Clinton
INSTRUMENT COMPANY

MODELS STM-10GF and STM-20GF
Multi-Electrode D.C. Spark Testers

FEATURES...

- Individual testing of multiple conductors
- Up to 7 test modules per control unit
- 10KV and 20KV models
- Transistor fault output for each channel
- Digital voltage display
- "Interlock Open" indicator
- CE approved
- Safe test current

When multi-conductor constructions must be spark tested during bunching and cabling, options have been limited and often, expensive. The cable manufacturer has had to choose between an elaborate multi-channel spark tester and a series of individual testers and electrodes installed at each stage of the operation.

Clinton now offers a practical alternative to these choices. As many as seven High Voltage Test Modules, strategically placed to test each cable element just prior to closing or extruding, are connected to a single 10KV or 20KV STM spark tester. When a fault is detected in an electrode, the fault indicator light on the HV Test Module chassis illuminates, and a signal is instantly sent to the corresponding channel on the control unit. The channel's fault indicator lights up and an opto-isolated transistor output conducts until reset. The front panel counter (common to all channels) registers the fault, and the spark tester responds in accordance with the operating mode selected for process control output. The system may then be reset locally or from a remote site.

Each HV Test Module connects directly to the STM control unit and may be located as far as 60 meters (approx. 200 feet) away.

STM-10GF and STM-20GF Multi-Electrode D.C. Spark Testers are current limited for operator safety and conform to IEC 1010-1.

Model STM-10GF Spark Tester shown with ST-10G01 High Voltage Test Module

Models STM-10GF and STM-20GF Specifications

Voltage Test Range:
- **STM-10GF** ..... 1000v to 10KV D.C.
- **STM-20GF** ..... 1000v to 20KV D.C.

For test voltages below 1000 volts, consult factory.

Voltage Display ..... 3-1/2 digit 14.5mm LED display, accuracy 2% of reading +/- 1 digit.

Fault Indication:
- **Control unit** ..... Each channel: amber indicating lamp, opto-isolated latching output. Common 3-digit electro-mechanical counter.
- **HV Test Module** ..... Amber indicating light mounted on chassis.

Fault Response ..... Less than 1 millisecond.

Fault Resolution ..... 40 milliseconds.

Output current:
- **STM-10GF** ..... 1.5 milliamperes maximum.
- **STM-20GF** ..... 0.75 milliamperes maximum.

Detection Sensitivity ..... Less than 600 µa. at 5KV.

Operating Modes ..... Continuous HV/Remove HV on Fault. Momentary Process Control/ Latch until Reset.

Process Control ..... Relay form "C" contacts rated 2 amps max. for both NO and NC circuits. Front panel or external reset. In non-latch modes, closure time is adjustable from 12.5 milliseconds to 2-1/2 seconds.

Line Speed, ST-10G01 or ST-20G01 HV Test Module, 2"(50.8 mm)long electrode .. 8000 FPM (2450 mpm) maximum.

Dimensions:
- **Control Unit** ..... 17.0"W x 12.3"D x 3.5"H (432 mm W x 311 mm D x 89 mm H).
- **HV Test Module** ..... 7.3"W x 9.6"D x 7.0"H (184 mm W x 397 mm D x 178 mm H).
- **Connecting Cable** ..... 10' (3m). Lengths to 200' (61m) are available.

Weight:
- **Control unit** ..... 15 lbs. (6.8 kg.)
- **HV Test Module** ..... 11.5 lbs. (5.2 kg.)

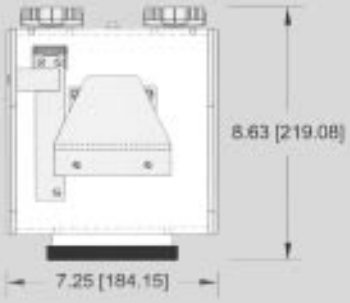
Power Requirements ..... 100 to 240VAC 1 amp, 49-61 Hz. Power supply is self-adjusting.

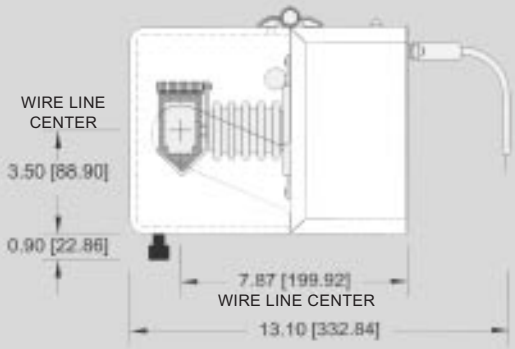
Safety ..... Conforms to IEC 1010-1.

Specifications subject to change without notice. 4/03EN

STM-10GF CONTROL UNIT

ST-10G01 HIGH VOLTAGE TEST MODULE





DIMENSIONS IN INCHES [MILLIMETERS].
A MEASURED DRAWING SHOWING MOUNTING INFORMATION IS AVAILABLE UPON REQUEST.

Clinton INSTRUMENT COMPANY

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