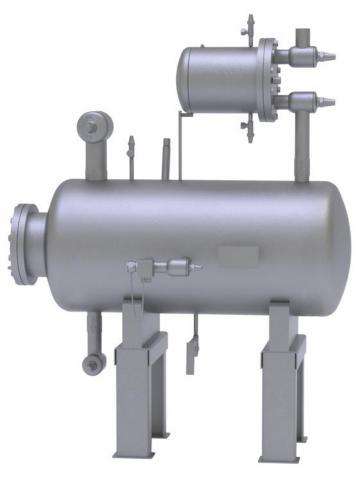


ECO

Economizer







ECO

Economizer

In screw compressor refrigerant plants the ECO is used to increase the efficiency and reduce the sizing of the required components.

Any refrigerant that is formed in the condenser flows to the float regulator, which then expands the liquid refrigerant into the ECO housing to intermediate pressure. The liquid refrigerant is expanded by the float regulation within the ECO housing, to the separator at the low-pressure side of the system. Due to the Economizer connection on the screw compressor, the throttle gas at the medium pressure level separated in the ECO is reintroduced into the compressor process.



Reduction of capacity

Due to a top mounted flash gas suction line, the screw compressor size and lowpressure separator size may be reduced or their performance may be increased.

Safety

Due to the almost mechanical design the wiring or additional controls will be reduced. In the event of a power failure condensate is drained safely to the low pressure side, ensuring highest operational safety.

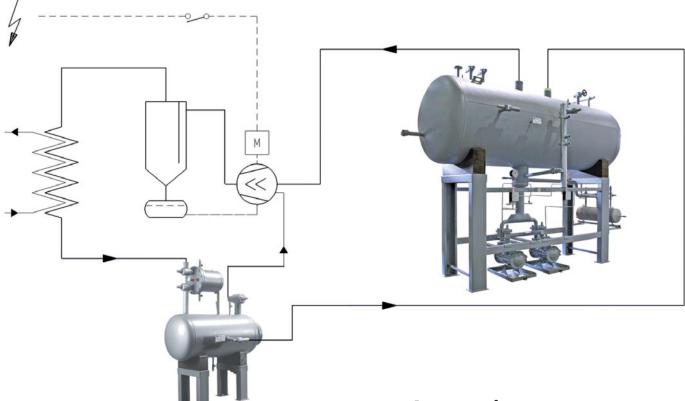
A WITT maximum high-level switch model NGX is fitted to the ECO housing. To ensure that in the event of the liquid level rising to high it will protect the compressor from liquid carry over and possible liquid hammer.

Energy-efficient

Beside the relief/performance increase of the compressor and the separator the refrigerant is always drained by the float whenever condensate accumulates. Thus, lower condensing temperatures can be utilized each season without a need to consider other control criteria. Compared to a system operating with traditional expansion valves there is neither a need for sub-cooling liquid nor superheating the suction gas. (Remark: energy savings of up to 13% are quite possible, i.e. with 5 K lower condensation temperature).







Accessories

- Inlet and outlet connection without WITT standard stop valves
- individual inspections of TÜV or other institutions
- special non standard executions upon request

Scope of supply

- Built-on high-pressure float regulator HR with valves
- WITT stop valves fitted to inlet and outlet connections or gas and liquid refrigerant
- Drainage valve EA 10 GB L
- Purge valve EE 6 L, before EA 10 GB L
- \bullet combined G $\frac{1}{2}$ "/G $\frac{1}{4}$ " threaded connection for safety valve
- Maximum liquid level switch NGX (attached)
- steel frame including wooden supports and mounting brackets







TH. WITT Kältemaschinenfabrik GmbH

Lukasstraße 32 52070 Aachen, Germany

+49 241 18208-0 | sales@th-witt.com