



GEA Purger

Optimize your industrial refrigeration plant with the self-limiting automatic purger

Maximizing system efficiency

The GEA Purger removes non-condensable gases from your refrigeration system, maximizing system efficiency

Refrigeration systems must be kept free from non-condensable gases that can inhibit their performance and increase energy consumption. The most effective way of doing this is by automatic purging which responds immediately to any unwanted gases entering the system, such as air inside the liquid receiver. The GEA Purger starts automatically when the concentration of these non-condensable gases exceeds 2 %, and stops when the concentration drops to below 1 %.

The purger operates independently from the main refrigeration system and is suitable for in- as well as outdoor installation. It comprises an integrated, low temperature refrigeration cycle, including a hermetic compressor and an air-cooled condenser, using the environmentally-friendly natural refrigerant R290 (propane).

Your benefits



Maximum energy-efficiency with minimum power consumption



Operates with the environmentally-friendly natural refrigerant R290 (propane)



Plug and play for in- and outdoor use



Blow-off valve with calibrated orifice for highest quality, rather than quantity purging



The solution:
the GEA Purger,
for maximum
system performance!

The challenge: non-condensable gases

Air or other non-condensable gases can enter the system in many ways:

- Parts of the refrigeration plant are frequently opened for service and maintenance, e.g. for oil changing and recharging with refrigerant. This can cause air to penetrate in the system.
- Systems operating with suction below atmospheric pressure 'can have small leaks (close to seals, etc.) allowing air to penetrate the system without being noticed.
- Contamination can occur due to inadequate evacuation before commissioning the refrigeration plant or after servicing.
- Non-condensables can be introduced if the refrigerant, when delivered, does not meet the specification for refrigeration plants.

When these unwanted gases enter system they can dissolve in the refrigerant and circulate throughout the entire system. Even in small concentrations this causes corrosion inside the piping and a significant increase in condensing pressure, due to their different and higher partial pressures, resulting in higher energy consumption. Refrigeration systems must, therefore, be kept as free as possible from these gases. This is where the GEA Purger comes into play.

Technical specifications

Refrigerant:	R290 (propane)
Refrigerant charge:	150 g
Dimensions (LxWxH):	700 x 330 x 450 mm
Weight:	approx. 50 kg
Protection:	IP44
Power supply:	230V @ 50 Hz
Connection power:	400 Watt
Design:	According to CE PED
Connections:	Flange connection for 22/27 mm
Ambient temperature:	-15 to +45 °C

We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is one of the largest suppliers for food processing technology and of related industries. The global group specializes in machinery, plants, as well as process technology and components. GEA provides sustainable solutions for sophisticated production processes in diverse end-user markets and offers a comprehensive service portfolio.

The company is listed on the German MDAX (G1A, WKN 660 200), the STOXX® Europe 600 Index as well as the DAX 50 ESG Index and selected MSCI Global Sustainability Indexes. With an "A-" rating, GEA is among the leading group in the climate benchmark Carbon Disclosure Project.

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