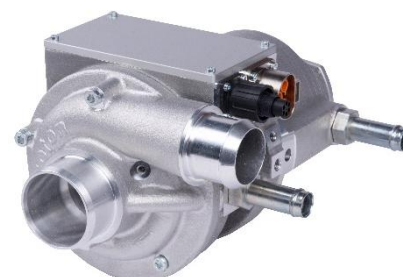


CT-2001

Highly compact, ultra-high-speed, electrically driven radial turbo compressor with air bearings for the air supply of fuel cell systems.

- Ultra-high-speed air bearings for oil-free operation
- Lowest ratio of volume and weight versus pressure and mass flow due to highest speeds
- Aerodynamic and electromagnetic optimization for highest total efficiency
- Proprietary air bearing technology
- Sensorless control with converter CC-2000



Specifications turbo compressor

Maximum pressure ratio	2.55
Maximum mass flow	40 g/s
Maximum speed	170,000 rpm
Maximum compressor input power	5.5 kW
Weight	5.8 kg
Dimensions (L x W x H)	244 x 189 x 149 mm (9.61 x 7.438 x 5.866 inch)

Cooling

Coolant	Inhibited 50%/50% water glycol mixture
Coolant temperature	Full-performance: -20 – 65 °C Start up capable: -30 °C
In-/Outlet connector type	According to SAE J1231 430192
Tube ID	10 mm

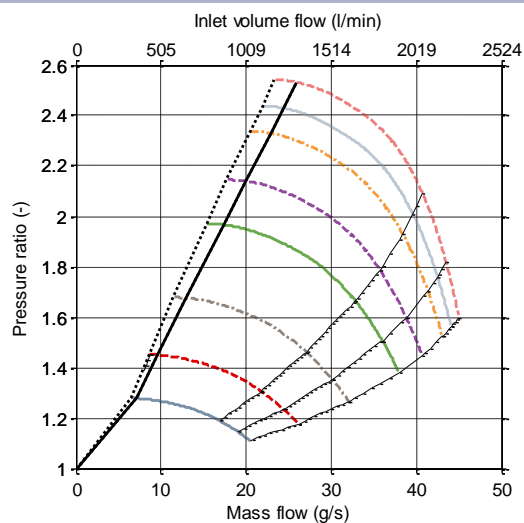
Electrical interface

Connection type	Motor and temperature sensor connector
Connector type power	Amphenol/PowerLok 4.0
Connector type signal	Amphenol/Eco-Mate RM

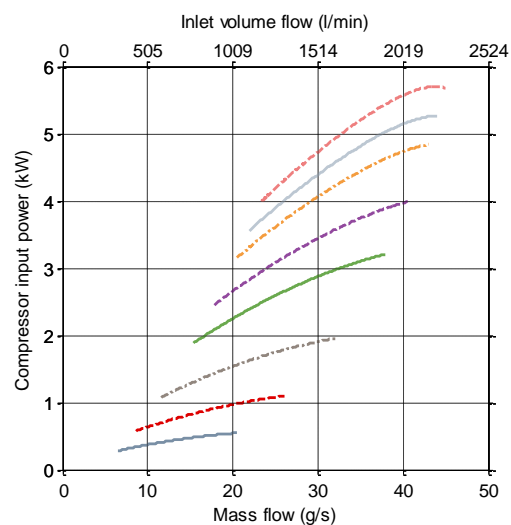
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Compressor map: operation with converter CC-2000

Pressure ratio versus mass flow



Compressor input power versus mass flow

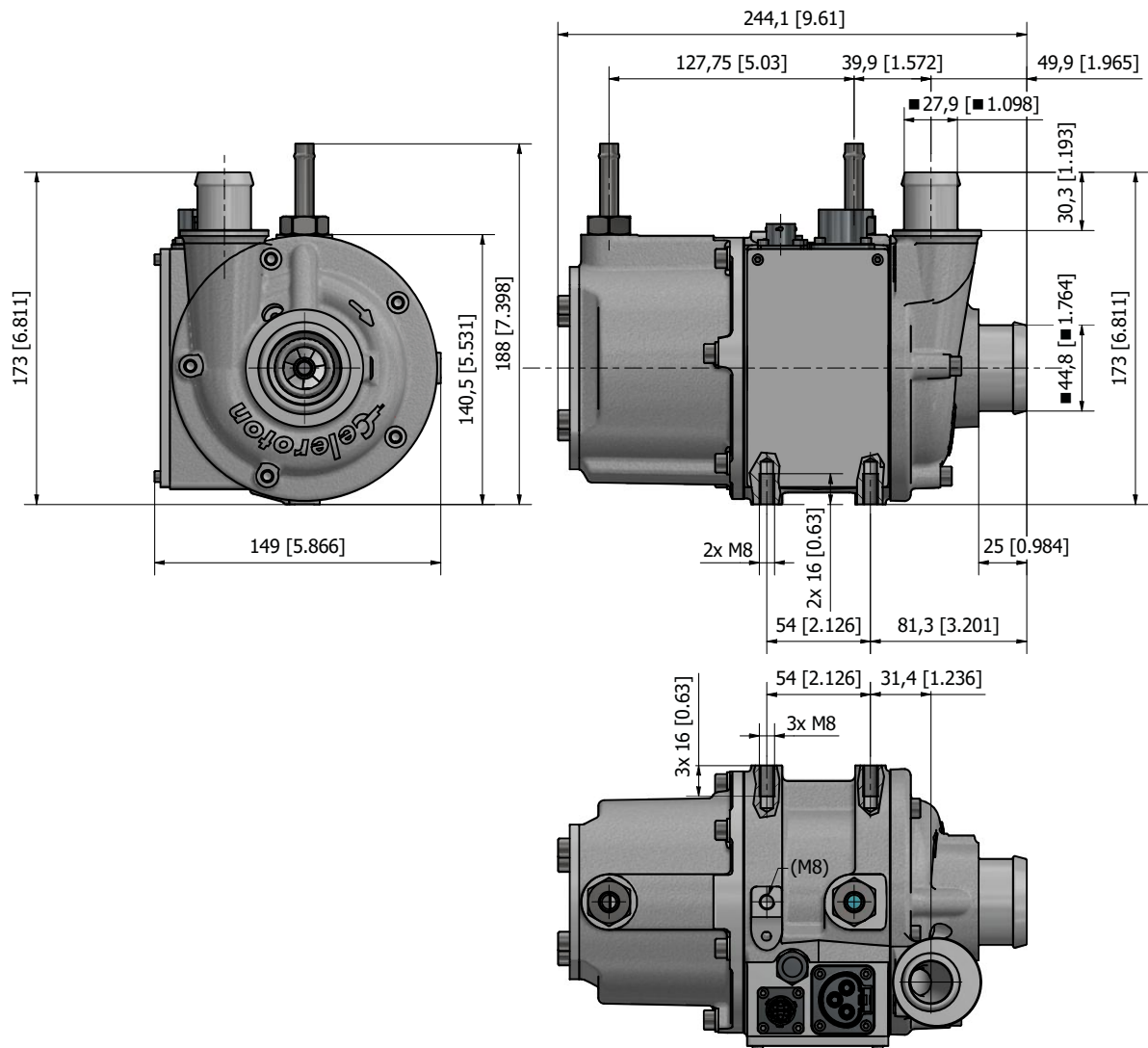


Order codes: CT-2001

Ordering information	Article number
CT-2001	contact sales
CT-2001 with CC-2000 (270 – 500 VDC)	contact sales

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Drawing in mm [inch]



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The specifications and compressor maps in this document refer to air (ISO 8778) at the inlet of the compressor: temperature: $T = 20^{\circ}\text{C}$, absolute pressure: $p_{in} = 1 \text{ bar}$.



Depending on custom specific operation conditions such as e.g. gas inlet pressure and temperature, humidity, cooling conditions, the operation in environmental conditions with vibrations and/or depending on the combination of the compressor and the corresponding Celeroton TurboCell converter, the compressor maps shown in this document may be different or may have additional limitations.

For technical details and further information, please refer to the user manual or contact Celeroton TurboCell directly.