

GEA introduces biggest semi-hermetic CO₂ Compressor

Bochum (Germany), April xx, 2013 – The new semi-hermetic 6-cylinder piston compressor GEA Bock HG46 CO₂ T is now available. With a displacement of 21,8 to 30,2 m³/h, it is the biggest semi-hermetic compressor for transcritical CO₂ applications with operating pressures of up to 130 bar currently available on the market. At normal cooling – gas cooler outlet conditions +35°C (90bar), evaporation temperature -10°C, superheat 10 K – it has an outstanding COP (coefficient of performance) of more than 1,85. The GEA Bock HG46 CO₂ T is characterized by its robust engineering design that enables maximum standstill pressures of 150 bar on the high pressure side and 100 bar on the low pressure side. The compressor is based on the already established HG34 CO₂ T and is used in numerous industrial heat pumps as well as classical refrigeration applications such as supermarkets.

With semi-hermetic GEA Bock compressors for the sustainable refrigerant CO₂, GEA Refrigeration Technologies offers a broad portfolio for subcritical and transcritical CO₂ applications and more than 20 years of experience in this technology.

Additional features and technical specifications of the compressor:

- Semi-hermetic four cylinder reciprocating compressor with drive motor for part winding start – 4 pole version
- Max. permissible stand still pressure (LP/HP)1): 100/150 bar
- Swept volume between 250 cm³ (21.8 m³/h at 50 Hz) and 345 cm³ (30,2 m³/h at 50 Hz)
- Single-section compressor housing
- Wear-resistant, long-life mechanism
- Reliable and safe oil supply through pump lubrication
- Good and highly efficient operational characteristics through solid total construction
- Two electronic motor versions for individual applications and operating conditions
- 3 different compressor types available:
 - ML-Version: For medium and low temperature applications at low and medium evaporating temperatures, oil charge C85E
 - S-Version: For frequency control and extended application range, equipped with more powerful drive motor, oil charge C85E
 - SH-Version: For heat pumps and at high evaporating temperatures, equipped with more powerful drive motor, oil charge C150E



The new HG46 CO₂ T is currently the biggest semi-hermetic compressor for CO₂ at operating pressures up to 130 bar

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About GEA Group

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