



NK Technologies



DT Series

'DT' Current Transducers from NK Technologies combine a Hall effect sensor and signal conditioner into a single package. The DT Series has jumper selectable current input ranges and industry standard 0–20mA, 4–20mA, 0–3VDC, 0–5VDC or 0–10VDC outputs. Available in a split core package.

DC Current Transducers 0–3/5/10VDC or 4–20mA Output

Applications

Battery Banks

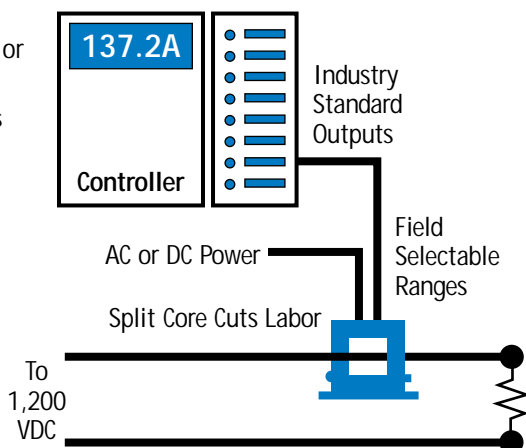
- Monitors load current.
- Monitors charging current.
- Verifies operation.

Transportation

Measures traction power or auxiliary loads.

Electric Heating Elements

Faster response than temperature sensors.



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 costs.
- **Easy Installation**

Split core design with built-in mounting brackets makes installation a snap.

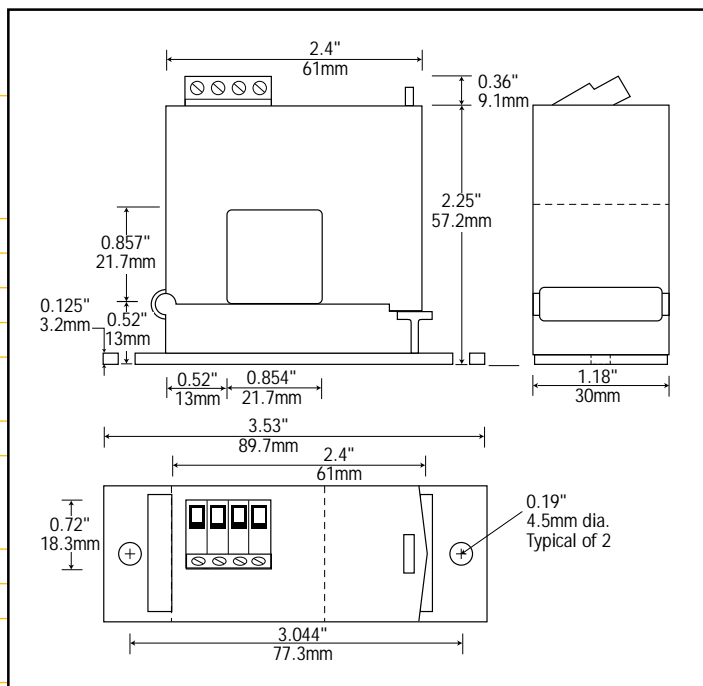
*DC Current Transducers
0–3/5/10VDC and 4–20mA Output*

Know your power...

because with knowledge comes control.

Specifications

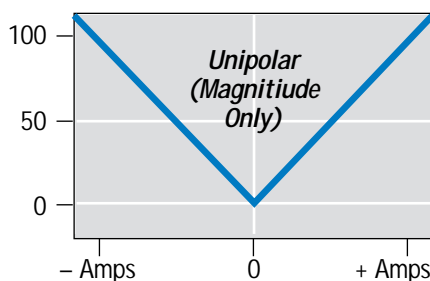
Output Signal	0-20mA, 4-20mA, 0-3VDC, 0-5VDC or 0-10VDC
Output Limit	<ul style="list-style-type: none"> 0-20mA, 4-20mA: 44mA 0-3VDC: 6.5VDC 0-5VDC: 13VDC 0-10VDC: 26VDC
Accuracy	1.0% FS
Repeatability	1.0% FS
Response Time	100mS (to 90% of step change)
Frequency Range	DC
Power Supply	20-50VDC, 22-38VAC. Power input and output signal are not isolated.
Power Consumption	2VA
Loading	<ul style="list-style-type: none"> 0-20mA, 4-20mA: 650Ω max. 0-3/5/10VDC: 250kΩ for rated accuracy; 25kΩ, add 1% error.
Isolation Voltage	3kV (monitored line to output)
Linearity	0.75% FS
Current Ranges	Field Selectable Ranges from 0-400A (see Ordering Information)
Sensing Aperture	0.85" (21.5mm) sq.
Case	UL 94V-0 Flammability rated
Environmental	-4 to 122°F (-20 to 50°C), 0-95% RH, non-condensing



Connections

Output Polarity

Output (%)



Notes:

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

Ordering Information

Example: DT2-420-24U-U

Split core DC/DC current switch, mid range, 24VAC/DC powered with a 4-20mA output that is unipolar.

DT		-		-	24U	-	U
Full Scale Range			Output Signal		Power Supply		Output Polarity*
1 50, 75, 100A			020 0-20mA		24U +24VAC/DC		U Unipolar
2 100, 150, 200A			420 4-20mA				
3 150, 225, 300A			003 0-3VDC				
4 200, 300, 400A			005 0-5VDC				
C Custom Range			010 0-10VDC				

*Bipolar version available in mid 2000.

DC Current Transducers
0-3/5/10VDC and 4-20mA Output