

# MCE<sup>™</sup> Product Information

# 5 kV Electric Motor Analyzer



- Portable and battery powered
- Monitors Power Circuit, Insulation, Stator, Rotor, and Air Gap
- Variable test voltage from 250 to 5000 V
- Automatic IR, PI, DAR, and Step Voltage Tests
- Measures insulation resistance to 3 TΩ
- Precision resistance from  $10\mu\Omega$  to  $2000\Omega$  using 4-wire bridge test measurement
- Measures capacitance (pF) and inductance (mH)

## **DESCRIPTION**

The MCE<sup>™</sup> Motor Circuit Evaluation test equipment offers the most versatile approach to troubleshooting and trending de-energized electric motors on the market today.

It is equipped with a fully functional laptop computer and loaded with MCEGold, the gold standard in motor management software.

With MCEGOIC the entire test history of your electric motor is at your fingertips and equipped with the latest in acceptance criteria from IEEE and NEMA. Red or Yellow color-coded alarms identify any test data that is outside the acceptance criteria immediately following the test.

The case is made of ultra high impact ABS material for ruggedness. It is easy to carry and no AC power is required, making tough to reach motors or starters easier to test.

### Data Includes:

- Phase-to-phase Resistance
- Phase-to-phase Inductance
- Balance of Resistance
- Balance of Inductance
- Ground Capacitance
- Polarization Index
- Dielectric Absorption Ratio
- Measured Ground Resistance
- Corrected Ground Resistance
- Rotor Influence Check
- Field Inductance
- Field Resistance
- Field Capacitance
- Field Ground Resistance
- DC Armature Tests
- Synchronous Motor Tests
- Wound Rotor Motor Tests
- More...

# **Ground resistance test voltages:**

250-5000 V in 50 V steps

Accuracy:

 $\pm 2.5\%$  100 KΩ to 1 GΩ @500/2500v  $\pm 5\%$  10 KΩ to 100 GΩ @2500v  $\pm 5\%$  100 KΩ to 100 GΩ @5000v  $\pm 20\%$  100 GΩ to 3 TΩ (≥1000 V) Short circuit/charge current: 2 mA

# **Capacitance measurement:**

±5% 1000 to 999,750 pF

## **Inductance measurement:**

±1% 100 to 1000 mH ±2% 1000 to 2500 mH ±5% 2500 to 5000 mH

## **Resistance measurement:**

Accuracy/Range:

 $\pm 1\%$  10  $\mu\Omega$  to 2000  $\Omega$ 

Resolution

 $\begin{array}{lll} .00001\Omega & 0\Omega \text{ to } .02\Omega \\ .0005\Omega & .02\Omega \text{ to } 2.0\Omega \\ .005\Omega & 2.0\Omega \text{ to } 50\Omega \\ .01\Omega & 50\Omega \text{ to } 1000\Omega \\ .1\Omega & 1000\Omega \text{ to } 2000\Omega \end{array}$ 

#### **Dimension:**

18.5x14.5x6 in. (46.99x36.83x15 cm)

### Weight:

19 - 23 lbs (8.62 - 10.43 kg)

## **Test Lead set:**

10 ft. (3.05 m.)

## **Voltage input range:**

AC 100-240 V, 50/60 Hz (Computer)

## **Environmental**

# **Operating temperature:**

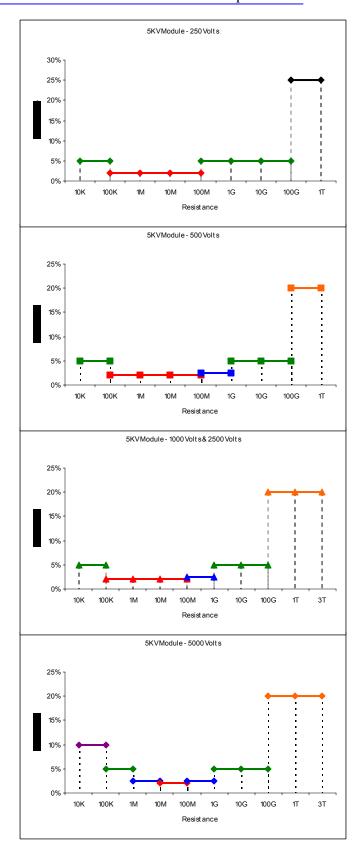
41°F to 95°F (5°C to 35°C)

# **Storage temperature:**

-4°F to 104°F (-20°C to 40°C)

#### **Humidity:**

20% - 80% non-condensing



**ATTENTION** Accuracies and Resolutions are subject to change without notice.