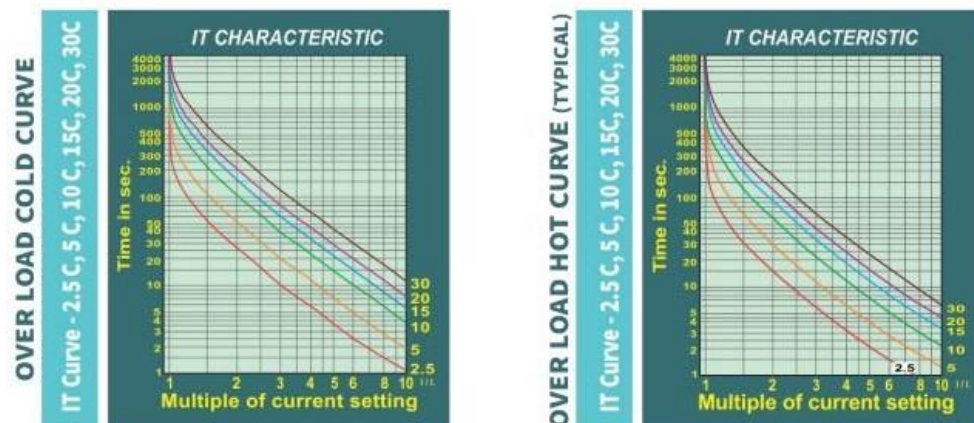


Motor Protection Device (μLEDX-T)



MODEL - μLEDX-T

FEATURES:

- LED Seven Segment Display, brighter pixilation
- Continuous scanning and display 3 phase currents and thermal capacity used, KW, PF and KWH
- Annunciation for each type of fault
- Numerical Algorithm for fast, reliable operation
- Thermal Overload curves selectable as per requirement, Excellent accuracy and longtime Stability of thermal curves due to complete software-based implementation
- Customized protection CT as per load requirement supplied with the relay
- Continuous self – supervision and fail-safe operation
- Annunciation in case, motor fails to stop after protection device issues trip command
- Man – Machine interface through keypad
- Up to five event trip records, FIFO based
- Reset Inhibit function, Hour Counter, Online calibration, Password facility (on demand)
- Robust mechanical design and adequate IP 54 degree of protection at the front of enclosure (when mounted on panel) which is shock proof non-metallic screw less unit

OPTIONAL:

- RS 485 Data communication over MODBUS RTU protocol
- 4-20mA Analogue output
- Both RS 485 communication and 4-20mA Analogue Output
- Relay output for external alarm
- Password facility
- Fault history with Real time clock

PROTECTION:

- Over Load
- Single Phasing - Current Based
- Unbalance Protection - Current Based
- Locked Rotor
- Under Current
- Short Circuit
- Earth Fault
- Over voltage & Under voltage protection
- KW based under load

RANGE:

- 0.2 to 12.5 Amp
- 0.8 to 25 Amp
- 2 to 62.5 Amp
- 4 to 125 Amp
- 40 to 250 Amp
- 80 to 500 Amp

MEASURING & DISPLAY

PARAMETERS:

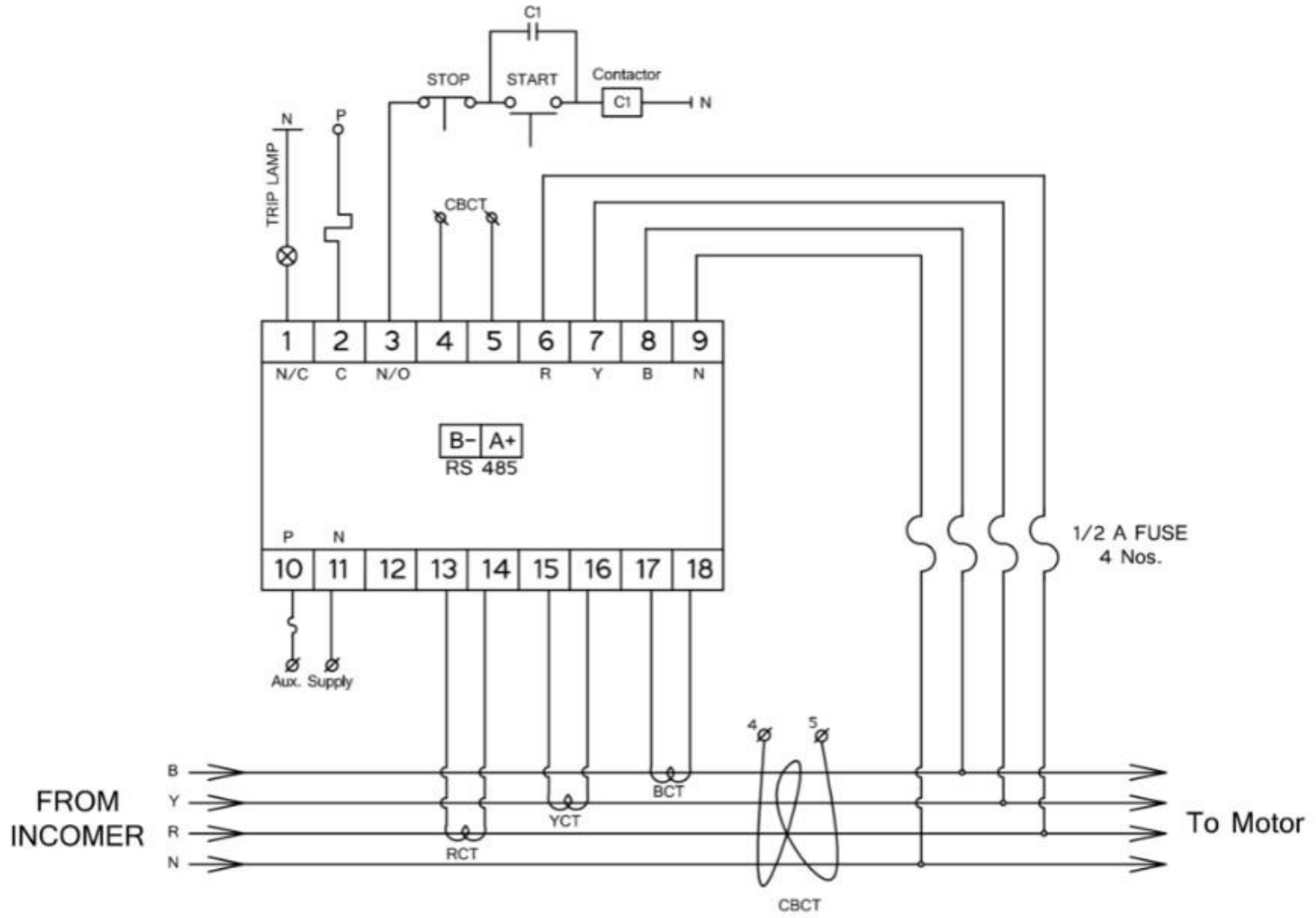
- R Phase Current (Ir)
- Y Phase Current (IY)
- B Phase Current (Ib)
- PF, KW & KWH measurement
- True RMS current measurement with 0.1A resolution
- Has Hour counter (Hr) (min)
- Has Start Counter
- Has Online Calibration facility

SPECIFICATIONS:

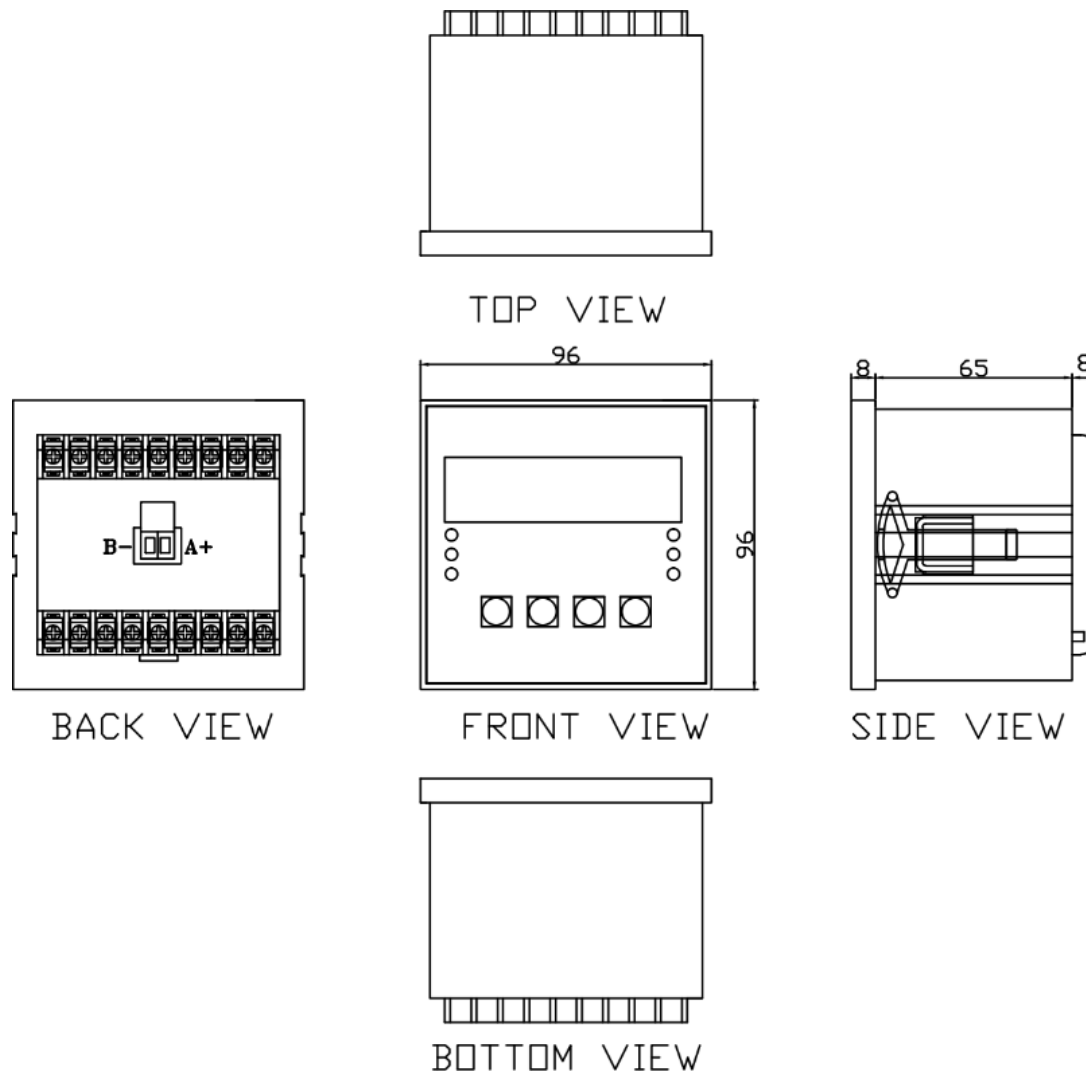
Aux. supply	230VAC (optional 110VAC / 415VAC), 50 Hz
CT	With External CT
*Rated current (As per motor FLC)	0.2 to 500A (Seven CT ranges)
Rated Frequency	50Hz/ 60Hz
Mass of the device	500gms. (approx.)
Mounting type	Flush mounted
Dimensions (L X W X D)	96 X 96 X 65 mm
Panel Cutout	92 X 92 mm
Thermal Overload setting range	0.2 to 500A, as per CT range selected
Thermal Overload curve selection	2.5C, 5C, 10C,15C,20C & 30C (six curves)
Thermal Overload Operating time	As per thermal curve selected
Under current feature	Enable/Disable
Under current setting range	10% to 80% FLC
Under current operating time	1 to 60 sec
Locked Rotor setting range	Current range selected, pick up 3 X FLC
Locked Rotor pick up delay time (during starting)	1 to 30 sec.
Earth fault trip start delay (during starting)	Enable or disable
(When enable; earth fault function will not operate during motor starting for 10 seconds)	
Earth fault setting range	10% to 30% FLC
Earth fault operating time	0.5 sec to 3 sec.
Short Circuit setting range	Current range selected, Pick up 8 X FLC
Short Circuit operating time	Instantaneous (about 1 Sec.)
Single phasing setting	Enable or disable
Single phase operating time	2 sec (fixed)
Unbalance protection	Enable or disable
Unbalance protection setting range	10% to 40%
Unbalance protection operating time	3 to 10 sec.
Low voltage setting Range	100 to 500V
Low voltage operating time	1 to 60 sec
High voltage setting range	100 to 500V
High voltage operating time	1 sec (default)
Under load setting range	0.115 to 144 KW
Under load operating time	1 to 60 sec
Thermal Reset Inhibit time	1 to 999 sec. (applicable when thermal reset is disable)
Thermal Reset function	Enable or disable
Data Output	RS 485 MODBUS – RTU Protocol, Baud Rate – 9600, Word length – 8
Analog Output	4-20 mA
Ambient service temperature	0 deg. C to + 55 deg. C
Degree of protection (enclosure panel mounted)	IP 54 (Front side of the Device)

***Note: Current range 80-500 Amp is available with all the above protections except short circuit protection.**

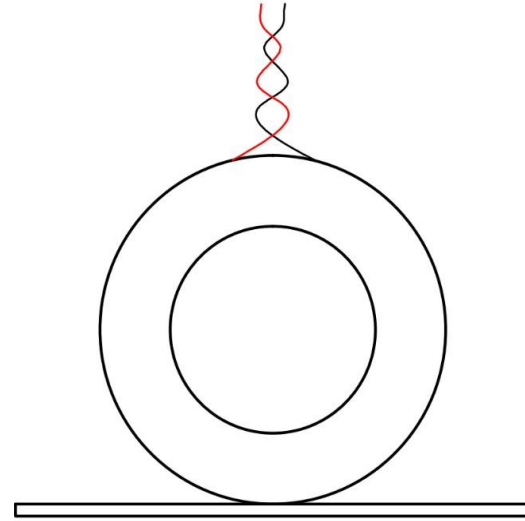
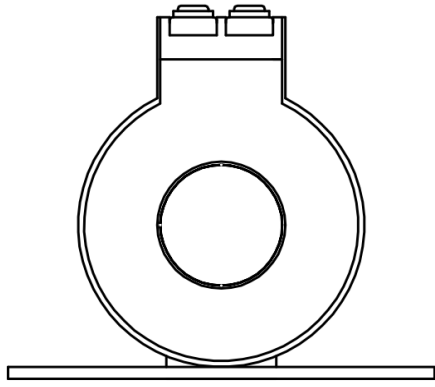
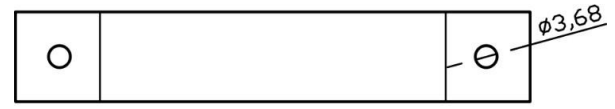
WIRING DIAGRAM



DIMENSION



CT DIMENSION

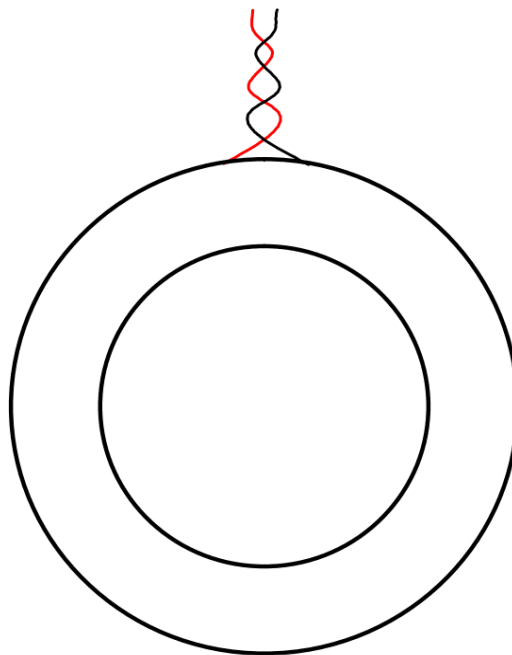


20mm LINE CT
INNER DIA.-20mm
OUTER DIA.-47mm

35mm LINE CT
INNER DIA.-35mm
OUTER DIA.-59mm

**FOR 0.2 TO 6.25A, 0.4 TO 12.5A,
0.8 TO 25A, 2 TO 62.5A**

FOR 4 TO 125A



55mm LINE CT
INNER DIA.-55mm
OUTER DIA.-85mm

FOR 40 TO 250A