

DLT SERIES

DC Current Transducers

DLT Series DC Current Transducers combine a hall effect sensor and a signal conditioner into a single package. The DLT Series is designed to produce an analog 4–20 mA signal proportional to the DC current in the primary conductor.

Available in a solid-core or split-core case design. Lower current ranges make this sensor ideal for use in photovoltaic panel combiner boxes.

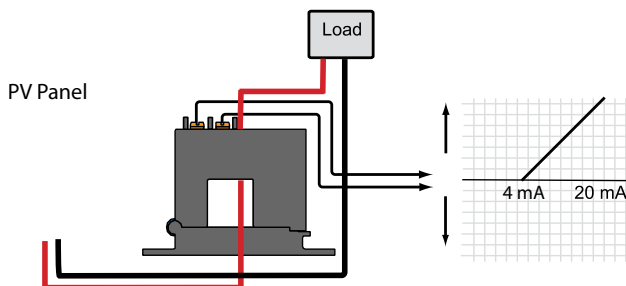


Applications

DC Current Monitoring

- PV Array combiner boxes.
- Wind generators.
- DC heating applications.
- UPS system monitoring.

Photovoltaic Arrays



Features

4–20 mA Loop-powered Output

- Industry standard connections, positive indication of correct field wiring.

Single Range

- No chance of field range selection errors.
- Eliminates zero and span pots.

Isolation

- Output is magnetically isolated from the primary circuit for safety.
- Eliminates insertion loss (voltage drop).

Agency Approval

- UL 508 Industrial Control Equipment (USA & Canada).

Monitoring PV Arrays:

The current produced by a photovoltaic module or array can be easily monitored by using the DLT series current sensors over the conductor exiting the collectors. A simple two-wire connection, powered by 24 VDC nominal in series with the sensor output, and the sensor will produce a signal in real time that is directly proportional to the current being produced.

If a single cell fails, or a module quits operating properly, the current output will drop, and the current sensor will reflect the change.

Safer and more stable than shunts, non-contact current sensors are a simple answer to measuring DC current at any point in the PV system.



Free program expedites evaluation process.
See page 1 for details

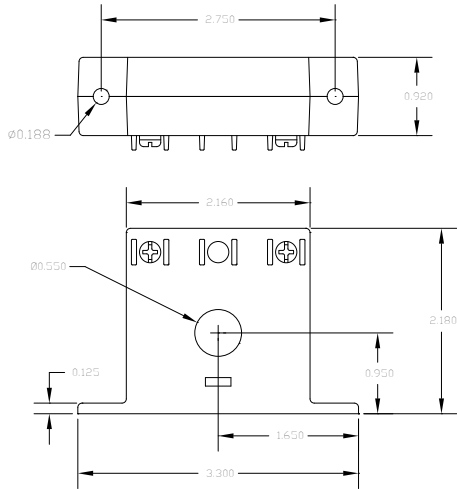


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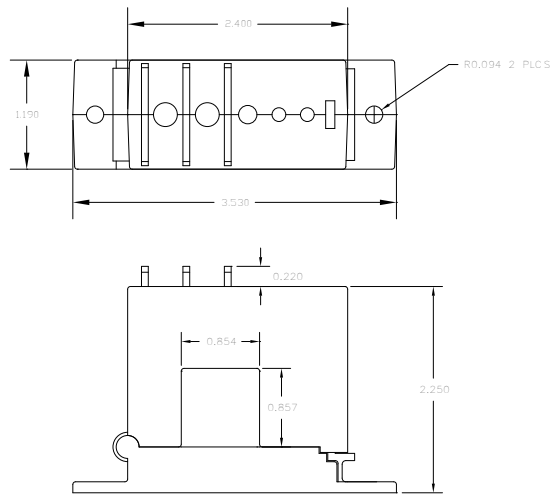


Dimensions

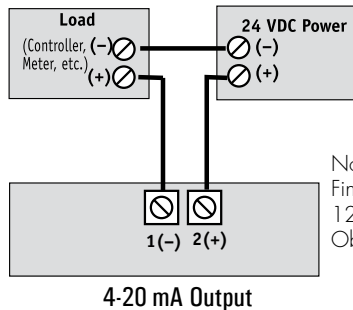
FL Case



SP Case



Connections



Notes:
Fingersafe captive screw terminals.
12-22 AWG solid or stranded.
Observe polarity.

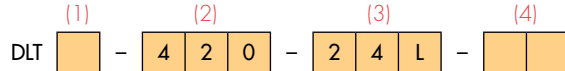
Specifications



Output Signal	4–20mA, Loop-powered
Output Limit	23mA
Accuracy	1.0% FS
Response Time	100 ms (to 90% step change)
Frequency Range	DC
Power Supply	24VDC Nominal, 40VDC Maximum
Isolation Voltage	UL listed to 1,270VAC (tested to 5KV)
Input Ranges	0-20 to 0-400 DC, see Ordering Information
Sensing Aperture	<ul style="list-style-type: none"> FF Case: 0.55" (14mm) dia. SP Case 0.84" (21.7mm) dia.
Case	UL94 V0 Flammability Rated
Environmental	-22 to 158°F (-30 to 70°C) 0–95% RH, non-condensing
Listings	UL 508 Industrial Control Equipment (USA & Canada)

Ordering Information*

Sample Model Number: DLTB-420-24L-FF
DC current transducer, 50A range, 4–20mA output, 24VDC loop-powered in a solid-core case.



(1) Full Scale Range

A	0–20 A
B	0–50 A
C	0–100 A
D	0–200 A
E	0–300 A
F	0–400 A

(2) Output Signal

420	4–20mA
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(3) Power Supply

24L	24VDC Loop-powered
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(4) Case Style (black only)

FF	Solid-core, Front Terminals (maximum range 0–100 A)
SP	Split-core (minimum range 0–50 A)

*Bulk packaging only.