PROJECT REPORT



POLAREX – PURGER FOR REFRIGERATION SYSTEMS



What is the reason for non-condensable in a refrigeration cycle?

Extraneous gases, most air, can come into the plant after opening of a plant due to repair and maintenance works or in plants who work below atmospheric pressure where the air can enter through shaft seals or gaskets.

Consequences

- Increase of condensing pressure which leads to lower cooling capacity and higher energy consumption
- Higher wear of bearings
- Increase of discharge temperature which leads to thermal stress of the oil and reducing the lubricity
- Water fraction in air can lead to male function and corrosion inside the refrigeration cycle

Solution

Permanent automatic purging with means of a purger.



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POLAREX – PURGER FOR REFRIGERATION SYSTEMS

POLAREX-Purger

The principle of purging is based on the fact that refrigerants can be liquefied at high temperature than air. In the purger the refrigerant/gas mixture will be cooled down till most of the refrigerant is in a liquid phase. The remain gaseous air will be removed out of the system. With use of an automatic purger the losses of refrigerant can be therefore reduced to a minimum.

The Purger has been designed for operation in a hazardous zone for use in

heavy industrial environment suitable for the oil and gas industry.

All instrumentation can be delivered in Ex-ia or Ex-d. The Purger is ready mounted and wired on junction boxes. Purger can also be delivered with microprocessor controller SIEMENS type ready for plug and play.

Tie-in connections via flanges according to DIN or ASME.



Dimensions

Footprint Unit overall Weight 560x600mm 560x955x1845mm approx. 70kg



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