



# NK Technologies

NK Technologies • 500 Division Street • Campbell, CA 95008-6906  
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MADE IN  
USA

## AT SERIES Current Transducers

### Applications

#### Automation Systems

- Analog current reading for remote monitoring and software alarms.

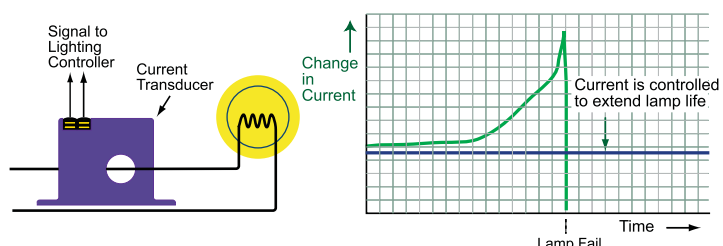
#### Data Loggers

- Self-powered transducer helps conserve data logger batteries.

#### Panel Meters

- Simple connection displays power consumption.

### Preventative Maintenance of a Critical Lighting System



**AT Series** Current Transducers combine a current transformer and signal conditioner into a single package. The AT Series has jumper selected current input ranges and industry standard 4–20mA, 0–5VDC or 0–10VDC outputs. The AT Series is designed for application on ‘linear’ or sinusoidal AC loads. Available in a split-core case or two types of solid-core cases.

### Features

#### Accurate

- Factory matched and calibrated single piece transducer is more accurate than traditional two-piece field installed solutions.

#### Average Responding

- “Average Responding” algorithm gives an RMS output on pure sine waves. Perfect for constant speed (linear) loads.

#### Jumper Selectable Ranges

- Reduces inventory.
- Eliminates zero and span pots.

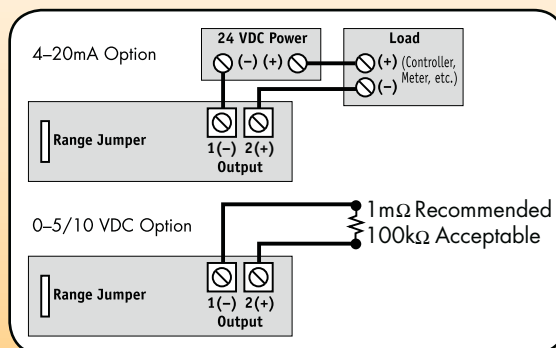
#### Isolation

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

#### UL, CUL and CE Approval

- Accepted worldwide.

### Connections



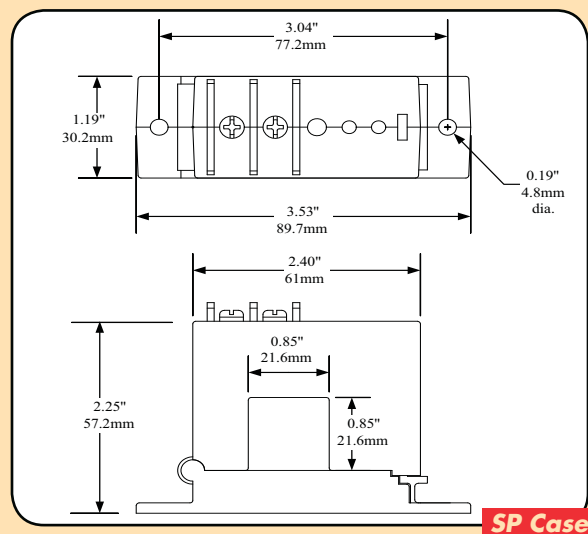
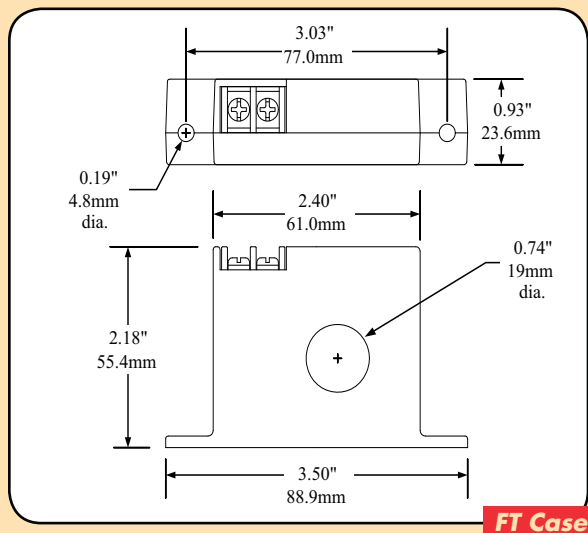
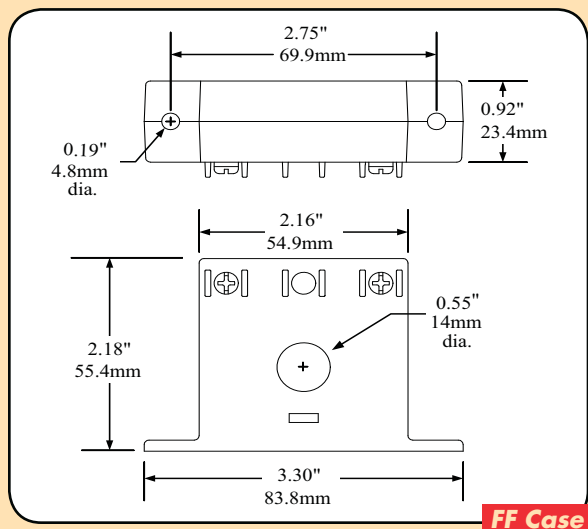
**Notes:** Pressure plate screw terminals.  
12–22 AWG solid or stranded.  
Field adjustable setpoint.



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## Dimensions



## Specifications

	-005 Model	-010 Model	-420 Model
<b>Output Signal</b>	0–5VDC	0–10VDC	4–20mA
<b>Output Limit</b>	8.2VDC	15VDC	32mA
<b>Accuracy</b>	1.0% FS		
<b>Response Time</b> (10–90% step change)	100 ms		300 ms
<b>Frequency Range</b>	50–60Hz		20–100Hz*
<b>Other Frequencies</b>	Special calibration available for any frequency from 10–400Hz*		
<b>Power Supply</b>	Self-powered		12–40VDC, Loop-powered
<b>Loading</b>	1mΩ min. for rated accuracy 100KΩ add 1.3% error		See Power Supply below
<b>Isolation Voltage</b>	UL listed to 1,270VAC (tested to 5KV)		
<b>Input Ranges</b>	Field selectable ranges from 0–200A; custom ranges available; consult factory.		
<b>Sensing Aperture</b>	<ul style="list-style-type: none"> <li>• FF Case: 0.55" (14mm) dia.</li> <li>• FT Case: 0.74" (19mm) dia.</li> <li>• SP Case: 0.85" (21.6mm) sq.</li> </ul>		
<b>Case</b>	UL94 V0 Flammability Rated		
<b>Environmental</b>	<ul style="list-style-type: none"> <li>• -4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing</li> </ul>		
<b>Listings</b>	UL 508 Industrial Control Equipment (USA & Canada), CE		

\*For sinusoidal waveforms only. Select ATR Transducers for distorted waveforms.



## Ordering Information

Sample Model Number: AT1-005-000-SP

AC current transducer, 10/20/50A range, self-powered with a 0–5VDC output in a split-core case.

AT <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup>

(1) Full Scale Range

0	2 & 5A
1	10, 20, 50A
2	100, 150, 200A

(3) Power Supply

24L	24VDC Loop-powered (4–20mA output ONLY)
000	Self-powered (0–5/0–10VDC output ONLY)

(2) Output Signal

420	4–20mA
005	0–5VDC
010	0–10VDC

(4) Case Style

FF	Solid-core, Front Term.
FT	Solid-core, Top Term.
SP	Split-core

**AT Series**