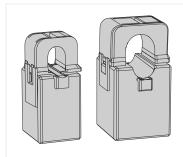


## **Current Transformer Features**



Split-core current transformers are used to monitor AC current for various devices. The current transformer input takes a high voltage current input and produces a proportional low-voltage, low-current signal for measuring and monitoring. Split-core current transformers are ideal for installing onto existing electrical wiring because they can snap around the individual conductors without having to disconnect any cables.

These split-core current transformers are compatible with Banner's Condition Monitoring devices (CM1L or Q45CT Nodes, and the S15C-CT-MQ Converters).

## **Current Transformer Models**

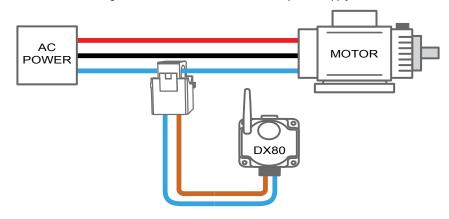
Model Kits	Description	Connection	
BWA-CURRENT-TRANSFORMER-20A	Includes CT20A; 20 A Input; 0.333 V Output		
BWA-CURRENT-TRANSFORMER-150A	Includes CT150A; 150 A Input; 0.333 V Output	1 meter two-wire twisted pair cable	
BWA-CURRENT-TRANSFORMER-600A	Includes CT600A; 600 A Input; 0.333 V Output		

## Installing the Current Transformers

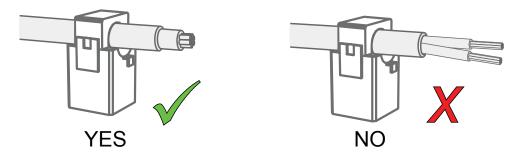
Observe the polarity when installing current transformers. Banner's current transformers indicate  $\mathbf{k}$  as the source side and  $\mathbf{l}$  as the load side, where source refers to the incoming power feed side to the device and the load side is the device side.

Banner's CTs have an etched arrow to indicate the directionality for installation (k -> I). As shown in "Installing a current transformer relative to the power supply/motor" on page 1, the source is the AC power supply and the load is the Motor. The CT direction arrow must point toward the load. Banner's current transformers can be installed on any conductor in a 2- or 3-phase AC line. Current transformers should only be installed on a single conductor. For the correct installation, see "Installing a single conductor on the current transformer" on page 1.

Installing a current transformer relative to the power supply/motor



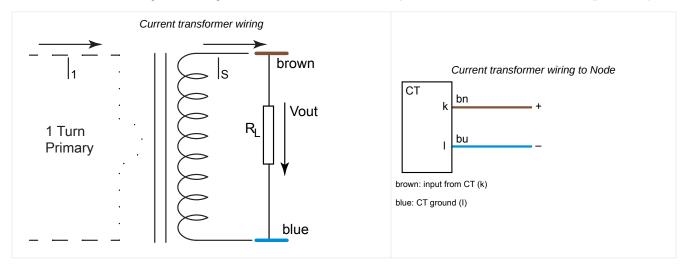
Installing a single conductor on the current transformer





## Wire the Current Transformer

For more information on wiring and installing the current transformer, refer to the Split Core Current Transformer datasheet (p/n 212463).



## **Current Transformer Specifications**

#### Frequency

50 to 2000 Hz

#### Rating Input

CT20A: 0-20A CT150A: 0-150A

CT600A: 0-600A

### Rated Output

0.333 V AC

#### Measuring Range

10% to 130% In

#### Ratio

≤ ±1%

# Certifications



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#### Phase Angle

≤ ±60 min

#### Dielectric Strength

2.5 kV / 1 mA / 1 min

#### Insulation Resistance

DC5000 V / 1000 MOhm min

#### Construction

PA /UL94-VO case; PBT bobbin; silicon steel core; epoxy internal structure; tie construction

#### **Operating Conditions**

-25 °C to +75 °C (-13 °F to +167 °F)

85% relative humidity

#### **Accuracy Class**

0.5



Turck Banner LTD Blenheim House Blenheim Court Wickford, Essex SS11 8YT GREAT BRITAIN

		Model	Diameter	A	В	С
A B C		CT20A	10 mm (0.39 in)	41 mm (1.61 in)	24 mm (0.94 in)	26.5 mm (1.04 in)
		CT150A	16 mm (0.63 in)	45.5 mm (1.79 in)	29 (1.14 in)	31.5 mm (1.24 in)
	—c→	CT600A	35.7 mm (1.41 in)	92.9 mm (3.66 in)	65.25 mm (2.57 in)	42 mm (1.65 in)

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Document title: Current Transformer (Split Core)

Part number: 212463

Revision: C

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212463