

DT SERIES, LARGE APERTURE Current Transducers

DT Series, Large Aperture Current Transducers combine a Hall effect sensor and signal conditioner into a single package for use in DC current applications up to 1200A. The DT Series has factory set and calibrated ranges and industry standard 4–20mA, 0–5VDC or 0–10VDC outputs. Available in solid-core DIN rail mounted enclosure.



Applications

Battery Banks

- Monitor load and charging currents.
- Verify operation.

Transportation

- Measure traction power or auxiliary loads.

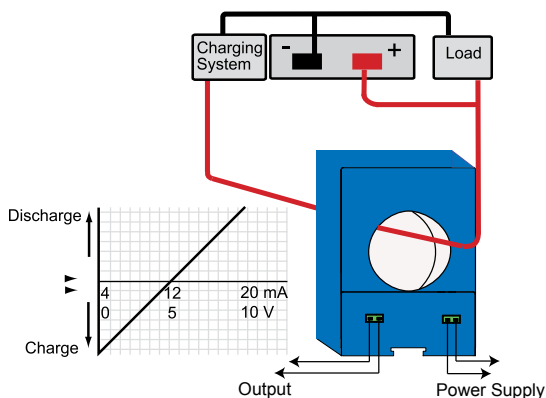
Wind and Solar Generated Power

- Measure the current produced or consumed.
- Detect mechanical problems before failure occurs.

Monitor DC Powered Motors

- Monitor current of cranes, saws, sorters and positioning equipment.

Battery Charging System



For additional Sample Output/Power Supply or Application Illustrations, see Supplemental Illustrations on page A80.

Features

Factory Set and Calibrated Ranges

- No need for field calibration.
- Eliminates zero and span pots.

Isolation

- Output is magnetically isolated from the input for safety.
- Eliminates insertion losses, no added burden.

Internal Power Regulation

- Works well, even with unregulated power.
- Cuts installation cost.

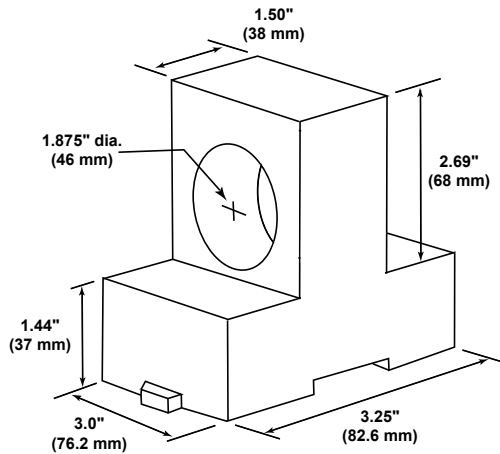
DIN Rail Mounted Enclosure

- Makes installation a snap.
- No drilling or screws to lose.
- Optional DIN Rail kit available for chassis mounting.*

*For information on the DIN Rail accessories kit, see page A79.

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

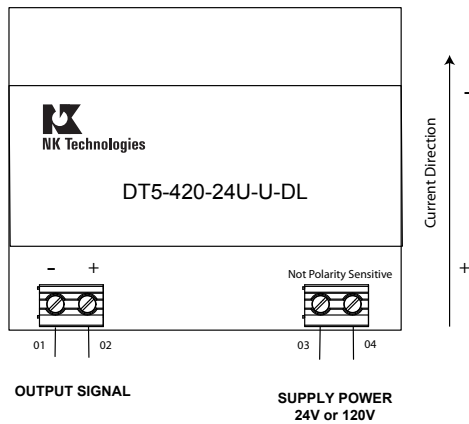
Dimensions



Specifications

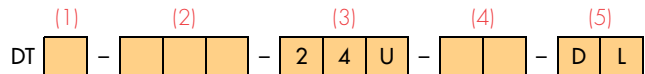
Output Signal	4–20mA, 0–5VDC, 0–10VDC
Output Limit	<ul style="list-style-type: none"> 4–20mA: 23mA 0–5VDC: 5.75VDC 0–10VDC: 11.5VDC
Accuracy	2% FS
Repeatability	1.0% FS
Response Time	100ms (to 90% of step change)
Frequency Range	DC
Power Supply	24VAC/DC, isolated from output
Power Consumption	2VA
Loading	<ul style="list-style-type: none"> 4–20mA: 650Ω maximum 0–5VDC: 25kΩ minimum 0–10VDC: 50kΩ minimum
Isolation Voltage	3KV (monitored line to output)
Linearity	0.75% FS
Current Ranges	Ranges from 0–1200A DC
Sensing Aperture	1.875" (46 mm) dia.
Case	UL94 V0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C), 0–95% RH, non-condensing
Listings	UL 508 Industrial Control Equipment (pending), CE (pending)

Connections

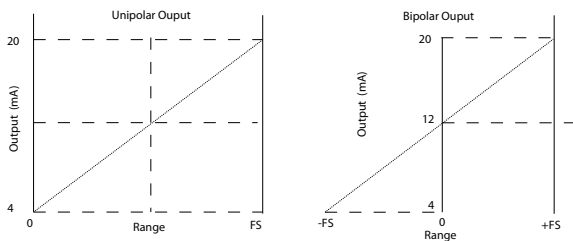


Ordering Information

Sample Model Number: DT6-420-24U-U-DL
Solid-core DC current transducer, 0–500A range, 24VAC/DC powered, 4–20mA, unipolar output.



Output Type



(1) Full Scale Range

5	300A
6	500A
7	750A
8	1000A
9	1200A

(3) Power Supply

24U	+24VAC/DC
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(4) Output Polarity

U	Unipolar
BD	Bipolar

(2) Output Signal

420	4-20mA
005	0-5VDC
010	0-10VDC

(5) Case Style

DL	Solid-core, DIN mount
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Notes:
Deadfront captive screw terminals.
12-22 AWG solid or stranded.
Observe polarity.
Unipolar Output: Signal With Current flowing in one direction only

