# **Ambassador Series (Totalizers)**

### **Product Description**

Eaton's Ambassador Series is our most noise-immune totalizer available. Various counting modes can be set by the user.

#### Features

- AC/DC powered, two-line LCD display
- Eight-digit totalizer
- 1/Tau ratemeter
- Totalizer and ratemeter scaling
- Four user-configurable control inputs

Count Controls/Preset Counters/Totalizers

- Two solid-state outputs
- RS-485 serial communications

# **Standards and Certifications**

- UL listed
- CE marked





#### **Product Selection**

### Ambassador Series

## **Ambassador Series Totalizers**



Description	Catalog Number
10-15 Vdc LCD	57600400
115 Vac LCD	57601400
230 Vac LCD	57602400

### **Technical Data and Specifications**

### **General Specifications**

Description	Specification
Power Input	
AC operation	115 Vac (±15%) std., 50 to 60 Hz, 7W
	230 Vac (±15%) opt., 50 to 60 Hz, 7W
DC operation	10–15 Vdc opt., 300 mA maximum
DC power output	12 Vdc (±25%), 100 mA maximum (includes all line and load variations)
Environmental	
Operating temperature	32° to 131°F (0° to 55°C)
Storage temperature	-4° to 158°F (-20° to 70°C)
Operating humidity	85% relative, non-condensing
Rating	NEMA 4 when mounted with gasket provided
Totalizer	
Туре	Bi-directional
Digits	Eight
Scaler range	0.00001 to 9.99999
Decimal point	Five positions, programmable
Totalizer Count Speeds ①	
Maximum speed—solid-state (high speed)	
Mode	Input A/Input B
Add/sub	20 kHz
Add/add	20 kHz
Count/direction	15 kHz
Count x 2/direction	7.5 kHz
Quadrature	6.5 kHz
Quadrature x 2	6.5 kHz
Maximum speed—contact (low speed)	
Mode	Input A/Input B
Add/sub	40 kHz
Add/add	40 kHz
Count/direction	0 kHz

#### Note

① The maximum count speed depends on the selected count mode. All maximum speeds are shown with square waves (50% duty cycle) input.

## **General Specifications, continued**

Description	Specification
Count Inputs	
Sink	
Impedance	4.6k ohms to +5 Vdc
Voltage	
High	3.5 to 34.0 Vdc
Low	0.0 to 1.9 Vdc
Source (high)	
Impedance	2.3k ohms to common
Voltage	
High	3.5 to 17.0 Vdc (100% duty cycle)
Low	0.0 to 1.9 Vdc
Source (low)	
Impedance	2.3k ohms to common
DC voltage	00.470
High	0.6 to 17.0 Vdc
Low	-17.0 to -0.6 Vdc
AC voltage	17 Vac (48V peak-peak) maximum
Control Inputs	
Impedance	4.7k ohms to +5 Vdc
Voltage	
High	+3.7 to +24 Vdc
Low	0.0 to 0.9 Vdc
Response	Minimum low 15 ms, minimum high 15 ms
Transistor Outputs (2)	
Туре	NPN open collector with transient protection
Maximum voltage (OFF state)	30 Vdc
Maximum current (ON state)	200 mA at 1.3 Vdc
Communication	
Туре	RS-485
Format	1 start bit, 7 data bits (ASCII), 1 parity bit, 1 stop bit
Protocol	Opto-22 compatible
Speed	300, 1200, 2400, 4800, 9600 and 19200 baud
Parity	Odd, even, none (space transmitted, ignore received)
Count Accuracy	
Operating within specifications	100% when operated within the specified count speeds and count signal high and low times
Rate Indicator	
Туре	1/Tau
Digits	Six
Scaler range	0.00001 to 99999
Decimal point	Five positions, programmable
· · ·	
Accuracy	±0.015% of reading
Update time	1 second, fixed
Zero time	10 seconds, fixed
Connections	
Туре	Dual depluggable screw terminal strips
Conductor size	14–22 AWG (2.1–0.38 mm <sup>2</sup> ), 600V, solid, stranded or fused (preferred)

### **Dimensions**

Approximate Dimensions in Inches (mm)

## **Ambassador Series Totalizer**

