 45HP	135	117	202	883	861	718	552
Grasso 55HP	168	147	252	919	943	768	633
Grasso 65HP	202	176	303	919	943	768	633

Models	Swept Volume* (m³/h)	Cooling cap. (kW)** NH₃		Dimensions (mm)			Weight
				L	W	Н	(kg)
Single stage		35/82 °C	35/70 °C				
Grasso 35HP	101	260	276	883	861	718	552
Grasso 45HP	135	346	368	883	861	718	552
Grasso 55HP	168	433	460	919	943	768	633
Grasso 65HP	202	520	552	919	943	768	633

<sup>\*</sup> Theoretical swept volume based on max. speed of N = 1500 min.-1

<sup>\*\*</sup> Capacity based on: 2K superheat, 0K subcooling



**GEA Refrigeration Technologies** 

