DT-BB SERIES
DC Current Transducers

The newest DC current transducer provides several features which have previously been unobtainable. This innovative design allows a split-core transducer to be installed over existing bus bars or wire, it can be mounted on a panel or DIN rail and is rated to measure DC current working voltage to 1500 VDC. The power supply and output signal wires are connected to the sensor with a terminal block which plugs into the header on the top of the sensor. Four ranges are available from 0–100 to 0–400 amps; three output types: unipolar, bipolar and bidirectional; and three industry standard outputs: 4–20 mA, 0–5 and 0–10 VDC. The Innovative design puts the current sensing components in one housing with the signal conditioning, reducing installation time and improving both accuracy and safety.

Current Transducer Applications

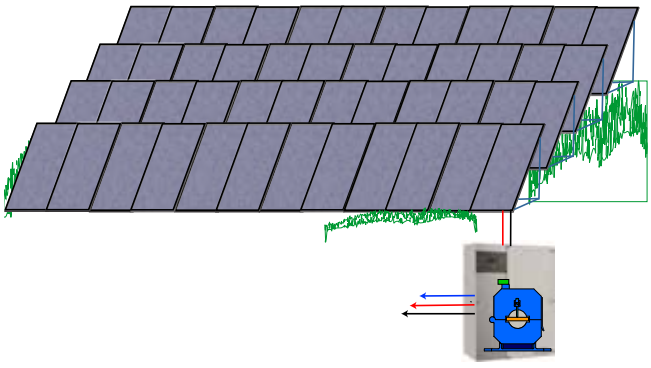
Grid Connected PV Solar Generation

- Measure the power produced by a number of panels connected together, at voltages to 1500 VDC.

DC Motor Monitoring

- Spot over current conditions before the machine fails.
- Sense clogged filters or blocked intake to DC driven pumps.

Solar Panal Grid



Power supply and output wires connect to the sensor with pluggable terminals, making installation even easier. Panel mounting bracket snaps on if needed.

Current Transducer Features

Standard Signal Outputs

- 4–20 mA unipolar or 4–12–20 mA bipolar output.
- 0–5/10 VDC unipolar or 0–2.5–5 VDC or 0–5–10 VDC bipolar output.
- +/-5 or +/-10 VDC bidirectional output also available.
- Compatible with most automation and control systems.

Externally Powered

- Low voltage 24 VAC/DC is safe and readily available.

Split-core Case

- Sensing window provides ample space for bus bar, single or multiple conductors.

DIN Rail or Panel Mount

- Attach to a bus assembly, snap onto DIN rail* (using available adapters) or attach with screws to a panel for secure mounting.

Designed for UL, cUL and CE Approval

- Accepted worldwide.

*For information on the DIN rail accessories kit, see page 140.

NK Technologies
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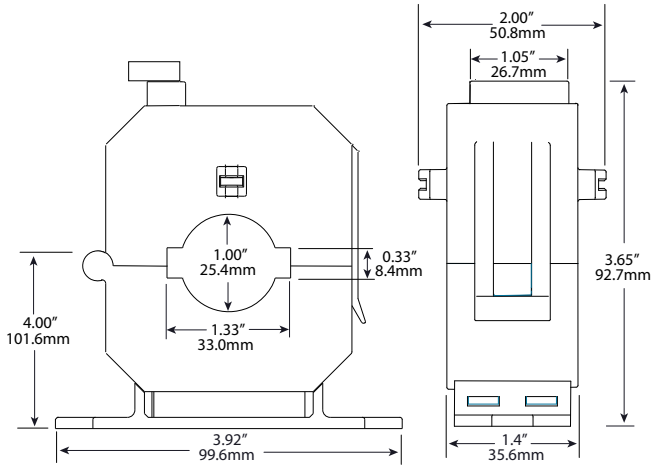
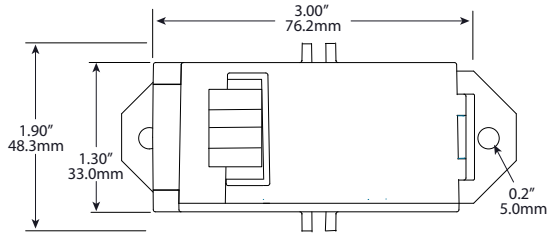
Current Transducer Dimensions

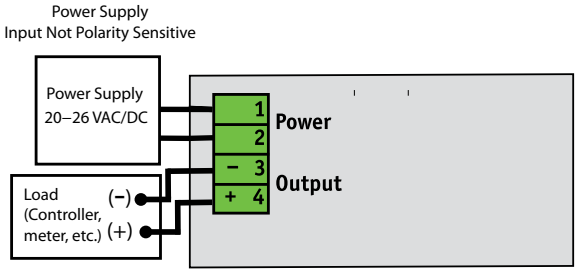




Current Transducer Specifications

Power Supply		24 VAC/DC (20–26 V) Power and signal are not isolated.
Consumption		<2 VA
Output		0–5 VDC, 0–10 VDC or 4–20 mA Bidirectional models: +/-5 or +/-10 VDC
Output Limits		4–20 mA : 23 mA 0–5 VDC : 5.75 VDC 0–10 VDC : 11.5 VDC
Response Time		40 ms (90% step change)
Input Ranges	1	0–100 A
	2	0–200 A
	3	0–300 A
	4	0–400 A
Isolation		Working voltage to 1500 VDC
Frequency Range		DC
Case		UL94 V0 Flammability Rated
Environmental		-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings		Designed for UL/cUL and CE approval

Current Trandsucer Connections



Ordering Information

Sample Model Number: DT4-010-24U-BD-BB
DT Current transducer, 0–400 amp range, 24 volt powered, bidirectional output signal, split-core, bus bar mounting.

	(1)		(2)			(3)			(4)		(5)	
DT		-			-	2	4	U	-		-	B	B

(1) Range

1	0–100 A
2	0–200 A
3	0–300 A
4	0–400 A

(2) Output

005	0–5 VDC
010	0–10 VDC
420	4–20 mA

(3) Power Supply

24U	24 VAC/DC

(4) Output Type

U	Unipolar
BP	Bipolar
BD	Bidirectional

(5) Case Style

BB	Split-core, buss bar or panel mount

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