

REFRIGERANT COMPRESSORS

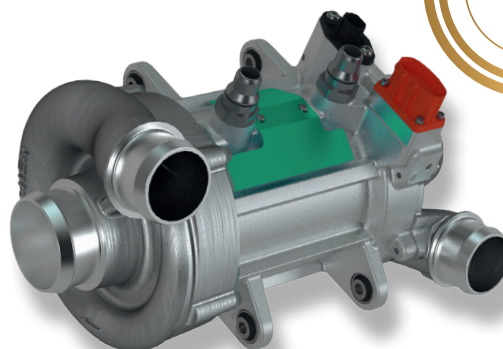
THANKS TO TOP TECHNOLOGY A HIGH-TECH PRODUCT

We also use the years of expertise we have gained in spindle and rotation technology for other applications and future markets. For example, we manufacture high-speed rotary spindles for atomizing liquids or high-performance compressors with FISCHER-patented bearings for compressing different gases.

With Swiss precision engineering, we rely on the innovative spiral groove bearing patented by FISCHER. Compared to conventional compressors, we create added value for our customers in terms of efficiency, extended lifetime and sustainability. Due to the oil-free bearings, our compressors are maintenance-free and therefore particularly suitable for heating and cooling applications. We enable the use of natural refrigerants.

The new generation of refrigerant compressors offers our customers the following advantages:

- Use of refrigerants with low global warming potential (GWP)
- High efficiency and COP
- Proven series technology from the fuel cell air compressors
- Oil-free (gas bearing with process gas)
- Greater robustness compared to conventional technologies
- Increased service life
- Higher power density
- Stepless controllability



Structure version	EMTC / EMTCC
Medium	R290 (other on request)
Bearing	Aerodynamic bearing (spiral groove bearing)
Bearing lubrication	Self-lubricating
Motor	Electric synchronous motor
Continuous motor power	20 kW
IP-Class	IP67/IP40
High-voltage supply	400 VAC

Speed range	20'000-100'000 U/min
Acceleration (t90 time)	< 10.0 s
Inlet gas temperature	-30 bis 30°C
Pressure ratio	≤ 5
Cooling mode	Compressor: Cooling via medium Inverter: Air cooling
Weight	Compressor: 15 kg Inverter: 38 kg

AREAS OF APPLICATION

Heating



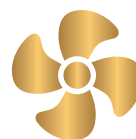
Cooling



Compression of gases



Energy recuperation



Industrial applications



FISCHER reserves the right to change specifications and design without notice. The data change depending on the configuration.