



NK Technologies

# AT Series



'AT' Current Transducers from NK Technologies 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.

## AT Current Transducers 0–5/10VDC or 4–20mA Output

### Applications

#### Automation Systems

Analog current reading for remote monitoring and software alarms.

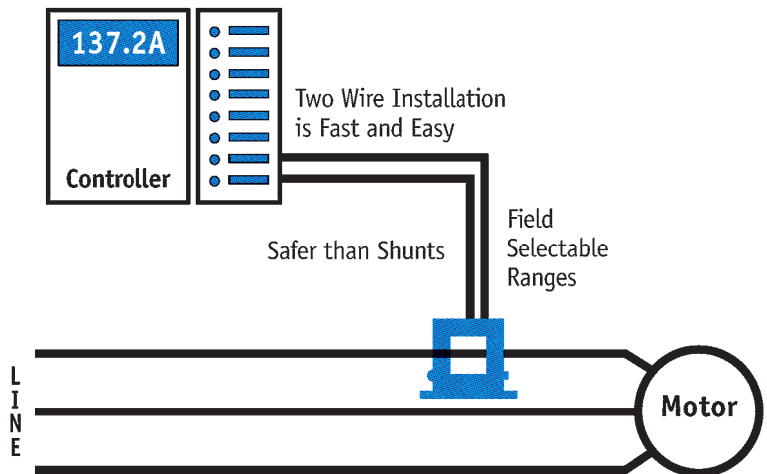
#### Data Loggers

Self-powered transducer helps conserve data logger batteries.

#### Panel Meters

Simple connection displays power consumption.

MADE IN  
USA



## AC Current Transducers 0–5/10VDC or 4–20mA Output

# AT Series

PAGE 15

### 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 a 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.

### Input Ranges

Model	Range	MAXIMUM	
		6 Sec.	1 Sec.
AT0	2 A	125A	250A
	5 A	125A	250A
AT1	10A	125A	250A
	20A	150A	300A
	50A	215A	400A
AT2	100A	300A	600A
	150A	450A	800A
	200A	500A	1,000A

**Know your power...**  
because with knowledge comes control.

## Specifications

	-005 Models	-010 Models	-420 Models
<b>Output Signal</b>	0-5VDC	0-10VDC	4-20mA
<b>Output Limit</b>	8.2VDC	15VDC	32mA
<b>Accuracy</b>	1.0% FS	1.0% FS	1.0% FS
<b>Response Time</b> (10-90% step change)	100ms	100ms	300ms
<b>Frequency Range</b>	50-60Hz	50-60Hz	20-100Hz*
<b>Other Frequencies</b>	Special calibration available for any frequency from 10-400Hz*		
<b>Power Supply</b>	Self-powered	Self-powered	12-40VDC, Loop-powered
<b>Loading</b>	1mΩ minimum 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 (see Ordering Information). Custom ranges available, consult factory.		

**Sensing Aperture**

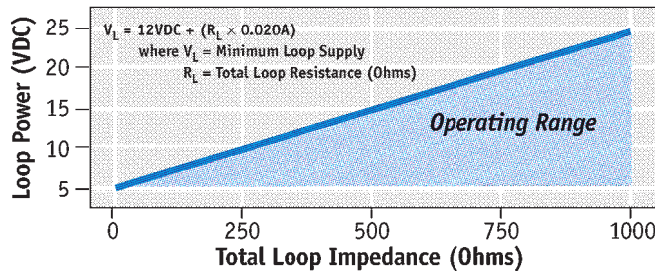
- FF Case: 0.55" (14mm) dia.
- FT Case: 0.74" (19mm) dia.
- SP Case: 0.85" (21.6mm) sq.

**Case** UL 94V-0 Flammability Rated  
**Environmental** -4 to 122°F (-20 to 50°C), 0-95% RH, non-condensing  
**Listings** UL 508 Industrial Control Equipment (USA & Canada), CE

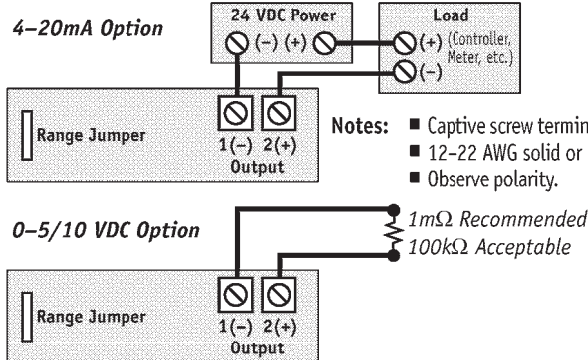
\*For sinusoidal waveforms only. Select ATR Transducers for distorted waveforms.



## Power Supply (4-20mA output only)



## Connections

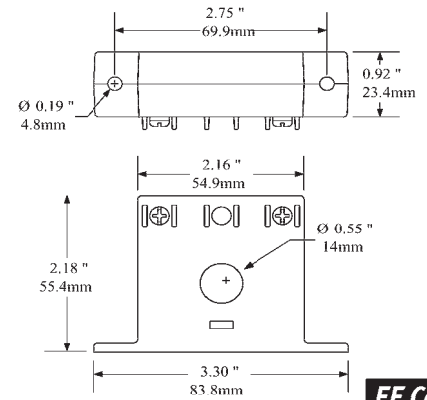


## Ordering Information

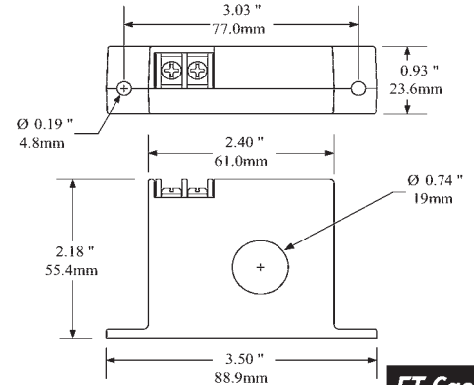
**Example: AT1-005-000-SP**  
 AC current transducer, 10/20/50A range, self-powered with a 0-5VDC output in a split-core case.

AT	Full Scale Ranges	Output Signal	Power Supply	Case
0	2 & 5A	005 0-5VDC	24L 24VDC Loop-powered (4-20mA output ONLY)	FF Fixed Core, Front Term.
1	10, 20, 50A	010 0-10VDC	000 Self-powered (0-5/0-10VDC output ONLY)	FT Fixed Core, Top Term.
2	100, 150, 200A			SP Split-core

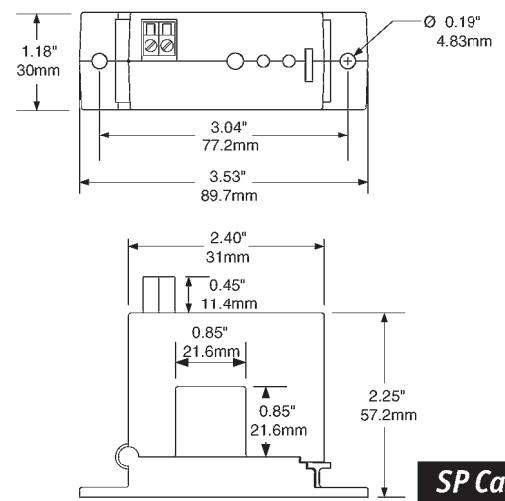
**AC Current Transducers**  
 0-5/10VDC or 4-20mA Output



**FF Case**



**FT Case**



**SP Case**