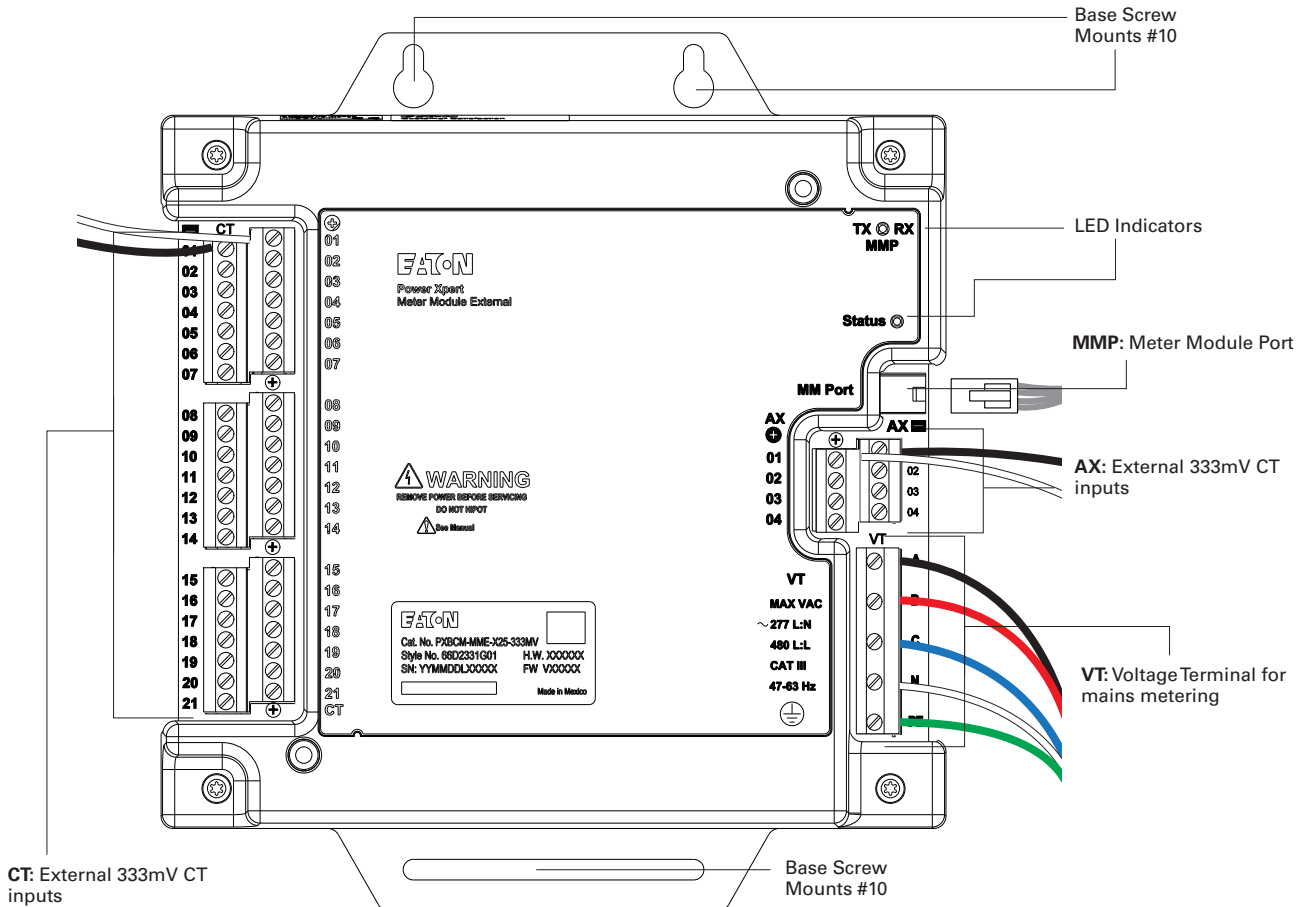


Power Xpert Branch Circuit Monitor: Meter Module External



⚠ WARNING!

BE SURE THAT ALL SYSTEM POWER IS OFF WHEN COMMISSIONING A PXBCM SYSTEM INCLUDING THE INSTALLATION OF THE PXBCM-MME AND ASSOCIATED COMPONENTS.

Overview

For use with PXBCM Power Xpert Branch Circuit Monitor -The PXBCM –MME Meter Module External (MME) is designed to be used with the following PXBCM components to form an electrical metering system:

- **PXBCM-MB** Meter Base
- **PXBCM-MMS-(L/R 9/15/21)**-A Meter Module Strip
- **PXBCM-MMP-CBLnn/-CBLEnn** Meter Module Port Cable and Cable Extension

The PXBCM-MME-X25-333MV (MME) is designed primarily for retrofit or high mix panel board applications. The MME provides metering inputs for up to 25 external 333mV Current Transformers (CT) split into 21 CT and 4 AX auxiliary current metering groups and Three or Single phase voltage measurements. The separate PXBCM-MB Meter Base provides power to the MME and shares data through the Meter Module Port and PXBCM-MMP-CBLnn cable.



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The PXBCM-MME must be housed in an appropriate NEMA or UL enclosure that ensures the device will remain within its specified environmental ranges and provides fire and mechanical protection. In retrofit panel board applications the MME must be mounted in an enclosure external from the monitored assembly gear, unless the MME is an approved accessory for the panel board.

Each Meter Module External has the following LED Indicators

- MMP Meter Module Port coms - Bicolor LED
 - Rx/Tx Green/Red
- Status - Green LED
 - ~ 1Hz blink – Normal heart beat

Terminate the secondary of up to 21, 333mV external CTs, rated for the application, to the CT terminal blocks on the MME. These are dual-tier terminal blocks, with the back/high tier for positive X1 inputs (typically white) and the front/lower tier for the negative X2 inputs (typically black). The terminal pairs are numbered adjacent to the terminals. Terminate the secondary of up to four, 333mV external CTs, rated for the application, to the Auxiliary AX terminal blocks. The termination is set up similar to the CT circuits but are located on the opposite side of the MME. The typical use case is to monitor the panel main circuit cables. External CTs must provide basic isolation between primary load cables to secondary output, qualified to:

- UL/IEC61010-1
- UL2808
- UL/ANSI C57.13
- IEC 60044

The VT Voltage Terminal block on the bottom right of the MME provides metering inputs to monitor the modules load mains connections. Phase A,B,and C inputs should be equipped with fuses or breakers sized to protect the wiring and provided with a disconnect.

PXBCM-MME Meter Module External Specifications

- Weight ~ 1 lb
- W/H/D: 7.7" (19.5 cm)/8.5" (21.6cm)/1.6" (4.1 cm)
- Housing NEMA 1, IP20, Pollution Degree 2
- Operational Temperature range -20 to +70°C
- Storage Temperature range -45 to +85°C
- Elevation 0-3000m
- Humidity 5-95% noncondensing
- CE mark
- UL file # E185559, UL Standard UL61010-1
- CNL evaluation to CAN/C22.2 No 1010.1.92
- EMC EN61326 – IEC61000-4-X level 3
- Emissions conducted and radiated as part of PXBCM system.
 - FCC part 15 class B
 - CISPR 11/22 class B

MMP Meter Module Ports

- 2 pair cable 1 pair power, 2nd data coms

- Use PXBCM-MMP-CBLnn –CBLEnn cables

VT - Voltage Terminal Metering Inputs

- 47 – 63 Hz., CAT III, 5 M ohm input impedance
- WYE 277VAC L:N(G) 480VL:L maximum nominal
- Floating delta, corner grounded delta, and high-impedance Wye not supported without the use of an interposing PT Potential Transformer.
- 5 Position fixed terminal block Va, Vb, Vc, Vn, PE
 - 24-12AWG – ferrules recommended

CT & AX CT Current terminal Metering Inputs

- 333mV secondary CT input to MME at maximum external CT Primary rating
 - Primary load rating determined by external CT
- CT 21 and AX 4 pair dual tier terminal blocks
 - 24-12AWG – ferrules recommended

A product identification label is on the front of each Meter Module External. This information can also be viewed through the PXBCM-MB Meter Base Ethernet web interface or Com1 RS485 Modbus serial port with optional PXBCM-DISP-6 Display.



Figure 1. Example PXBCM-MME Product ID Label



Please refer to the PXBCM Install Guide IB150003EN for complete system detail: www.eaton.com/meters

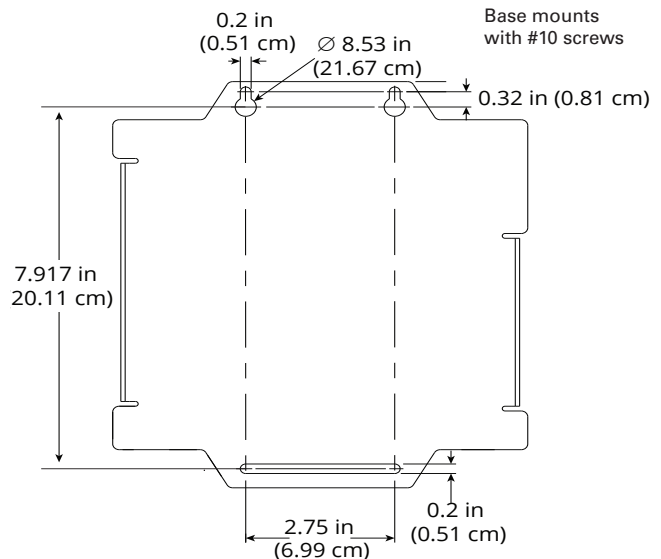


Figure 2. Mounting details

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