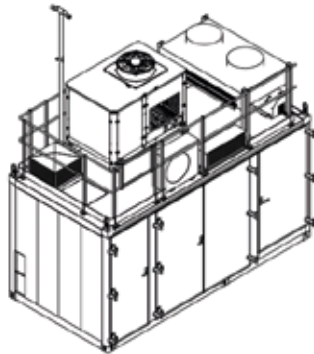




IC90/30 Ionic Compressor

Compressor module for gaseous hydrogen refueling station



Description/application

Based on Linde's Ionic Compressor technology, the IC90/30 is the optimal hydrogen fueling station for light-duty vehicles like passenger cars or smaller fleets of lightweight transport and utility vehicles. It is a highly efficient, reliable and safe fueling station for gaseous hydrogen.

Typical fueling/ station parameters

- Fueling demand: < 450 kg/day
- Number of fuelings: 90/day, 5 kg refueled mass at 700 bar
- Fueling window: 24 hours

Components

- Compressor unit: 1 x IC90, 5 stages, hydraulic drive
- High-pressure storage: 24 x 1000-bar PED cylinders, each with 50 liters
- Bank storage management system
- Instrument air supply
- Electric cabinet including air conditioning

Technical data/ performance

- Nominal inlet pressure: 6–201 bara, GH₂
- Outlet pressure: < 900 bar
- Capacity: 28 kg/h
- Power consumption^a: 1–3.3 kWh/kg
- Connection power^b: 93 kW, 400 V, 50 Hz, 3 phases + PEN
- 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 H₂ pre-cooling unit

Optional features

- Low-pressure GH₂ storage tank
- F90 fire protection wall
- Parallel fueling
- Additional mid-pressure tubes for GH₂ storage at 550 bar
- Additional high-pressure storage: 70 x 1000-bar cylinders, each with 50 liters
- Plant monitoring
- Hydrogen pre-cooling unit
- Dispenser for H35 and H70 refueling

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