

- f. Phase sequence
 - g. Phase imbalance
 - h. Phase loss
 - i. Earth leakage
 - j. Earth fault
 - k. Thermistor broken
 - l. Open contactor
 - m. Locked rotor
- I. Motor current sensing shall be through external 5 A or 1 A current transformer. The following measured values shall be displayed on the LCD mounted on the starter compartment door.
 - a. RMS current of each phase
 - b. RMS voltage
 - c. Earth Leakage current
 - d. Continuous monitoring of thermal capacity of the motor
 - e. Thermal capacity used during start
 - f. Power factor of the motor
 - g. Motor KW
 - h. Phase unbalance
 - i. Parameter settings
 - j. Percentage of FLC of the motor
 - k. Adjustable delayed start/stop
 - l. Maintenance Log
- J. EMPR shall be capable of registering all trip commands and log trip and pre-trip metering values for reporting and printing purposes.

1.3.16.3 Programmable Ranges

- A. **Overload** – shall be based on the calculation of accumulated I^2t value and selected thermal capacity curve. The tripping time shall be 0-10 Sec. Adjustable.