



# DIGITAL MOTOR CHECKER EMC-38

**Electric Motor, Generator and Transformer Trouble Shooter**  
**Know in a few minutes what the problem is: Electrical or Mechanical?**  
**Coil or Rotor, Internal Fault or Ground Fault ?**



## Features:

- ❖ Insulation Resistance (IR) Measurement
- ❖ Identify open and short circuits / loose connections in a winding coil
- ❖ Identify inter turn shorts.
- ❖ Detect rotor bar problems without dismantling the rotor
- ❖ Inductance of the winding with respect to different positions for rotor for detecting blow holes or cracks in the rotor bars.
- ❖ Simple operation, accurate & quick assessment of motor condition.
- ❖ Shock Proof Rubber Casing

## Fast Checks of On-Site Motors:

EMC-38 is a Digital portable diagnostic tool for Electrical Engineer and is used for quick on - site checks of electric motor and other three - phase machines.

A reduction in machine performance, such as inefficient operation or tripping of overloads, may indicate mechanical or electrical faults. If the fault is electrical the EMC-38 will immediately detect it, without having to dismantle the equipment.

The instruments has three separate operating modes to measure different types of faults like fully insulation, **open circuits / loose connections, short circuits** and **rotor defects**. Motor insulation is tested with a high voltage at **500V & 1000V** DC supplied by the instrument.

## Technical Specifications

**A) INSULATION RESISTANCE :** 0 – 200 M at 500 V DC  $\pm$  ( 2% + 1digit), 0.1 M resolution  
 0 – 2000 M at 1000 V DC  $\pm$  ( 2% + 1digit), 1 M resolution

| B) RESISTANCE: | <u>RANGE</u>  | <u>RESOLUTION</u> | <u>TOLERANCE</u> |
|----------------|---------------|-------------------|------------------|
|                | 0 - 200 milli | 0.10 milli        | $\pm$ 2%         |
|                | 0 – 2         | 0.001             | $\pm$ 2%         |
|                | 0 – 20        | 0.01              | $\pm$ 2%         |
|                | 0 – 200       | 0.10              | $\pm$ 2%         |

| C ) INDUCTANCE: | <u>RANGE</u> | <u>RESOLUTION</u> | <u>TOLERANCE</u> |
|-----------------|--------------|-------------------|------------------|
|                 | 0 – 2 mH     | 0.001 mH          | $\pm$ 3%         |
|                 | 0 – 20mH     | 0.01 mH           | $\pm$ 3%         |
|                 | 0 –200 mH    | 0.1 mH            | $\pm$ 3%         |
|                 | 0 –2000 mH   | 1 mH              | $\pm$ 3%         |

\* Display:3½ LCD \* Temp.Range:0- 55°C \* Size:210x125x65 \* Weight:1000gms \* Power:1.5V x 6 AA size Cells  
 (Optional Accessory : Rechargeable Battery Pack with Charger)

## Standard Supply:

- 1). Motor Checker EMC-38, 2) Leads (Clips)-1set, 3) Batteries-6 nos,
- 4) Test & Calibration Report with Warranty/Guarantee Certificate, 5) Manual & 6) Carry Case.

## MCM INSTRUMENTS

(An ISO 9001:2008 Certified Company)

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