



Information about product price on demand

Parameters

Quantitative unit

ks

GUNT CE 400

Gas Absorption Unit is designed for the separation of a CO₂/air mixture through counterflow absorption with water. The system generates a controlled gas mixture using CO₂ from a compressed gas cylinder and ambient air, with adjustable mixing ratios via valves. A compressor delivers the gas mixture into the DURAN glass absorption column (packed bed), where the CO₂ is absorbed by water.

The solvent is continuously regenerated in a desorption column operating under vacuum, ensuring an efficient closed-loop process. Temperature control is maintained via an integrated heating and refrigeration system using R513A refrigerant.

Technical Data & Specifications:

Absorption Column:

- Height: 2 × 750 mm
- Inner diameter: 80 mm

Desorption Column:

- Height: 750 mm
- Inner diameter: 80 mm

Pumps:

- Absorption/desorption pumps: Max. flow rate 17.5 L/min, max. head 47 m
- Cooling pump: Max. flow rate 29 L/min, max. head 1.4 m

Compressor:

- Max. positive pressure: 0.6 bar
- Max. flow rate: 62 L/min

Refrigeration System:

- Capacity: 1432 W at 5/32°C
- Refrigerant: R513A (GWP: 631)
- Filling volume: 600 g
- CO₂-equivalent: 0.4 t

Measuring Ranges:

- Flow rate:
 - Air: 0.2-2.4 Nm³/h
 - Solvent: 50-600 L/h
 - CO₂: 0.4-5.4 L/min
- Temperature:
 - 2x -200...100°C
 - 3x 0...120°C
 - 4x 0...60°C
- Pressure:
 - 1x 0...2.5 bar
 - 1x -1...0.6 bar
- Differential pressure:
 - 2x 0-250 mmWC
 - CO₂ content: 0-100 vol%

Operating Conditions:

- 230V, 50Hz, 1 phase
- 230V, 60Hz, 1 phase
- 230V, 60Hz, 3 phases (UL/CSA optional)

Included Items:

- DURAN glass absorption and desorption columns
- CO₂/air gas mixing system with adjustable ratio control
- Integrated compressor and pumps for solvent circulation
- Continuous solvent regeneration under vacuum
- Heating and refrigeration system with R513A refrigerant
- Multiple sensors for temperature, pressure, and CO₂ concentration

Dimensions & Weight:

- Unit (LxWxH): 1920 × 790 × 2300 mm
- Weight: Approx. 290 kg

Required for Operation:

- CO₂ gas cylinder with pressure-reducing valve
- Water connection and drain