

MODEL IT-25B

Impulse Spark Tester

- >> Impulse spark tester
- >> Regulated output voltage
- >> Meets MIL-C-13777E, MIL-W-16878D, NEMA specifications
- >> Process control output

The IT-25B Impulse Spark Tester is designed to comply with the rigorous test requirements of Military Specifications MIL-C-13777E, MIL-W-16878, and NEMA Standards for hook-up wire used in high temperature wire applications. This method is favored as an alternate to wet dielectric test.

This unit produces a repetitive fast-rise negative voltage pulse, followed by an exponentially damped sinusoid having a frequency of several kilohertz. The electrode voltage is regulated against line voltage and load current changes. A repetition rate of 250 I.P.S. allows two test pulses in a 2 inch electrode at a wire speed of 1250 ft./min. Higher speeds may be attained by using a longer electrode when specifications permit.

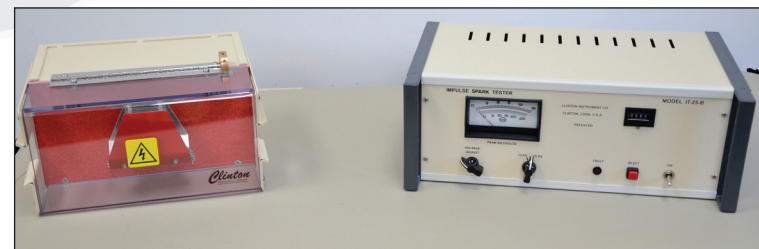
The phase splitting feature allows for wire whip and vibration while retaining the high sensitivity necessary to insure the detection of low current arc faults. Process control output is provided for the operation of machinery or an external alarm.



IT-25B Control Unit



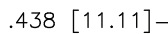
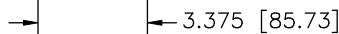
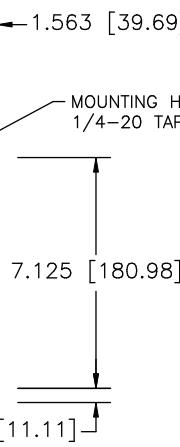
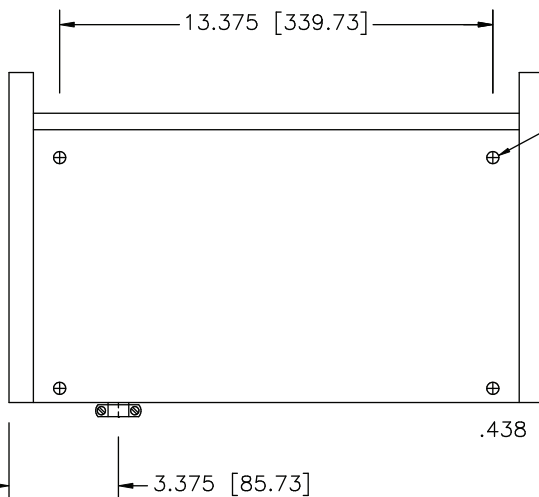
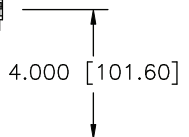
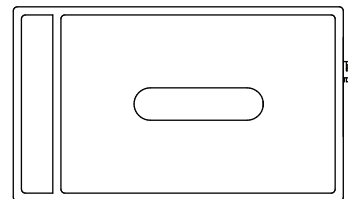
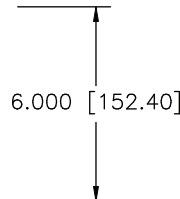
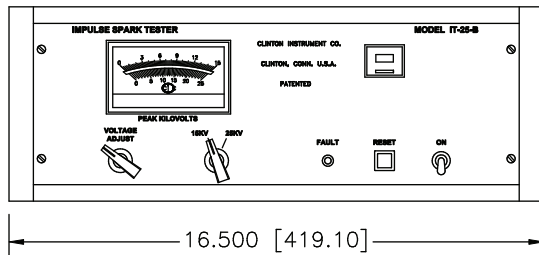
BD-E121 Bead Chain Electrode



IT-25B SPECIFICATIONS

Test Voltages..... 3-15KV, 3-25KV (negative peak volts).
 Regulation: Line $\pm 1\%$ for line voltage 105-135V with 25 pf load.
 Load Less than 500V decrease from 25 pf to 50 pf load.
 Voltage Metering 3-15 KV, 3-25 KV peak, $\pm 3\%$ FSD (true negative peak indication).
 Impulse Wave Form Negative pulse with an exponentially damped sinusoid.
 Rise Time..... (10% to 90%) 10 ± 2 microseconds.
 Positive Overshoot..... Less than 80% of initial negative amplitude.
 Impulse Repetition Rate 250 = 0/-2% I.P.S.
 Sensitivity..... Resistance connected from electrode to ground required to register a fault; 500 kilohms, min.

Dynamic Response..... Fault registration when a single impulse arc occurs between 1/2" ball electrodes connected from the high voltage terminal to ground.
 Repetitive Fault Counting Rate 20 per second maximum.
 Fault Indication 4 digit counter with manual reset.
 Process Control Output From C relay contacts 5 amperes.
 Power Requirements 120 Vac 50/60HZ, 240 Volts, optional.
 Dimensions: Cabinet 16 1/2" L x 6" H x 10 1/4" D (419 x 152 x 250 mm).
 Electrode 11" L x 6 1/4" H x 6 1/4" D (279 x 159 x 159 mm).
 Net Weight: Cabinet 18.5 lbs. (8.5 kgs.)
 Electrode 8 lbs. (3.6 kgs.)



MOUNTING HOLES
1/4"-20 TAPPED (4 PLACES)

DIMENSIONS IN INCHES AND (MILLIMETERS)

the clinton instrument company

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TITLE: OUTLINE DIMENSIONS			
DATE: 08-14-01	USED IN: IT-25B	DWG. No: IT-25B	REV: NULL
DRAWN BY: TPL	APPROVED BY: NULL		



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Specifications subject to change without notice. 06/15 EN