



The CTBL series of bus bar current transformers measure current in large conductors. They are UL Listed with a 0.33333 Vac (333.33 millivolt) AC output.

Custom sizes and rated currents are also available up to 12 inches by 24 inches and 6000 amps.

Features

- Rated current: 800, 1200, 2000, 3000 and custom from 100 to 6000 amps
- Monitoring-grade: 1.5% accuracy
- Output is 0.33333 Vac at rated current
- UL Listed (UL 2808, XOBA) for field installation
- No exposed metal parts on assembled CT

Links

- <https://ctlsys.com/product/bus-bar-opening-ct/>
- <https://ctlsys.com/cat/current-transformer/>

Table 1: Models

Model	Rated Amps	Opening Width	Opening Length
CTBL-1.5x3.5-0800	800	1.5 inches (38 mm)	3.5 inches (89 mm)
CTBL-4.0x4.0-0800	800	4.0 inches (102 mm)	4.0 inches (102 mm)
CTBL-4.0x4.0-1200	1200	4.0 inches (102 mm)	4.0 inches (102 mm)
CTBL-4.0x4.0-2000	2000	4.0 inches (102 mm)	4.0 inches (102 mm)
CTBL-4.0x4.5-3000	3000	4.0 inches (102 mm)	4.5 inches (114 mm)
CTBL-WxL-Amps (custom)	100 to 6000	1.0 to 12.0 inches	2.5 to 24 inches

Note: the custom models are specified with the opening (inside) width (W) and opening (inside) length (L) in inches, followed by the rated current in amps. For example, for 8 inch width, 10 inch length, and 5000 amps: CTBL-8.0x10.0-5000

1 Specifications

- **Line Frequency:** 50 to 60 Hz
- **Maximum Continuous Primary Current:** same as rated amps
- **Maximum Voltage:** 600 Vac
- **Overvoltage and Measurement Category:** CAT IV, 600 Vac
- **Output Lead Wires:**
 - **Standard length:** 8 ft (2.4 m)
 - **Gauge:** #18 AWG
 - **Type:** MTW, UL 1015
 - **Voltage:** 600 Vac
- **Output:** voltage output, integral burden resistor
 - **Output Voltage at Rated Amps:** 0.33333 Vac (one-third volt)
 - **Output Protection:** includes internal burden resistor

1.1 Accuracy

- **Output Accuracy (% of reading):**
 - **Accuracy:** $\pm 1.5\%$ from 10% to 100% of rated current
 - **Phase angle:** 0.0 to 1.5 degrees leading from 20% to 100% of rated current

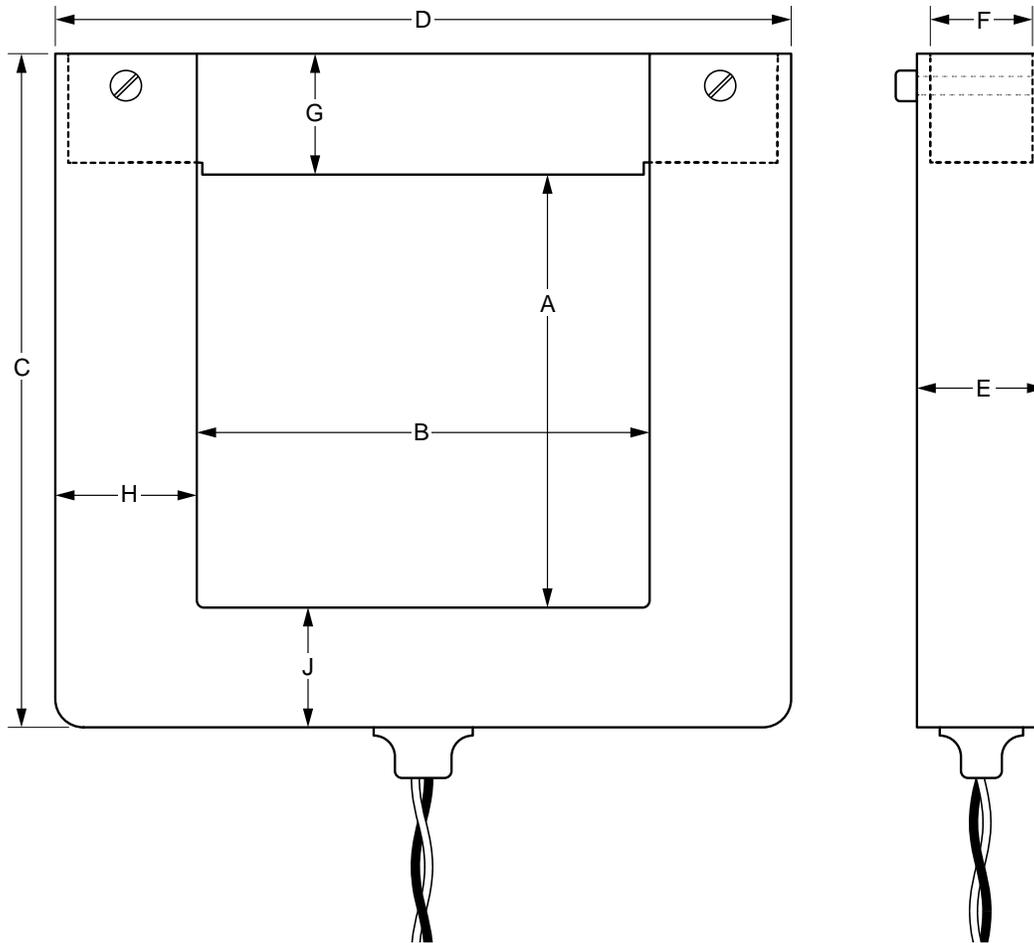
1.2 Regulatory

- **CE**
- **UL:** UL listed, XOBA, UL 2808, CAN/CSA-C22.2 No. 61010-1, E363660
- **RoHS Compliant:** EU Directive 2011/65/EU

1.3 Environmental

- **Operating Temperature:** -40°C to $+70^{\circ}\text{C}$ (-40°F to $+158^{\circ}\text{F}$)
- **Operating Humidity:** non-condensing, 0 to 95% relative humidity (RH)
- **Operating Altitude:** up to 2000 m (6561 feet)
- **Pollution Degree:** 3 (harsh environment)
- **Indoor Use:** suitable for indoor use
- **Outdoor Use:** suitable for outdoor use when mounted in a NEMA 3R or 4 (IP 66) rated enclosure, provided the ambient temperature will not exceed 70°C (158°F)

1.4 Mechanical



Size	A Opening Length	B Opening Width	C Overall Length	D Overall Width	E Overall Thickness	F Crossbar Thickness	G Crossbar Height	H Sidebar Width	J Base Height	Weight
CTBL-1.5x3.5	3.5 in 89 mm	1.5 in 38 mm	5.47 in 139 mm	3.74 in 95 mm	1.08 in 27.5 mm	0.87 in 22.0 mm	1.05 in 26.6 mm	1.09 in 27.8 mm	0.93 in 23.6 mm	15.4 oz 0.44 kg
CTBL-4.0x4.0	4.0 in 102 mm	4.0 in 102 mm	6.22 in 158 mm	6.61 in 168 mm	1.15 in 29.0 mm	0.90 in 23.0 mm	1.08 in 27.4 mm	1.28 in 32.5 mm	1.06 in 27.0 mm	27.5 oz 0.78 kg
CTBL-4.0x4.5	4.5 in 114 mm	4.0 in 102 mm	6.72 in 171 mm	6.61 in 168 mm	1.15 in 29.0 mm	0.90 in 23.0 mm	1.08 in 27.4 mm	1.28 in 32.5 mm	1.06 in 27.0 mm	32.3 oz 0.92 kg

The overall thickness dimension excludes the Nylon screws. The overall length dimension excludes the wire strain relief. The weight includes the lead wires.

Contact CCS for dimensional information on CTBL models with custom sizes and rated amps.

- **Core Material:** silicon-iron