

# Split-core Current Transducers/Sensors

Models BB-JC10F50-V, BB-JC24S250-V, BB-JC36S500-V

**B+B SMARTWORX**

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BB-JC10F50-V

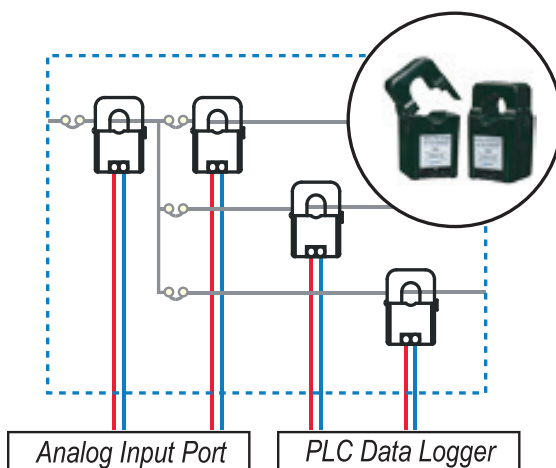
- + All-in one structure in a small size
- + Connect directly to PLCs
- + Sense motor stalls and short circuits
- + Industrial instrumentation
- + Process control loops
- + Phased fired-controlled heaters
- + UL, CSA, CE and RoHS available

## OVERVIEW

These split-core current transducers are designed for energy management with a convenient connection to electronic sub-metering. They may also be applied for current measurement in a system of distributed power line carriers (PLCs) or remote controls such as SCADA software for automation and supervision. Other applications include security and condition monitoring, load monitoring, protection systems, and predictive maintenance of conveyors, pumps, HVAC motors and more.

## LOAD TREND MONITOR PER DISTRIBUTION PANEL

When a sensor outputting analog instrumentation signals in proportion to load current, is clamped directly onto the main or branch wiring of the distribution panel, direct input into analog port as PLC or data logger becomes available without a converter in the middle.



## ORDERING INFORMATION

MODEL NUMBER	CURRENT RANGE (50/60 HZ)	OUTPUT IMPEDANCE	WEIGHT
<b>BB-JC10F50-V</b>	50 Arms	6.2K $\Omega$	45g
<b>BB-JC24S250-V</b>	250 Arms	5.8K $\Omega$	200g
<b>BB-JC36S500-V</b>	500 Arms	5.8K $\Omega$	290g

## SPECIFICATIONS – All Models

TECHNOLOGY	
Output Voltage	0~5V DC (average) / 0 ~ rated current, 7.5V DC limiter built-in
Maximum Allowable Current	100% (continuous) 150% (1 min.)
Accuracy/Linearity	$\pm 2\%$ FS.dynamic range 1:100 (50/60 Hz sinewave)
Output Ripple Voltage	Within 5% of output voltage
Response Time	300 ms
Insulation Resistance	DC500V / 100M $\Omega$ or more (between core and output terminals)
Dielectric Strength	AC 2000V / 1 min. (between core and output terminals)
MECHANICAL	
Sensing Aperture	10mm (clamp-on type)
Latch/Unlatch	About 150 times
Output Terminals	2 x M3-screw with terminal covers
Tightening Torque	0.3 Nm
ENVIRONMENTAL	
Operating Conditions	-20 ~ +50 $^{\circ}\text{C}$ , $\leq 85\%$ RH, No condensation, In-house & any direction installable
Storage Conditions	-30 ~ +90 $^{\circ}\text{C}$ , $\leq 85\%$ RH, No condensation

All product specifications are subject to change without notice.

BB-JCxV-CurrentSensors\_3718ds

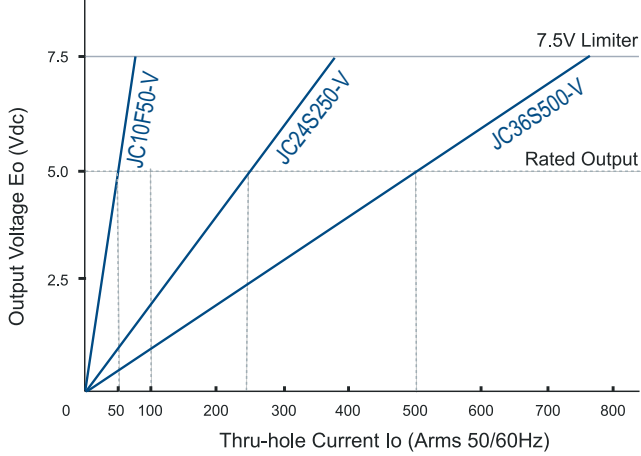
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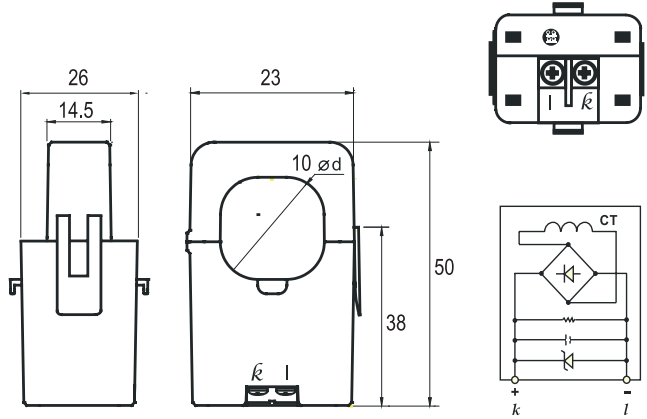
BB-JC24S250-V

## OUTPUT VOLTAGE DATA



## DIMENSIONS – BB-JC10F50-V

Unit = mm

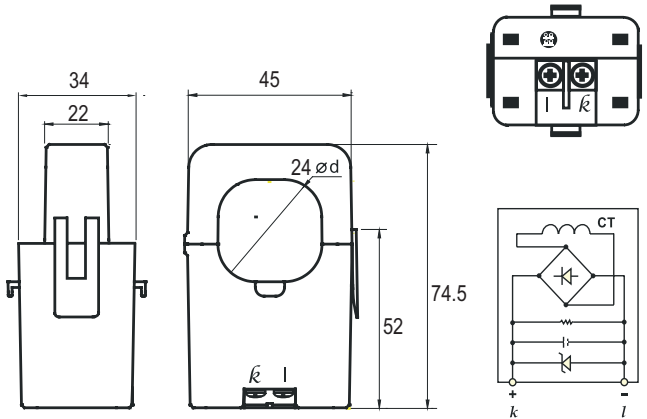


## CONNECTING THE LEAD WIRE

1. The transducer is shown with its lead wires.
2. Hands are shown stripping the insulation from the lead wires.
3. A hand is shown inserting the stripped lead wires into the transducer's terminals.
4. The transducer is shown with the lead wires inserted and secured.
5. A hand is shown pulling the transducer over the lead wire.
6. The transducer is shown fully assembled with the lead wire.
7. The transducer is shown with the lead wire and a cable.
8. Cables & Cable Accessories

## DIMENSIONS – BB-JC24S250-V

Unit = mm



## DIMENSIONS – BB-JC36S500-V

Unit = mm

