SMF-200 (VOLTS, AMPS, FREQUENCY)

Λ SUPPLY VOLTAGES: 415 V AC OR 110 V AC

Λ CURRENT INPUT: -/5Amp & -/1Amp. [SELECTABLE]

Λ PT RATIO: 3.7727(415 V/110V), 4.0(440 V/110 V), 2.2, 3.3, 6.6, 11, 22, 33, 66 KV / 110 V AC

[SELECTABLE]

Λ AUXILIARY SUPPLY: 80 TO 270 V AC.

 Λ STANDARDS USED: STABLE AC VOLTAGE & CURRENT SOURCE, PHASE SHIFTING TRANSFORMER, POWER METER & INTEGRATOR WITH BASIC ACCURACY OF 0.35%, STANDARD ENERGY METER OF ACCURACY CLASS 0.05s TRACEABLE TO NATIONAL STANDARDS.

 Λ **TRACEABILITY:** THE ABOVE METER(S) WAS TESTED AND CALIBRATED AGAINST "MTE"0.05 STANDARD (MASTER CALIBRATING INSTRUMENT) MODEL PRS 1.3.THE MTE STANDARD METER IS TRACEABLE TO INTERNATIONAL STANDARDS.

 Λ SPECIAL REMARK: When PT ratio is set & Voltage is In Kilo Volt "H" will blink in the Last Digit

A RESULT OF TEST: Pass A TEST ENGINEER: KST DATE: 29/07/2024

WARRANTY

THE EQUIPMENT SUPPLIED UNDER THIS T.C. IS GURANTEED AGAINST DESIGN, MANUFACTURING AND WORKMANSHIP DEFECTS FOR A PERIOD OF 5 YEARS FROM THE ABOVE DATE. TRINITY ENGINEERING UNDERTAKES TO REPLACE / REPAIR THE FAULTY UNIT AT OUR WORKS FREE OF COST. THE MANUFACTUR'S LIABILITY IS LIMITED TO THE VALUE OF GOODS SUPPLIED. THE MANUFACTURER WILL TAKE NO RESPONSIBILITY FOR ANY CONSEQUENTIAL DAMAGE CLAIMED WHATSOEVER. THIS WARRANTY CERTIFICTE IS REQUIRED TO BE PRODUCED FOR OBTAINING ANY REPAIR OR REPLACEMENT / SERVICE FROM THE MANUFACTURER. THE MANUFACTURING RESERVES THE RIGHT TO DETERMINE THE REASON FOR DEFECT / DAMAGE BEFORE PROVIDING SERVICE.

INSTALLATION & COMMISSIONING-3P4W

- **1.** Push the unit into the panel and mount using the clamps provided.
- 2. Connect the three phases with the phase sequence being R-Y-B to the corresponding terminals on the unit. Make sure that the three phases coming to the unit come through control fuses of 1.0 Amp rating. This will protect the electronics inside from damage due to sever over voltages or phase faults in the system.
- 3. In case of three phases four wire systems, connect the neutral to the terminal marked N.
- **4.** Connect the two wires from the R-phase CT to terminals marked M1 & L1 such that S1 from CT goes to M1 on the unit.
- **5.** Connect the two wires from the Y-phase CT to terminals marked M2 & L2 such that S1 from CT goes to M2 on the unit.
- **6.** Connect the two wires from the B-phase CT to terminals marked M3 & L3 such that S1 from CT goes to M3 on the unit.
- **7.** Switch on the auxiliary supply. The unit will come alive. The first parameter to be displayed will be CT ratio. This is displayed only once, at the time of start-up of the unit.

INSTALLATION & COMMISSIONING- 1P2W

- **1.** In case of 1P2W systems, connect the phase to the terminal marked U1 and neutral to the terminal marked U4.
- 2. Connect the two wires from the phase CT to terminals marked M1 & L1 such that S1 from CT goes to M1 on the unit.

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3. Switch on the auxiliary supply. The unit will come alive. The first parameter to be displayed will be CT ratio, PT ratio & INSTALLATION which has been programmed, and then show first page. This is displayed only once, at the time of start-up of the unit.

INSTALLATION & COMMISSIONING-3P3W

- 1. Connect the three phases with the phase sequence being R-Y-B to the corresponding terminals on the unit. Make sure that the three phases coming to the unit come through control fuses of 1.0 Amp rating. This will protect the electronics inside from damage due to sever over voltages or phase faults in the system.
- 2. Connect the two wires from the R-phase CT to terminals marked M1 & L1 such that S1 from CT goes to M1 on the unit.
- **3.** Connect the two wires from the Y-phase CT to terminals marked M2 & L2 such that S1 from CT goes to M2 on the unit.
- **4.** Connect the two wires from the B-phase CT to terminals marked M3 & L3 such that S1 from CT goes to M3 on the unit.
- **5**. Switch on the auxiliary supply. The unit will come alive. The first parameter to be displayed will be CT ratio, PT ratio & INSTALLATION which has been programmed, and then show first page. This is displayed only once, at the time of start-up of the unit.

$\Box \Lambda$ CHANGING CT PRIMARY:

Press the key continuously till the display shows present CT primary. Now, using the key again, increase the CT primary till you reach the desired CT primary. The CT primary can be changed in steps of 5A up to 200A, and in steps of 25A there after up to 8000A. After re aching 8000, if the key is kept in pressed condition, the CT primary will rollover and start with 5 amps again. When the desired CT primary is reached, leave the key. After 10 seconds, the meter will automatically reset and show the CT ratio, PT ratio & INSTALLATION which has been programmed, and then show first page.

$\Box \Lambda$ CHANGING CT SECONDARY:

Press the key continuously till the display shows present CT secondary. Now, using the key again, change the CT secondary to 5 or 1 after that leave the key. After 10 seconds, the meter will automatically reset and show the CT ratio, PT ratio & INSTALLATION which has been programmed, and then show first page.

$\Box \Lambda$ CHANGING PT RATIO:

Press the key continuously till the display shows present PT RATIO. Now, using the key again, change the PT RATIO to 3.7727,4,20,30,60,100,200,300,600 when the desired PT RATIO is reached, leave the key. After 10 seconds, the meter will automatically reset and show the CT ratio, PT ratio & INSTALLATION which has been programmed, and then show first page.

$\Box \Lambda$ CHANGING INSTALLATION:

Press the key continuously till the display shows present INSTALLATION. Now, using the key again it can be changed to the INSTALLATION - 3P4W or 3P3W or 1P2W. After setting that leave the key. After 10 seconds, the meter will automatically reset and show the CT ratio, PT ratio & INSTALLATION which has been programmed, and then show first page.

∧ DISPLAY PARAMETER – 3P4W

Page 1:Phase to Neural Voltage Rn,Yn,Bn Vpn-LED Glow(In Kilo Volt "H" will blink the Last Digit)

Page 2:Phase to Phase Voltage RY, YB, BR Vpp-LED Glow(In Kilo Volt "H" will blink the Last Digit)

Page 3:All Phase Current R, Y, B, A - LED Glow

Page 4: Avg. Volts, Avg. Amps, & Frequency, Vpp, A & Hz - LED Glow

A DISPLAY PARAMETER – 3P3W

Page 1:Phase to Phase Voltage RY, YB, BR Vpp-LED Glow (In Kilo Volt "H" will blink the Last Digit)

Page 2:All Phase Current R, Y, B, A - LED Glow

Page 3:Avg.Volts, Avg.Amps, & Frequency, Vpp, A & Hz - LED Glow

A DISPLAY PARAMETER – 1P2W

Page 1: Volts, Amps, & Frequency, V, A & Hz - LED Glow

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