DT SERIES, 3–WIRE
DC Current Transducers

DT Series DC Current Transducers provide a low cost way of measuring DC current in a small and easy-to-install housing. The series is stable at a wide range of temperatures. The single range design and the use of a common for the power supply and output signal provide a price competitive option in an international market. Similar in concept to the DLT current output sensors, this design produces your choice of 0–5 or 0–10 VDC to interface with controllers or data acquisition systems lacking the current signal capacity.

DC Current Transducer Applications

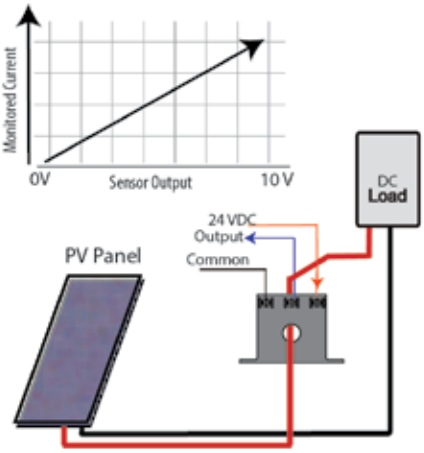
Photovoltaic Panel Monitoring
- Accurate and reliable indication of how much power is produced by a single panel or a string of panels.

Hoists
- Detect overloads and jams.
- Detect undercurrent conditions from coupling slip or breakage.

DC Motor Protection
- Detect imminent bearing failures.

Wind Driven Generators
- Measure and monitor power production from alternative sources.

Monitoring a Photovoltaic Panel Power Output



DC Current Transducer Features

Industry Standard Outputs
- 0–5 or 0–10 VDC proportional to the DC current.
- Compatible with most automation systems.

24 VDC Powered
- Supply and Output share common.

No Span or Zero Adjustments Needed
- Reduces field calibration errors.
- Factory calibrated without potentiometers.

Solid-core Case
- Compact size requiring very little panel space.

Built-in Mounting Feet
- Simple, two-screw panel mounting or attach with DIN rail brackets (included).*

Designed for UL/cUL and CE Approval
- Accepted worldwide.

*For information on the DIN rail accessories kit, see page 122.

For additional Application Examples, go to www.nktechnologies.com/applications

OEMs **Test & Evaluation Units for OEMs**
Free program expedites evaluation process. See page 1 for details.

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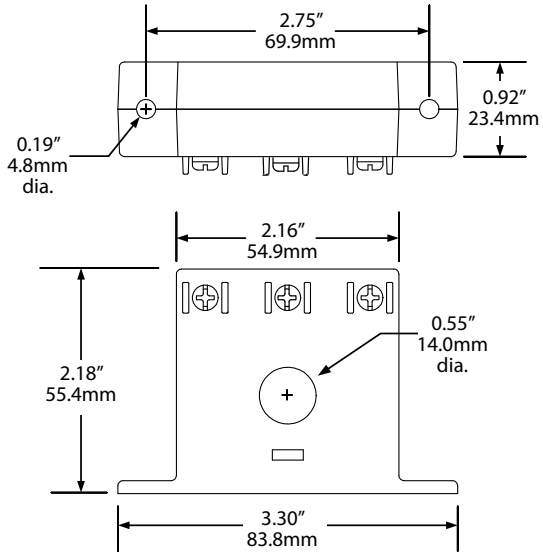
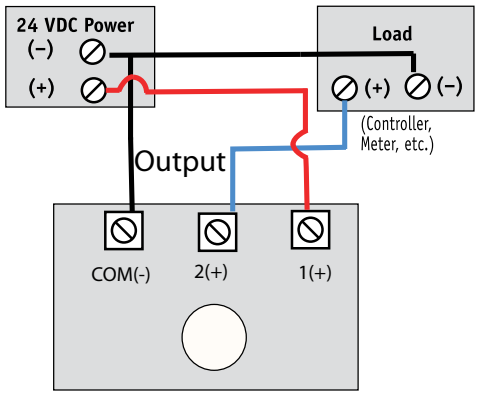
DC Current Transducer Dimensions

FF Case



DC Current Transducer Connections



DC Current Transducer Specifications

Power Supply	24 VDC (19–30 V)
Power Consumption	<2 VA
Output Signal	0–5 or 0–10 VDC
Output Impedence	10 KΩ min.
Response Time	500 ms
Range	• 0–50 A • 0–100 A
Frequency Range	DC
Isolation Voltage	UL listed to 1270 VAC, tested to 5 KV
Case	UL94 V-0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	Designed for UL/cUL and CE approval

DC Current Transducer Ordering Information

Sample Model Number: DTB-010-24D-U-FF

DC current transducer, 0–50 A, 0–10 VDC output, 24 VDC powered, unipolar, solid-core case. (DIN rail adapters are included)

	(1)		(2)			(3)			(4)		(5)	
DT		–				–	**2**	**4**	**D**	–	**F**	**F**

(1) Range

B	0–50 ADC
C	0–100 ADC

(2) Output Type

005	0–5 VDC
010	0–10 VDC

(3) Power Supply

24D	24 VDC

(4) Output Design

U	Unipolar (output with current in one direction)

(5) Case Style

FF	Solid-core, Front Terminals