



# INSULATION TESTER

HAND DRIVEN GENERATOR TYPE (METAL BODY)

MODEL : CIE /444



## SPECIAL FEATURES

- Silent Generator ● Centrifugal Clutch (Governor) for Constant out put voltage.
- Collapsible Driven Handle-fold back flush into casing when not in use.
- Chuck nut locking arrangement to prevent anti Clock-Wise Rotation.
- Wide & Anti parallax mirror scale. ● Long life & strength against vibration & impact.
- Accurate & Quick response. ● Graceful appearance. ● Conforms to ISS : 2992/1987.
- Anti magnetic aluminium body. ● Protected Metallic Flap over the Glass window to Scale.
- Guard Terminal & an externally accessible infinity adjuster are provided for instrument having insulation range 1000 megohms & above.

**INSTRUMENTS FOR ACCURACY & RELIABILITY**

## APPLICATION

'CIE' Insulation Tester is a compact portable unit incorporating most modern features used for direct reading of electrical operating machines, Rotating Plant equipment, Stationary apparatus, Insulation Control and switching equipment, Distribution networks, Communication cables, Insulators, Transformers, Industrial Installations, Cable, electrical components, wiring and other devices capable of carrying the rated voltages. It is a Versatile instruments in locating intermittent shorts defective electrical connections insulation and conductor failure and in preventing costly repairs & break down insulation value.

## PRINCIPLE

'CIE' Insulation Tester consists of a Hand Driven Clutch type A.C. Generator and a High Sensitive CROSS COIL Indicator. The A.C. Voltage generated is converted into D.C. voltage by Silicon Diodes.

## CONSTRUCTION

Rugged yet light the instrument is housed in a sturdy and elegant Aluminium Casted Case with metallic carrying handle which makes the instrument conveniently portable. The DUST FREE INSTRUMENT. Rubber shoes hold the surface and gives the instrument stability PROTECTED METALLIC FLAP OVER the Glass window of scale.

## SALIENT FEATURES GENERATOR

The A.C. Generator drives extremely silent and smooth because of excellent Dynamic Balance of Rotating Parts and is free from any mechanical noise.

## GOVERNOR

High grade centrifugal Governor holds constant voltage for accurate measurement. Variation in speed rotation does not effect the reading as it is provided with cut off clutch to cut it beyond the rated speed of rotation.

## GENERATOR DRIVEN HANDLE- Collapsible

Fold back flush into the casing when tester is not in use.

## QUICK RESPONSE

Response time is 3 seconds, when a resistance whose value corresponds to the central scale mark is suddenly inserted between the measurement terminals as per ISS:2992-1987.

## TECHNICAL DETAILS

SCALE LENGTH	: 90 mm. (approx.)
ACCURACY	: Confirms to ISS : 2992-1987
ROTATION SPEED	: 160 or more r.p.m.
WEIGHT	: 2.5 kg (approx.)
DIMENSIONS (in mm)	: 110 X 128 X 195 (approx.)
HIGH VOLTAGE TEST	: Withstands minimum 2000 Volts or (Rated Voltage + 1000) Volts A.C. (rms) between the electrical circuit & the handle for one minute.
INSULATION RESISTANCE TEST	: Better than 50 Megohms at 500 V between the electrical circuit and the containing case.
RESPONSE TIME	: 3 seconds
GUARANTEE	: Guaranteed for 12 months against any manufacturing defects.

## RANGES

CIE / 444 are available from 100V to 5000V with respectively suitable resistance range. Special resistance range can also manufactured against specific enquiries. **Multirange instruments are also manufactured provided with range selector switch. (Note : Anti-parallax mirror scale is not provided for Triple range & above instruments)**

'CIE' in a continuing effort to offer excellent products at a fair value, reserves the right to change models, specifications and designs without notice.

*Manufactured & Designed by :*

# CAMBRIDGE INSTRUMENTS & ENGINEERING CO.