

## 160105.22 Glowing Wire Test Instrument Model GDP.2 (Mk II)

acc. DIN EN IEC 60695-2-10 (VDE 0471-2-10):2023-10 / COR1:2024-07;  
IEC 60695-2-10:2021/COR1:2024;

**Application:** Fire Hazard Testing of Specimens and End Products.



Instrument for fire hazard testing of electrical end products and materials when exposed to a heated wire acc. DIN EN 60695-2-11/-12/-13 & IEC 60695-2-11/-12/-13. Programming of wire temperature with self-explanatory keys (→ SW user interface). Range of PID-controlled temperature is R/T to 1000°C [1832° F]. Monitoring of glow wire temperature by means of narrowband pyrometer (non-contact measurement). During the actual test the controller automatically will be switched into manual mode, since temperature compensation is not prescribed in the relevant standards. The test specimen will be moved with constant velocity of 11 mm/sec. towards the glow wire loop and back to starting position by motor-drive.

After attaching to a special sled the specimen under test will be pressed against the glow wire loop with tractive force of 1 N. That force precisely is ensured by cable-connected weights.

The duration of the specimen's physical contact with the glow wire is 30 sec. ( exactly quartz-controlled ).

The test instrument is equipped with an IEC mains socket for a detachable power supply cord fitted with "Schuko" type plug ( may be replaced by other compatible country-specific cord sets ). Nominal voltage is 230 VAC ±10% (50Hz).

Verification of g. w. temperature measuring system → integrated current measuring instrument provides values for deriving a correlation curve (procedure acc. informative guidance published with updated standard / edition 2014-04)

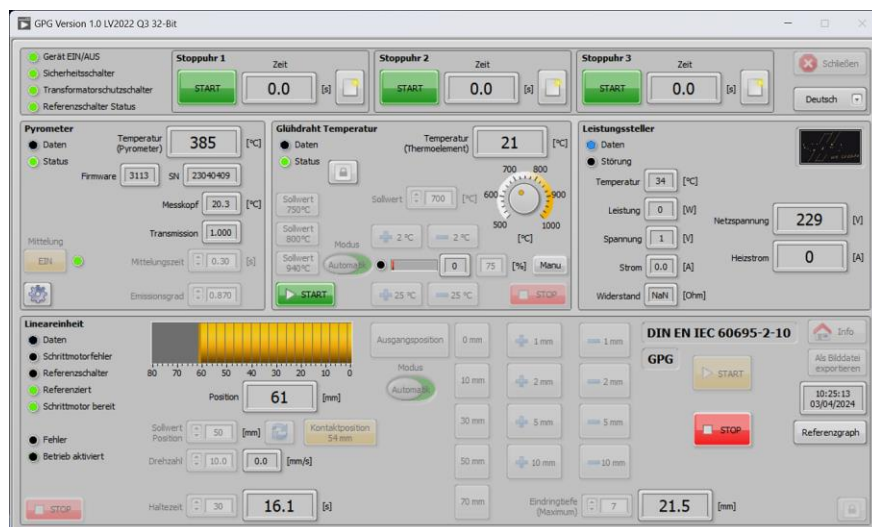
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Non-Contact Measurement of Glow Wire Temperature with Pyrometer

#### Features:

- Compact & robust desktop unit
- Automatic execution of tests after pressing the START button (SW / GUI)
- Electric linear drive system to move sled with certain speed
- Contact force by means of wire-connected standardized load
- Mode selection AUTOMATIC / MANUAL by means switch (SW / GUI)
- Temperature controller with steady voltage output & fuzzy-self optimization
- Built-in two-wire infrared thermometer with excellent temperature resolution
- Glow wire loop
- Display of temperature values (set point & actual status) & heating current
- Fixture for specimens with max. size [120 x 120 x 20] mm
- Scale for flame height
- Scale for depth of penetration
- Manual stopwatch for verification of the instrument's integrated quartz timer



Graphical user interface / LabView-based for controlling & monitoring the instrument

*Electrical Data:*

- Mains Voltage: 230 V 1N~ ( ±10 % ), 50 Hz
- Nominal Power: 0.5 kW (typically)
- Mains Connection: Instrument is equipped with IEC mains socket
- Electric Plug: GDP.2 comes with detachable power supply cord fitted with "Schuko" type plug

*Dimensions & Weight:*

- Dim's. (L x D x H): [505 x 332 x 650] mm
- Weight (net): approx. 30 kg

**Please note:**

Windows™ compatible PC is not provided with a.m. setup

*A mini or notebook PC can be quoted at customer's express request*



**Options** (if required, extra charge):

**Test Chamber** made of steel, inside walls blackened  
Front door with viewing window  
Dim's.: (L x D x H): [800 x 650 x 1150] mm

*Additionally available on request:/ extra charge*

**Exhaust Duct, mounted on top of cabinet**  
with integrated blower (230 VAC/50 Hz)  
→ for evacuation after completion of test

**DAkkS Certificate of Pyrometer** (Initial Certification)  
Temperature values [500 / 700 / 900 / 960 / 1000] ° C  
Calibration based on PTB-traceable measurement standards. Service performed by accredited laboratory

*The instrument is of German origin and CE marked.  
Documentation in English or German language.*

Preliminary Info / 2024