

DUAL HYDRAULIC DRIVE - HDC400

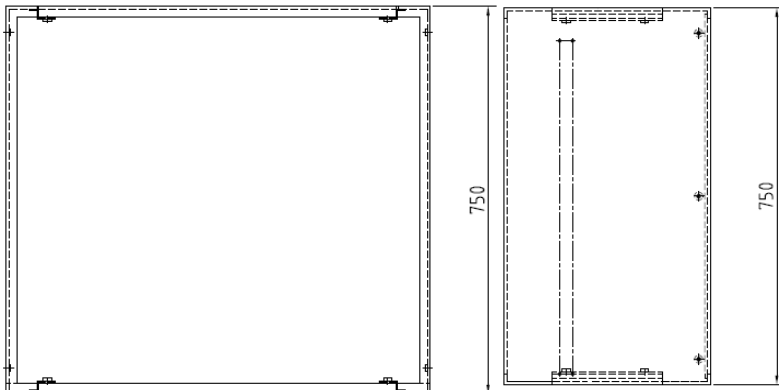
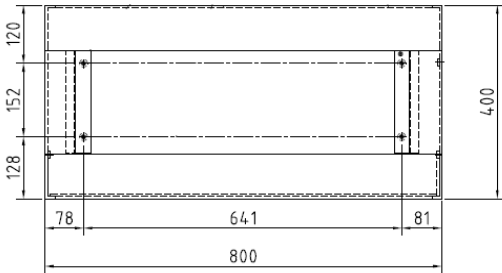


HYDRAULIC COMPRESSOR DRIVE

The HDC range are high performance compact air conditioning compressor systems. Hydraulic motor driven, have been designed to meet the specific requirements of the "Sigma" mining and industrial range of products while maintaining quiet and smooth operation. They are available as either standalone assemblies, packaged in an easy to fit housing, complete with basic controls, or integrated into the Sigma product range.

SYSTEM FEATURES

- ✓ Heavy duty stainless steel casing (Grade304)
- ✓ Dual hydraulic compressor drives, independent systems.
- ✓ Utilise UP200 Compressors, 200cc displacement.
- ✓ Each compressor is provided with HP/LP system protection Pressure Controls.
- ✓ Compressors are fitted O-ring service valves.
- ✓ Provided with suction & discharge refrigeration connections via O-Ring brass bulkhead fittings.
- ✓ Internally fitted oil separators c/w isolation valves.
- ✓ Coupling housing offers inspection opening to measure compressor speed.
- ✓ Assembly supplied with Heavy-Duty Steel A/C bead-lock O-Ring Hose Fittings
- ✓ Provided with louvers to encourage ventilation, and are also removable for greater service access.
- ✓ Easily accessible to service all internal components via rubber toggle clamps



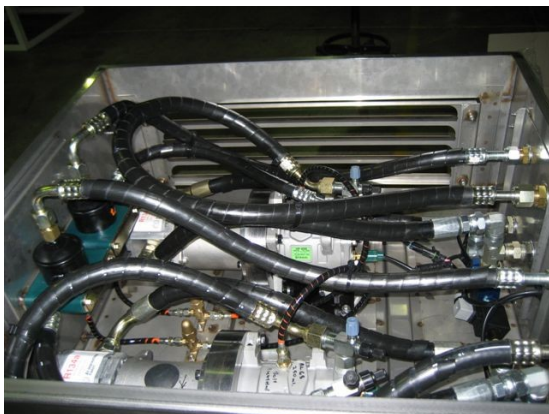
Model No	Displacement motor (Nom) cc/ rev	Displacement Comp (Nom) cc/ rev	Weight
HDC200L	14.5	200	14
1500 RPM			
<i>Cooling Kw @ 0°C/58C</i>	<i>Flow lpm</i>	<i>compr input Kw</i>	<i>ΔP Bar</i>
6.03	22.4	2.79	83
2000 RPM			
<i>Cooling Kw @ 0°C/58C</i>	<i>Flow lpm</i>	<i>compr input Kw</i>	<i>ΔP Bar</i>
7.77	29.9	3.90	96

All details provided are for general information only. The technical specifications mentioned in this data sheet may vary according to the specific equipment/options. In the interest of product improvement, Sigma Air Conditioning Pty Ltd, reserves the right to alter specifications without notice. For more Information on the SIGMA range of Air Conditioners , please visit our web site; www.sigma-hvac.com

DUAL HYDRAULIC DRIVE - HDC400



Sigma designed to minimise engine horsepower & fuel costs during normal AC off-engine drive operation.



ADVANTAGES

Eliminates long refrigerant hose lengths, which can generate problems such as loss of capacity, oil starvation, resulting in mechanical damage to the compressor, additional costs of long hoses and secure clamping.

Improved capacity, this is the big benefit of eliminating long hoses, suction and discharge pressure drops are improved and therefore capacity is increased and maintained.

Solves oil starvation, typically in the mining & earthmoving industry, an automotive type of compressor is used, and these are not charged with a lot of oil with long hose runs. Add to this any refrigerant leaks and it does not take long to run into problems.

Eliminates engine driven compressors, basically a close coupled hydraulic gear motor and compressor assembly is very neat and offers significant benefits such as performance, reliability, and ease of service over an engine driven assembly.

Improved performance, one of the main variables in compressor capacity is the speed at which it operates. An engine driven compressor will vary according to engine speed. Consequently so does capacity at low speeds, and the oil return could also be a problem. Hydraulic drive systems result in constant speed of the compressor, hence cycling is eliminated. Speed can be set according to the load and continuous operation will improve operator comfort and system reliability.

Clutch life is also affected; excessive cycling of a clutch will lead to bearing, belts, or seal damage. The clutch assembly has an open face and if the conditions are dusty, this will generate additional heat and friction, therefore a failure is not far away.

WHAT WE NEED FROM YOU...



... to make sure we have a balanced system, we need the following:

- Oil - Fluid cleanliness level to ISO 16/13, operating fluid viscosity ranges 80 – 1000 SSU.
- Flow - Details of what flow and pressures are available at different operating conditions (i.e.; Idle Speed, Medium to Full Speed RPM's), and other flow requirements etc.
- Load - Details of the application so load can be determined and selection can be made.
- Off-Cycle - Does fluid return to tank or just shut off.
- Voltage - To enable system

Sigma Air Conditioning Pty Ltd takes no responsibility for hydraulic modification and connections. All details provided are for general information only. The technical specifications mentioned in this data sheet may vary according to the specific equipment/options. In the interest of product improvement, Sigma Air Conditioning Pty Ltd, reserves the right to alter specifications without notice. Hydraulic work must be done by a certified hydraulic company/technician. For more Information on the SIGMA range of Air Conditioners , please visit our web site; www.sigma-hvac.com