Rev. 1.14

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-toinstall 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, jams.
- Detect under current 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

Monitored Current 0 10 V Sensor Output DC Load 24 VDC Output-PV Panel Common Test & Evaluation Units



Free program expedites evaluation process. See page 1 for details.

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 Case

Compact size requiring very little panel space.

Built-in Mounting Feet

• Simple, two-screw panel mount or attach with optional DIN rail brackets.

Designed to Meet UL, CUL and CE Approval

• Accepted worldwide.

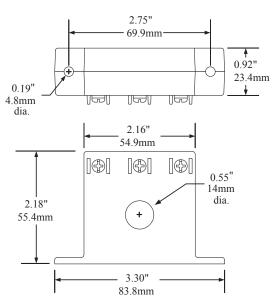


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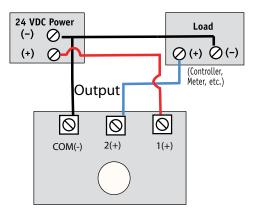


DC Current Transducer Dimensions

FF Case



DC Current Transducer Connections



DC Current Transducer Specifications

Power Supply	24 VDC, <2 VA
Output	0–5 or 0–10 VDC
Response Time	500 ms
Range	• 0–50 A • 0–100 A
Accuracy	±1% FS
Isolation Voltage	Designed to UL 508 1270 VAC, tested to 5000 VAC
Frequency Range	DC
Sensing Aperture	-FF case: 0.55" (14 mm) dia.
Case	UL94 VO Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	Designed to meet UL 508 Industrial Control Equipment (US & Canada)

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.

