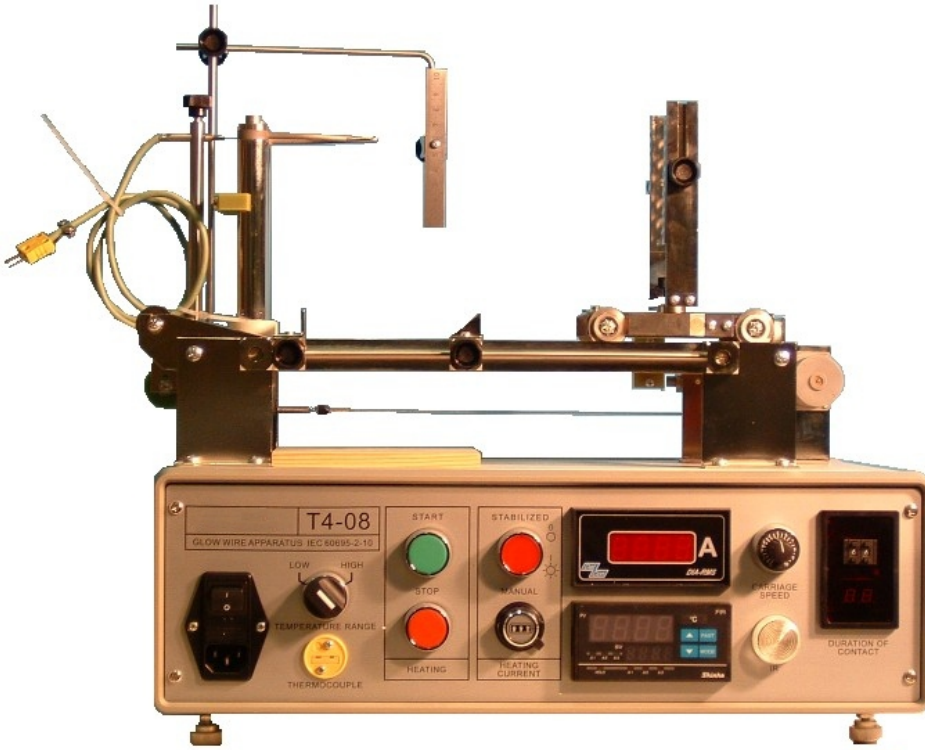


T4-08

Automated / Remote-Control Glow Wire Tester



T4-08 GLOW WIRE TEST APPARATUS WITH MOTOR DRIVE is intended for testing the flammability and ignitability of components and materials. It is constructed in compliance with IEC (e.g **60695-2-10, 695-2-1, 335-1, 1058-1, 742, 669-1,**) and also includes electronic feed back heating current stabilizer - regulator, A-meter, thermometer, motor drive and timer.

Apparatus consists of electric unit and mechanical unit.

ELECTRIC UNIT: Electric circuit is built in steel sheet housing on which is located mechanism for performing the test. Measuring instruments and components for controlling the operation of apparatus are located on the front plate of apparatus. The source of heating current is toroidal transformer that is controlled (its primary side) through ERT-200. Electronic circuit ERT-200 operates as regulator of heating current and from the selected moment on, as heating current stabilizer. The circuit includes microprocessor that continually monitors the amplitude of heating current. The current information is obtained through the measuring current transformer. Potentiometer, that is located on the front plate, is intended for heating current regulation (adjustment). To enable more precise current (temperature) regulation ten-turn potentiometer with 1000 digital dial is built-in. When the requested temperature stabilizes, push-button should be pressed. In this moment the microprocessor memorizes the current information (triggering angle of triac) that match requested temperature. Processor monitors the changes in current amplitude that can be generated as a consequence of mains voltage variation (fluctuation) or the change of resistance in heating circuit. Processor corrects all Changes in heating current (standard requests that the heating current should remain stable during the test) by changing the triggering angle of triac. When current stabilization is turned on the lamp in the push-button is lit. During this time it is not possible to adjust the heating current by potentiometer Stabilization can be also turned off Electric circuit also contains control and switching elements for controlling the electric motor drive that slowly moves tested sample to the wire loop after its activation. When the sample contacts the glow wire loop it activates the timer, which, after 30 seconds, returns the carriage with the sample to the start position. The test can be also started by remote controller, which enables easier operation inside test Chamber.

Precision Regulatory Test Equipment

MECHANICAL UNIT: Mechanism with wire loop, thermocouple and motor drive is located on the cover of casing with electric unit. Heating transformer and current transformer are mounted on the bottom side of the cover, so that complete cover is easy removable. Carriage with sample mounting support is so designed that it can be easily removed from the guiding tracks. All regulating elements of the mechanism are equipped with handle-screws. Wire loop and thermocouple are easily exchangeable. Apparatus also has scales for the depth of penetration and flame height reading with zero point adjustments. All parts of mechanism are galvanically protected or made of stainless steel. Enclosed is also silver foil for calibration of temperature measuring system as standard requests.

PROTECTION: The apparatus is protected against overheating, short circuit and break off in the circuit. In the thermometer are built in three limit comparators, of which the first is used as protection against too high temperature that could shorten the lifetime of the thermocouple. It switches off the heating of glow wire at a temperature 1000°C, which is 40°C over max. temperature that is requested by standard (960°C). In case of short circuit between the loop carrying rods (bare!) or between the heating current leads in manual or stabilization mode, processor detects irregular conditions and turns the heating off. This is indicated by blinking of signal push-button. After the cause has been removed, heating can be turned on by pressing "STOP" and "START" push-button. In case of break off in the circuit or bad connection in the heating current in manual or stabilization mode, processor detects irregular conditions and turns the heating off. This is indicated by blinking of signal push-button. Heating can be turned on by pressing "STOP" and "START" push-button.

Specifications

Power supply	220V±10%, 50HZ ±2HZ (Other optional)
Temperature adjustment	370°C-1000°C in two ranges
Control and Stabilization system	microprocessor, 256 steps, effective current stabilization
Thermocouple	Ni-Cr-Ni Type K Ø 0.5 -200-1150°C
Thermometer	digital programmable, accuracy to ±0.05%, -200-1000°C
A-meter	digital A-meter 150 A RMS
Heating transformer	toroidal-separating 500VA, secondary winding 2.5 V, 150A
Dimensions (max.)	W x D x H: 480 x 380 x 380 mm, Weight: 17 kg

Appearance of products can change without notice

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