

NK Technologies

Current Transducers
DT SERIES



DT Series Current Transducers combine a Hall effect sensor and signal conditioner into a single package for use in DC current applications up to 400A. The DT Series has jumper selectable current input ranges and industry standard 0–20mA, 4–20mA, 0–5VDC or 0–10VDC outputs. Available in solid or split-core enclosures.

Features

Three Jumper Selectable Ranges

- Reduces inventory.
- Eliminates zero and span pots.

Isolation

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

Internal Power Regulation

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

Split-core Design/Built-in Mounting Brackets

- Makes installation a snap.

Applications

Battery Banks

- Monitors load current.
- Monitors charging current.
- Verifies operation.

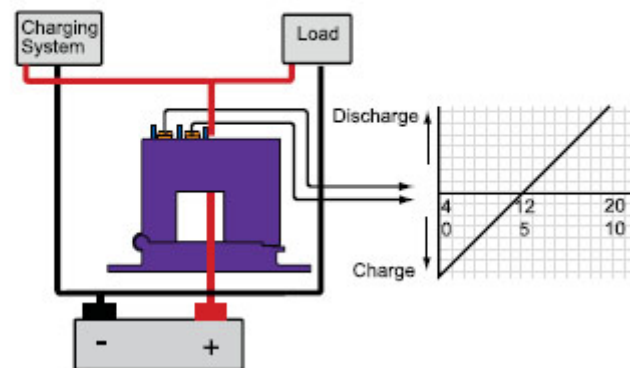
Transportation

- Measures traction power or auxiliary loads.

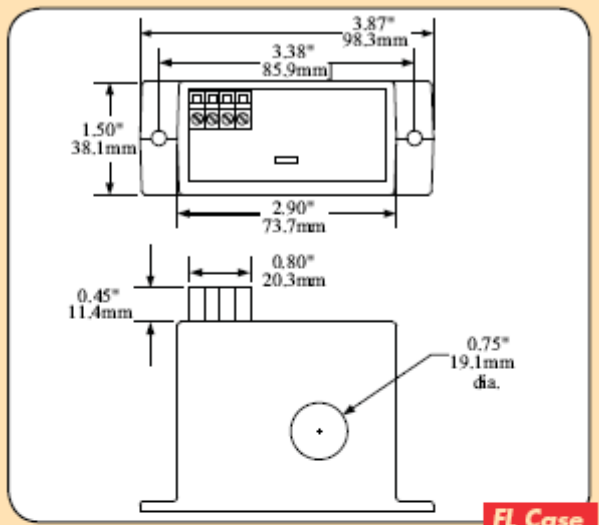
Electric Heating Elements

- Monitors heater loads.
- Faster response than temperature sensors.

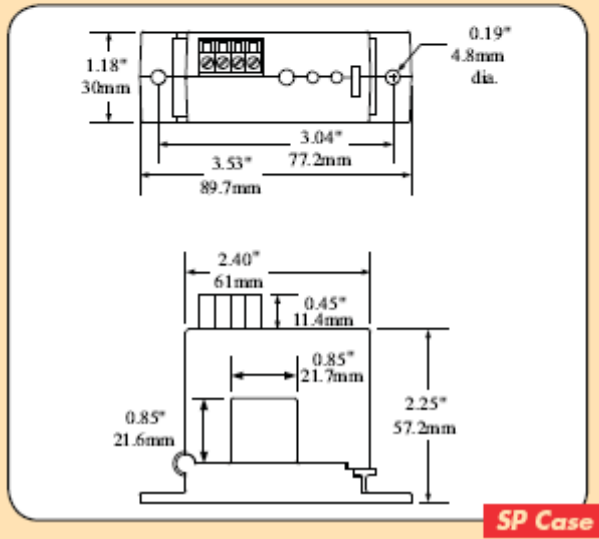
Battery Charging System



Dimensions

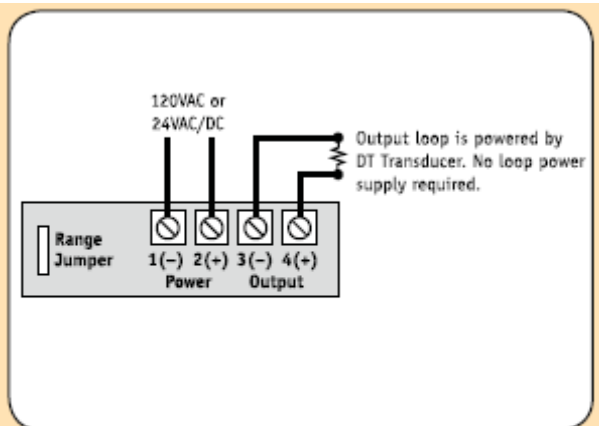


FL Case



SP Case

Connections



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

Specifications

Output Signal 0–20mA, 4–20mA, 0–5VDC, 0–10VDC

Output Limit 0–20mA, 4–20mA: 23mA
0–5VDC: 5.75VDC
0–10VDC: 11.5VDC

Accuracy Solid-core: 1% FS
Split-core: 2% FS
DT3: 1.5%, DT4: 2%

Repeatability 1.0% FS

Response Time Solid-core: 20ms (to 90% of step change)
Split-core: 100ms (to 90% of step change)

Frequency Range DC

Power Supply 24VAC/DC, 2VA max. or 120VAC (-FL only)

Power Consumption 2VA

Loading 0–20mA, 4–20mA: 650 max
0–5VDC: 25k min.
0–10VDC: 50k min.

Isolation Voltage 3KV (monitored line to output)

Linearity 0.75% FS

Current Ranges Field Selectable Ranges from 0–400A

Sensing Aperture FL Case: 0.75" (19.1mm) dia.
SP Case: 0.85" (21.6mm) sq.

Case UL94 V0 Flammability Rated

Environmental -4 to 122oF (-20 to 50oC),
0–95% RH, non-condensing

Listings CE, UL 508 Industrial Control Equipment
(Pending, USA & Canada),

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