

E50 Series Compact Power and Energy Meters

For use with Split Core/Solid Core CTs Data Sheet



E50H2-T2 BACnet

Ordering Numbers: Description: X13690276002 E50H2-T2 BACnet





Introduction

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Revision History

Obsoleted Modbus Energy Meters.

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Overview

The E50 Series DIN Rail Meter combines exceptional performance and easy installation that delivers a cost-effective solution for power monitoring applications. BACnet (E50H2-T2) output model offer added flexibility for system integration.

Features

- · Revenue Grade measurements.
- Used in applications such as energy monitoring, building automation systems (BAS), energy management, commercial submetering, industrial monitoring, and cost allocation.
- High reliability with ANSI C12.20 0.2% accuracy, IEC 62053-22 Class 0.2S.
- DIN rail or screw mounting option for easy installation.
- 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.
- Compatible with current transducers (CTs) that range from 5 A to 32000 A for a wide range of service types.
- · User-enabled password protection, which offers protection from tampering.
- System integration via BACnet MS/TP (E50H2-T2); compatible with existing systems.
- Native BACnet MS/TP support (no gateway) with serial rates up to 115.2 kpbs (E50H2-T2).
- BTL-certified (E50H2-T2).
- Additional pulse inputs (E50H2-T2 only) provide an easy way to incorporate simple flow sensors to track gas, water, steam, or other energy forms using a BACnet system.

Specifications

Table 1. Specifications

Accuracy		
Real Power and Energy:	0.2% (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) CE Maximum: 300 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	5 A to 32,000 A	
Input Range:	0 to 0.333 V or 0 to 1 V (selectable) CT must be rated for use with Class 1 voltage inputs	
Pulse Inputs (E50H2-T2):	Contact inputs to pulse accumulators (10 kW Vac/dc to 4 to 10 Vdc)	
Outputs		
E50H2-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)

Altitude of Operation:	3000 m
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
Certifications	
Agency Approvals:	UL508 (Open Type Device), EN61010-1, California CSI Solar, ANSI C12.20, Cat III, pollution degree 2
Warranty	
Limited Warranty:	5 Years

Ordering Information

Table 2. Ordering information

Descriptions and Models	E50H2-T2
Measurement Capability - Full Data Set	
Power (3-Phase Total and Per Phase): Real (kW) Reactive (kVAR), and Apparent (kVA)	×
Power Factor: 3-Phase Average and Per Phase	x
Present Power Demand: Real (kW), Reactive (kVAR), and Apparent (kVA)	х
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 0.2S	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	х
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)	×
Inputs	
1 Pulse Contact Accumulator Input	×
CE Mark	

CE Mair

 $\label{thm:center} \mbox{The CE mark indicates RoHS2 compliance}. \mbox{ See CE Declaration of Conformity for additional details}.$



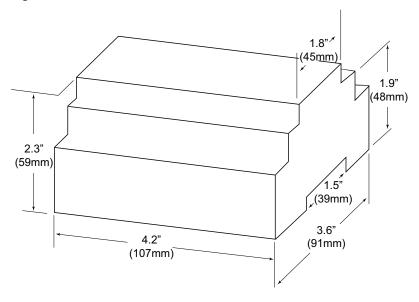




Note: BTL Only for E50H2-T2

Dimensions

Figure 1. Dimensions



Mounting Diagrams

Figure 2. DIN mount configuration

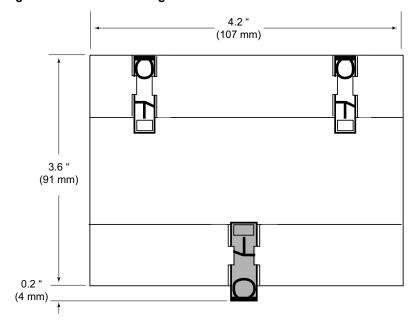
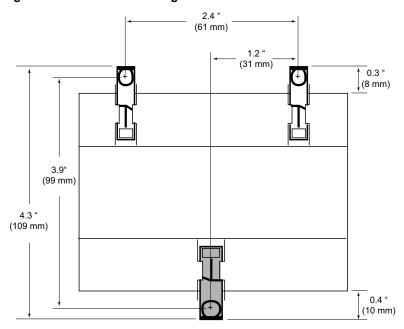




Figure 3. Screw mount configuration





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