Glow wire testing device GPD DIN EN 60695-2-10

Application: Tests with a glow wire for evaluating fire hazard.

Principle: The device is used to test the fire resistance properties of electrotechnical products and materials under DIN EN 60695-2-10. A glow wire is used as the fire source.
The temperature of the glow wire is set and adjusted using a temperature controller which is set to manual mode during testing in order to have a fixed voltage in the command variable (glow wire) and not to allow a feedback of the command signal (thermocouple) to the temperature controller. The temperature of the glow wire is adjustable from room temperature up to 1000°C. The temperature of the glow wire is measured by a type K mineral-insulated metal-sheathed thermocouple (Class 1) under IEC 60584-2. During the test the specimen is moved back and forth towards the glow wire with a fixed velocity of 11 mm/s. The exposure period of the specimen to the glow wire is controlled by a quartz and is 30 s. The specimen plate is pulled to the glow wire with a force of 1 N during the test. The specimen holder allows specimen from 50 x 120 mm to 120 x 120 mm. The thickness of the specimen can be at a maximum of 20 mm.
The power supply is provided by an IEC-320 AC power cordset 230 VAC (50/60 Hz).

Constituents:
Testing rack installed on device
Specimen holder
Glow wire
Thermocouple Ø 0.5 mm
Temperature controller with steady voltage output and fuzzy-logik
Linear motor with a speed of ca. 11 mm/s