

HL 352.01

Oil burner



The illustration shows a similar unit

Description

- oil burner for installation in the HL 352 test stand
- blue flame burner

Oil burners are divided into yellow flame and blue flame burners, depending on the flame colour. In the case of yellow flame burners, the heating oil is only atomized before combustion; in the case of blue flame burners, the heating oil is evaporated and some of the hot exhaust gases are returned to the root of the burner flame. In blue flame burners, combustion takes place in a gaseous state, which produces the blue flame. This results in cleaner combustion with a lower nitrogen oxide content and very low carbon monoxide content in the exhaust gas.

The HL 352.01 Oil burner is a commercially available blue flame burner in the power range that is commonly used for residential buildings.

The HL 352 test stand can be used to measure important temperatures and pressures, which are then available for further calculations. A thermal balance can be created from the measurement data and the energy efficiency can be determined.

Learning objectives/experiments

- together with the HL 352 test stand
 - ▶ investigation of an oil burner
 - ▶ thermodynamic balance

Specification

- [1] oil burner for installation in the HL 352 test stand
- [2] fuel supplied via the HL 352 test stand
- [3] sensor and digital displays for initial oil pressure, temperatures and flow rate on the HL 352 test stand

Technical data

Oil burner

- max. output: 18kW

LxWxH: 590x270x300mm

Weight: approx. 13kg

Required for operation

fuel oil

Scope of delivery

- 1 experimental unit
- 1 manual

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Required accessories

HL 352 Test stand for oil, natural gas and propane gas burners