

# 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.

## 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.

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

## Applications

### Automation Systems

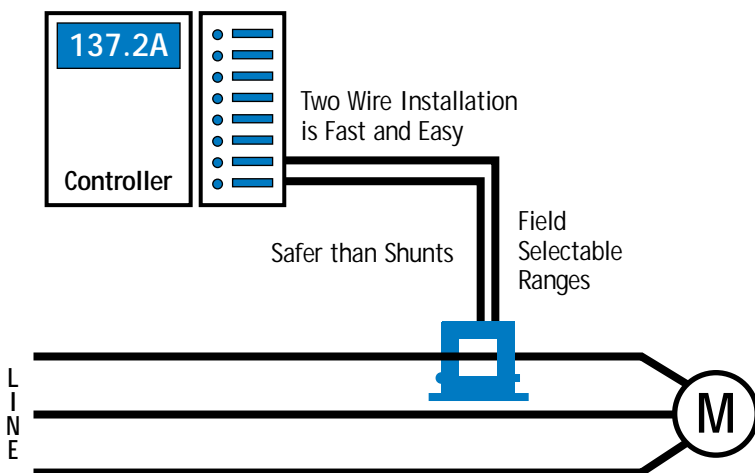
Analog current reading for remote monitoring and software alarms.

### Data Loggers

Self-powered transducer does not drain data logger batteries.

### Panel Meters

Simple connection displays power consumption.



## Input Ranges

Model	Range	Continuous	MAXIMUM	
			6 Sec.	1 Sec.
AT0	2A	80A	60A	100A
	5A	100A	124A	250A
AT1	10A	80A	125A	250A
	20A	110A	150A	300A
	50A	175A	215A	400A
AT2	100A	200A	300A	600A
	150A	300A	450A	800A
	200A	400A	500A	1,000A

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

**AT Series**

**Know your power...**

**because with knowledge comes control.**

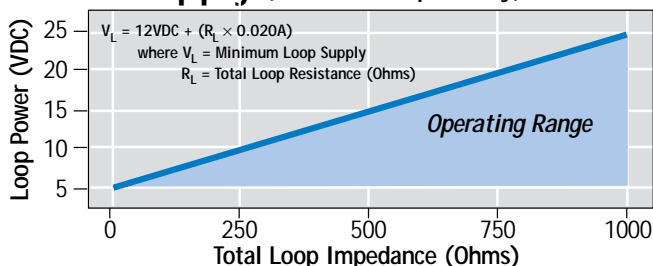
## Specifications

	–005 Models	–010 Models	–420 Models
Output Signal	0–5VDC	0–10VDC	4–20mA
Output Limit	10VDC	15VDC	40mA
Accuracy	1.0% FS	1.0% FS	0.5% FS
Response Time (10–90% step change)	100mS	100mS	300mS
Frequency Range	50–60Hz	50–60Hz	20–100Hz*
Other Frequencies	Special calibration available for any frequency from 10–400Hz*		
Power Supply	Self-powered	Self-powered	12–40VDC, Loop-powered
Loading	1mΩ minimum for rated accuracy 100KΩ add 1.3% error		See “Power Supply” below
Isolation Voltage	UL listed to 1,270VAC, tested to 5KV		
Input Ranges	Field Selectable Ranges from 0–200A (see Ordering Information). Custom ranges available, consult factory.		
Sensing Aperture	■ –FF Case : 0.55" (14mm) dia. ■ –FT Case : 0.75" (19mm) dia. ■ –SP Case : 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		
Listings	UL 508 Industrial Control Equipment (USA & Canada). CE		

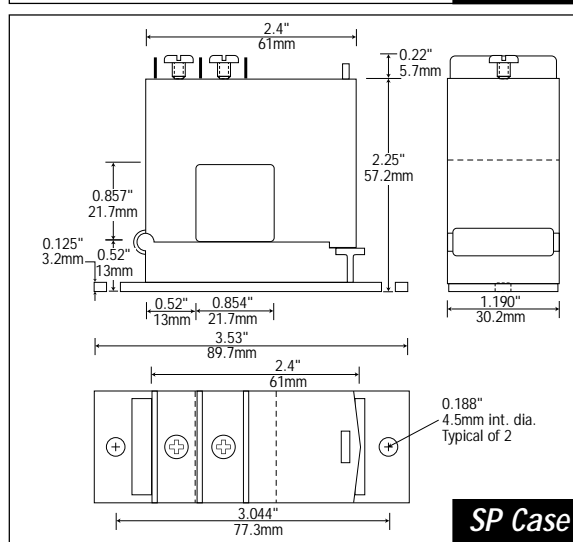
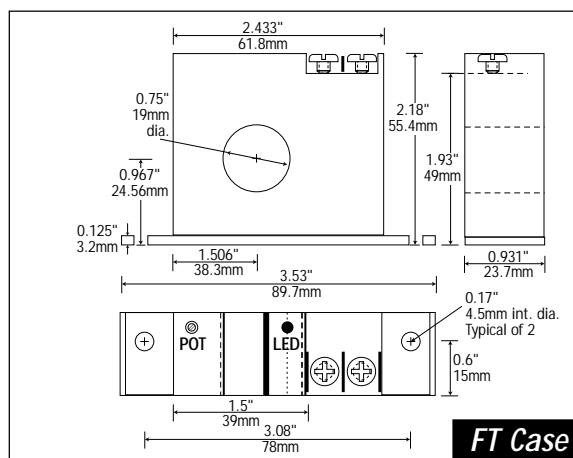
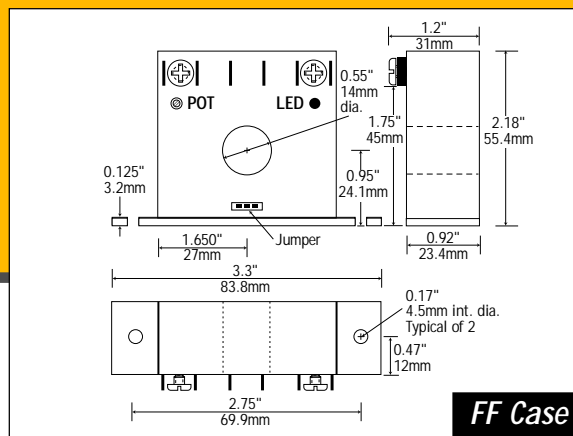
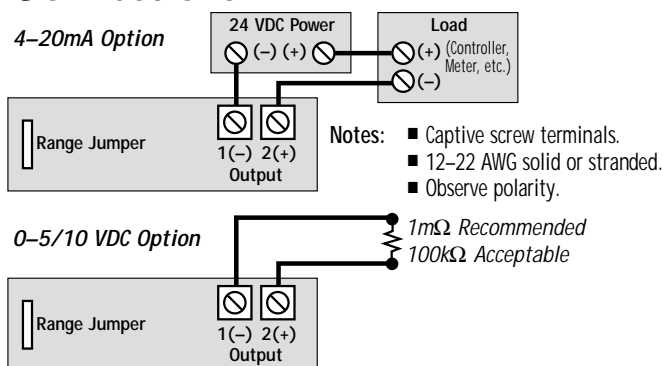
\*For sinusoidal waveforms only. Select ATR Transducers for distorted waveforms.



## 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
	420 4-20mA	005 0-5VDC	24L 24VDC Loop-powered (4-20mA output ONLY)	FF Fixed Core, Front Term.
	0 2 & 5A	010 0-10VDC	000 Self-powered (0-5/0-10VDC output ONLY)	FT Fixed Core, Top Term.
	1 10, 20, 50A			SP Split Core
	2 100, 150, 200A			

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

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