Product Data

E50 Series Compact Power and Energy Meters

For Use Only with E683 Series Rope Style CTs Data Sheet

E50H2A-T2 BACnet

E683 Series Rope CT

Ordering Number:	Description
X13690276001	E50H2A-T2 BACnet

November 2025

BAS-PRD036E-EN

Introduction

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Revision History

Obsoleted Modbus Energy Meters.

Product Data

Overview

The E50 Series DIN Rail Meter combines exceptional metering performance with a built-in integrator and power supply that delivers a cost-effective, easily installed solution for power monitoring applications. Multiple communication protocol options offer additional flexibility for easy system integration.

Features

- Integrator and power supply for the CTs are built into the meter resulting in faster installation and reduced costs.
- Designed to work exclusively with E683 Series rope CTs, which offers 1% accuracy from 50 A to 5000 A monitoring a wide range of loads with breakers from 400 A to 5000 A.
- Versatile Rope CTs allow convenient installation in tight spaces.
- Used in applications such as energy monitoring, building automation systems (BAS), energy management, commercial sub-metering, industrial monitoring, and cost allocation.
- ANSI C12.20 0.5% accuracy and IEC 62053-22 Class 0.5S – great for cost allocation.
- DIN rail or screw mounting option for easy installation.
- Real energy output and phase loss alarm output on E50C2A-T2 model (one device serves multiple applications).
- Adding to its versatility the E50 models have a wide input range between 90-600 Vac, which alleviates the need to keep multiple models in stock.
- System integration via BACnet® MS/TP (E50H2A-T2); compatible with existing systems.
- Native BACnet MS/TP support (no gateway) with serial rates up to115.2 kbps (E50H2A-T2).

Specifications

Table 1. Specifications

Certifications	
Agency Approvals:	UL508, EN61010, California CSI Solar, ANSI C12.20
Accuracy	
Real Power and Energy:	0.5% (ANSI C12.20, IEC 62053-22 Class 0.5S)
Inputs	
Control Power, AC:	• 50/60 Hz; 5 VA max.; 90 V min. • UL Maximums: 600 VL-L (347 VL-N)
Control Power, DC:	• 3W maximum • U.L. and CE: 125 to 300 Vdc (external dc current limiting required)
Voltage Input	• U.L.: 90 VL-N to 600 VL-L • CE: 90 VL-N to 300 VL-N
Current Input Scaling Input Range:	• 50 to 5000 A • E683 series rope style CTs only (CT must be rated for connection to Class 1 voltage inputs)
Pulse Inputs (E50H2A-T2):	Contact inputs to pulse accumulators (10 kW Vac/dc to 4 to 10 Vdc)
Outputs	
E50H2A-T2:	RS-485 2-wire BACnet MS/TP (9600 baud to 115.2 kbps)
Mechanical	
Mounting:	DIN Rail or 3-point screw mount
Environmental	

Table 1. Specifications (continued)

Operating Temperature Range:	-30 to 70 °C (-22 to 158 °F)
Storage Temperature Range:	-40 to 85 °C (-40 to 185 °F)
Humidity Range:	<95% RH non-condensing; indoor use only
Warranty	
Limited Warranty:	5 Years

Ordering Information

Table 2. Ordering information

Descriptions and Models	E50H2A-T2
Measurement Capability - Full Data Set	
Power (3-Phase Total and Per Phase): Real (kW) Reactive (kVAR), and Apparent (kVA)	X
Power Factor: 3-Phase Average and Per Phase	X
Present Power Demand: Real (kW), Reactive (kVAR), and Apparent (kVA)	X
Peak Power Demand: Real (kW), Reactive (kVAR) and Apparent (kVA)	X
Current (3-Phase Average and Per Phase)	X
Voltage: Line-Line and Line-Neutral (3-Phase Average and Per Phase)	X
Frequency	X
ANSI C12.20 0.5% Accuracy, IEC 62053-22 Class 0.5S	X
Accumulated Net Energy: Real (kWh), Reactive (kVARh), and Apparent (kVAh)	X
Accumulated Real Energy by Phase (kWh)	X
Demand Interval Configuration: Fixed or Rolling Block	X
Demand Interval Configuration: External Sync to Comm	X
Outputs	
Alarm Output (N.C.)	X
1 Pulse Output (N.O.)	—
RS-485 Serial (BACnet MS/TP Protocol)	X
Inputs	
1 Pulse Contact Accumulator Input	X
CE Mark	
The CE mark indicates RoHS2 compliance. Refer to the CE Declaration of Conformity for additional details.	

Required CTs

Table 3. Required CTs

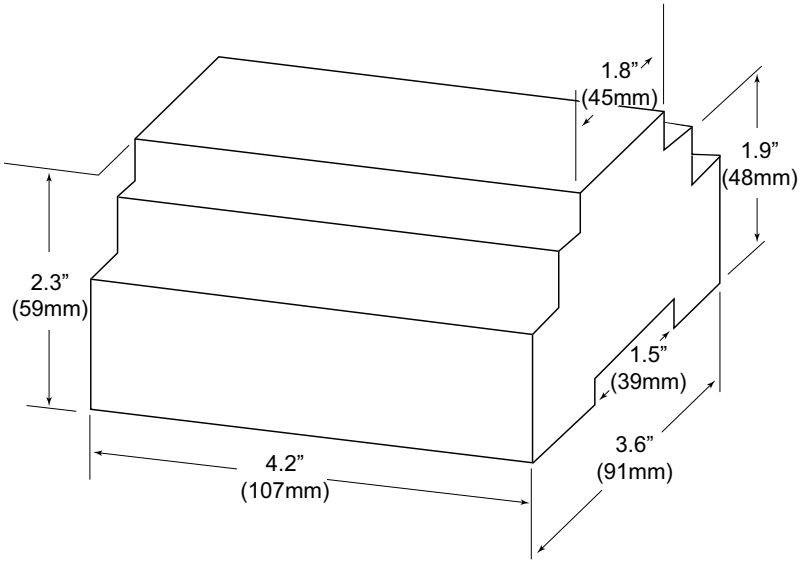
Trane Part Number	Model	Description
N/A - Veris only	E683C502	Rogowski CT, 250 mm (9 in.), 600 V, 5 kA, U018 equivalent
X13550945001	E683D502	Rogowski CT, 300 mm (12 in.), 600 V, 5 kA, U018 equivalent

Table 3. Required CTs (continued)

Trane Part Number	Model	Description
X13550945002	E683G502	Rogowski CT, 460 mm (18 in.), 600 V, 5 kA, U018 equivalent
N/A - Veris only	E683J502	Rogowski CT, 600 mm (24 in.), 600 V, 5 kA, U018 equivalent
X13550945003	E683L502	Rogowski CT, 900 mm (35 in.), 600 V, 5 kA, U018 equivalent

Dimensions

Figure 1. Dimensions



Mounting Diagrams

Figure 2. DIN mount configuration

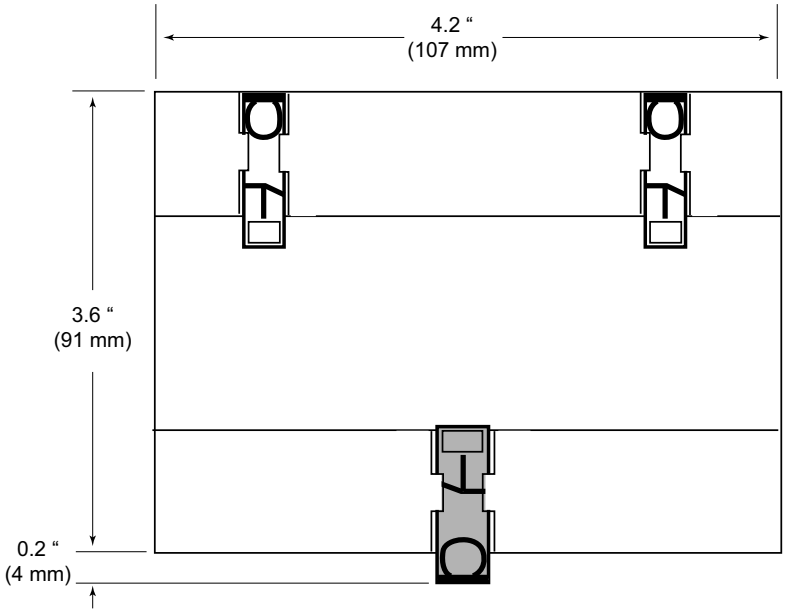
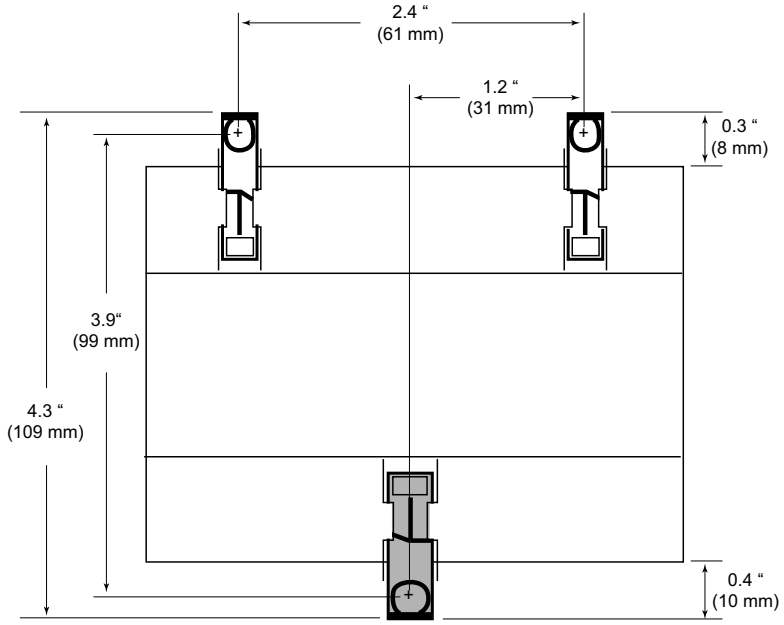


Figure 3. Screw mount configuration



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