

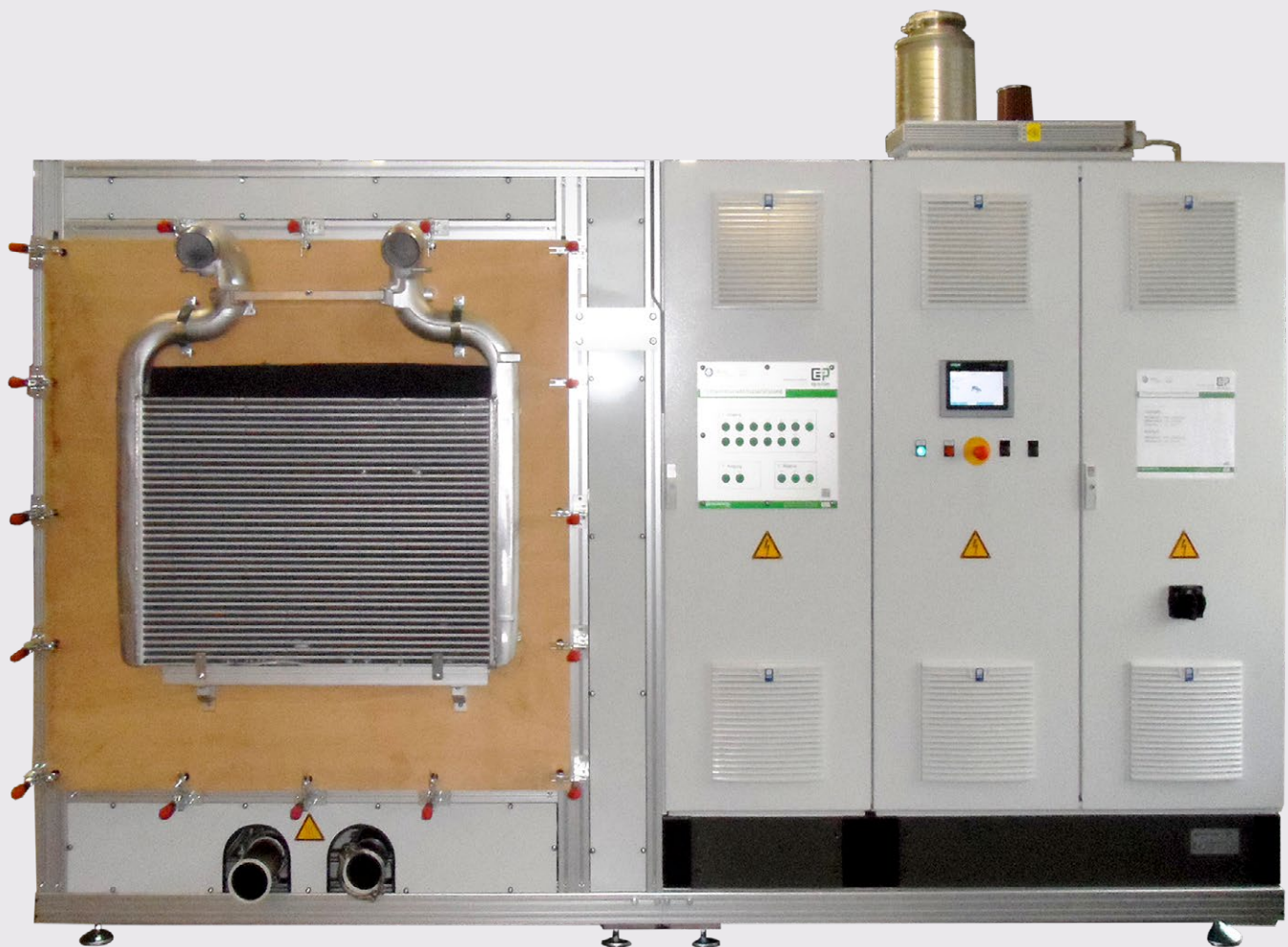
Perfection in fluids.

The right *flow*  
by German engineering.



# TCB300 - Temperature Cycle Test Bench

Data Sheet EPE-147043



Made in  
GERMANY



# TCB300 - Temperature Cycle Test Bench

EPE-147043



Made in  
GERMANY



Similar to Figure



## Temperature cycle test bench for charge air coolers

Temperature gradient up to 40 K/sec  
Temperature range from 30°C to 300°C  
Mass flow charge air from 200 to 1000 kg/h

### Description

The system is designed for the testing of direct charge air coolers. The supply with charge air is provided by a side channel compressor. The temperature of the charge air is achieved with an electrical heater. The mass flow control is carried out by a combination of speed-controlled blower and control valves. The measurement of the mass flow is done via a thermal mass flow meter.

For the generation of the cooling air, a radial blower is integrated. This blower sucks ambient air through the test item. The mass flow measurement of the cooling air takes place via a venturi nozzle. The system is controlled via a PLC with HMI touch panel. Alternatively, the system can also be offered with a PC.

### Benefits

- ✓ Compact test bench
- ✓ Temperature changes in a very short time
- ✓ Simple operation with intuitive software
- ✓ Compilation of test plans
- ✓ Best price relation

### Technical data

Temperature range charge air	30...300°C
Electric heating power	100 kW
Temperature cooling air	environmental temperature
Mass flow range charge air	200...1000 kg/h
Power charge air blower	28 kW
Mass flow range cooling air	360...3600 kg/h
Power cooling air blower	11 kW
Temperature cycles per minute	5...10°C



### Special Solutions

#### Application examples:

#### Automotive:



- Endurance test for charge air coolers
- Testing of heat exchangers
- Component testing for components in the high temperature range

#### Domestic appliances:



- Testing of components for heaters
- Testing of heat exchangers for ventilation system



This is only an **example** interpretation and is of course individually adaptable to your needs.



Top-Innovator  
2016

For special requirements we are happy to advise you. Subject to change. / EPE-147043 / Last update: 03/2018 / V02  
© EP Ehrler Prüftechnik Engineering GmbH, Wilhelm-Hachtel-Str. 8, D-97996 Niederstetten

**TOP-INNOVATOR 2016:** EP Ehrler Prüftechnik is one of the most innovative companies in the German SME segment.

+49 (0) 79 32 . 6 06 66 - 0 / +49 (0) 79 32 . 6 06 66 - 11 / [info@ep-e.com](mailto:info@ep-e.com) / [www.ep-e.com](http://www.ep-e.com)