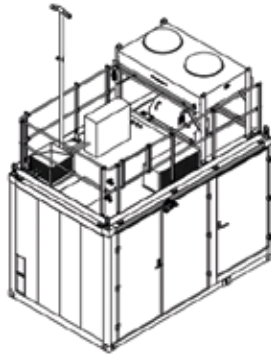# IC50-P/60 Ionic Compressor
Compressor module for gaseous hydrogen refueling station

Description/application

Based on Linde's Ionic Compressor technology, the IC50-P/60 is the optimal hydrogen fueling station for fleets of heavyweight vehicles like buses or transport trucks. 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: 15/day, 30 kg refueled mass at 350 bar
→ Fueling window: 24 hours

Components

→ Compressor unit: 1 x IC50-P, 5 stages, hydraulic drive
→ Mid-pressure storage: 9 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: 16–201 bara, GH_2
→ Outlet pressure: < 500 bar
→ Capacity: 28 kg/h at 16 bara inlet pressure
        56 kg/h at 31 bara pressure
→ Power consumption[a]: 1–2.8 kWh/kg
→ Connection power[b]: 93 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): 5 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 GH_2 storage at 550 bar
→ Plant monitoring
→ Hydrogen pre-cooling unit
→ Dispenser for H35 refueling

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