

CT 159.02

Exhaust gas analysing unit



Learning objectives/experiments

- measurement of residual oxygen content in exhaust gas
- measurement of carbon monoxide and carbon dioxide
- measurement of hydrocarbons
- determination of lambda (fuel-air ratio)

Specification

- [1] exhaust gas analysis unit for engines
- [2] menu-based display for calibration, operation and displaying measured values
- [3] USB interface

Technical data

Working temperature: 5...45°C

Measuring ranges

- CO: 0...10% vol.
- CO₂: 0...20% vol.
- O₂: 0...22% vol.
- HC: 0...2500ppm vol.
- lambda: 0...9,999
- accuracy classes 1 and 0

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase

120V, 60Hz, 1 phase

UL/CSA optional

LxWxH: 330x260x205mm

Weight: approx. 7kg

Scope of delivery

- 1 exhaust gas analysing unit
- 1 probe
- 1 manual

Description

■ measurement of relevant exhaust gas parameters on internal combustion engines

The CT 159.02 is an accessory for the CT 159, CT 110, CT 300 and CT 400 engine test stands and the associated engines. The unit can be used to measure the exhaust gas composition (CO, CO₂, HC, O₂) and the excess air factor lambda of the engine. The menu-based display on the unit is used for calibration, operation and to display the measured data. Interfaces allow it to be connected to a PC or external printer.

The measuring accuracy complies with OIML Class 1 (Organisation Internationale de Métrologie Légale) and meets the requirements of the Physikalisch-Technische Bundesanstalt (German national metrology institute; PTB).

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Required accessories

CT 159	Modular test stand for single-cylinder engines, 3kW
or	
CT 110	Test stand for single-cylinder engines, 7,5kW
or	
CT 300	Engine test stand, 11kW
or	
CT 400	Load unit, 75kW, for four-cylinder engines