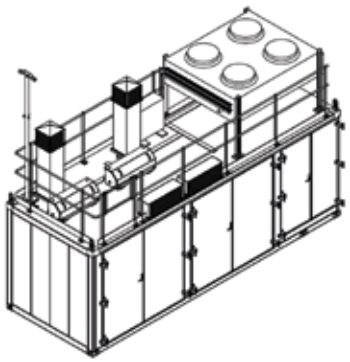
→ Datasheet

IC50/60 Ionic Compressor

Compressor module for gaseous hydrogen refueling station



Description/application

Based on Linde's Ionic Compressor technology, the IC50/60 is the optimal hydrogen fueling station for larger fleets of heavyweight vehicles like buses or transport trucks with more frequent refueling requirements. It is a highly efficient, reliable and safe fueling station for gaseous hydrogen.

Typical fueling/ station parameters

- → Fueling demand: < 900 kg/day
- → Number of fuelings: 30/day, 30 kg refueled mass at 350 bar
- → Fueling window: 24 hours

Components

- → Compressor unit: 2x IC50, 5 stages, hydraulic drive
- → Mid-pressure storage: 18 x 550-bar tubes, each with 1,200 liters
- → Bank storage management system
- → Instrument air supply for valves
- → Electric cabinet including air conditioning

Technical data/ performance

- → Nominal inlet pressure: 6–201 bara, GH_2
- → Outlet pressure: < 500 bar
- → Capacity: 56 kg/h
- → Power consumption[a]: 1–2.8 kWh/kg
- → Connection power[b]: 186 kW
- → Ambient operating temperature: –20 °C / +40 °C
- → Noise level: 70 dB (A) at a distance of 10 m
- → Footprint (L x W x H): 7 m x 2.4 m x 4.1 m (without chimney)
- → Fueling protocol: SAE J 2601-2016
- → Certification: CE

[a] compressor plus thermal management
[b] without H_2 pre-cooling unit

Optional features

- → Low-pressure GH_2 storage tank
- → F90 fire protection wall
- → Parallel fueling
- → Additional mid-pressure tubes for GH2 storage at 550 bar
- → Plant monitoring
- → Hydrogen pre-cooling unit
- → Dispenser for H35 refueling

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