

Cabinet and Small Container Air Conditioning Unit FKS-CLM

Credible Solutions for the Oil and Gas Industry



Air Conditioning Unit FKS-CLM

To remain competitive, today's refiners must employ all optimization and product control techniques available. The use of online physical property analyzers is one of the key features to reach those objectives because they measure important quality properties in the process directly. It is therefore of the utmost importance that the analyzers operate as reliably as possible and with the best performance. An important prerequisite for this is a constant and reliable ambient temperature for the analyzers,

since fluctuations can lead to measurement errors and malfunction of the analyzer in the worst case. However, this source of error is often underestimated and is therefore not taken into account when choosing the air conditioning. Here the FKS-CLM is the perfect solution to keep the risk as low as possible. Another application area are converter control cabinets or small generator houses that are set up, for example, on drilling rigs in potentially explosive areas.

- Optimized for robust and reliable operation
- -20°C to +55°C operating temperature
- High cooling capacity
- Compact design, suitable also for Ex p cabinets
- Easy retrofit in systems that are in operation
- Two different variants with 2 kW and 4 kW available
- Simple Maintenance



The FKS-CLM Air Conditioning Units are self-contained units that excel with their space-saving dimensions, while maintain high cooling capacities. This is the result of decades of experience in the manufacture of air conditioning products, coupled with a careful selection of high-quality components. Together with precise production and strict quality control, the FKS-CLM Air Conditioning Units show unsurpassed reliability and durability.

The chassis is made of glass fiber reinforced polyester. This makes it robust, antistatic and resistant to corrosion and mineral oils. The strict partitioning of air circuits prevents fouling of cabinet air conditioner electrical components. It also contains an active condensate evaporation system with safety overflow and provides high and low refrigerant cutouts with fault indication as standard.

The units can be easily mounted on a flat side panel and it is suitable for setting up outdoors in temperatures ranging from -20 °C to +55 °C. It can of course also be retrofitted in systems that are already in operation and in Ex p cabinets. Unlike most products on the market, the FKS-CLM is also designed on the cooling side for hazardous locations (HazLoc) that could possibly occur in the cabinets and containers.

With the optionally available Hot Gas Bypass Heating System, the compact air-conditioning unit can be used to bring small cabinets and containers to an exact and stable temperature at lower ambient temperatures. The heating output produced results from electrical heat loss, compression heat and frictional energy of the compressor. It corresponds to approximately half of the cooling output.

Refrigerant circuit High-pressure side (Cold side) ETH Extract air Supply air ODA Outdoor air

Side view of the KWS-CLM Air Conditioning Unit air guidance. The nomenclature of the air types is according to DIN EN 16798-3 and 12792.

Special Features

Hot Gas Bypass Heating System in standard and non-standard voltage rating

Ex d Control Gear for ATEX marking or standard electrical control configuration for use in non-Ex areas and installation in Ex p cabinets only

Automatic Condensate Drain for use with Exp cabinets

Supply voltage for different rated or non-standard voltages (according to customer requirements)

Protective hood made from Stainless Steel (EN 1.4404, ASTM 316L) in IP 55, IP65 and IP66 ratings (comparable e.g. with NEMA 4 and 4x respectively)

Offshore Protection (heat exchangers and copper pipes are protected against salty atmospheres with a special corrosion protection, stainless steel parts are made from EN 1.4404 / ASTM 316L

Sound absorbing panel and hood in Stainless Steel (EN 1.4404, ASTM 316L)

External power switch Ex d, 3-pole, 16A

External thermostat IP 65

In case you require custom-made air conditioning solutions for your cabinets or containers, please contact your local sales representative or directly our highly competent sales team in Reinbek (Germany) at sales-reinbek@bartec.com.

Make your decision for a strong partner! Choose BARTEC also for:

- Fast Loop Systems
- Sample Conditioning Systems
- Validation Systems
- Recovery Systems
- Chillers
- Air Conditioning Systems/HVAC
- Pre Commissioned Analyzer Shelters/Turn-Key Solutions

BARTEC BENKE GmbH

Borsigstr. 10 21465 Reinbek/Hamburg Germany

Tel.: +49 40 72703 0 sales-reinbek@bartec.com

bartec.com