



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.

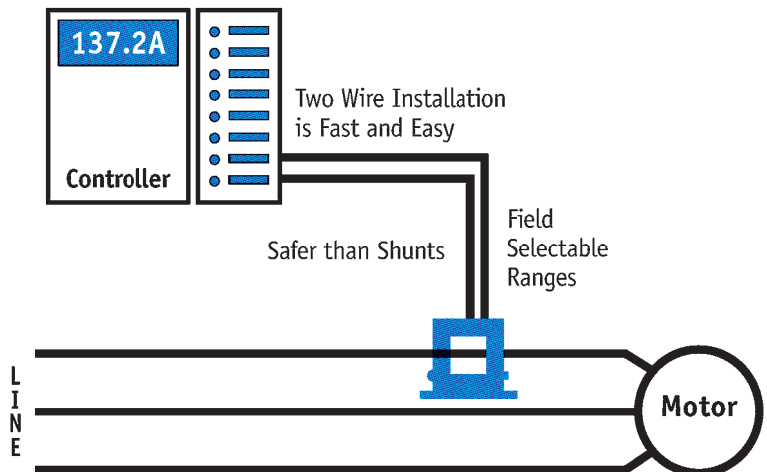
Data Loggers

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.
ATO	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
Output Signal	0-5VDC	0-10VDC	4-20mA
Output Limit	8.2VDC	15VDC	32mA
Accuracy	1.0% FS	1.0% FS	1.0% 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

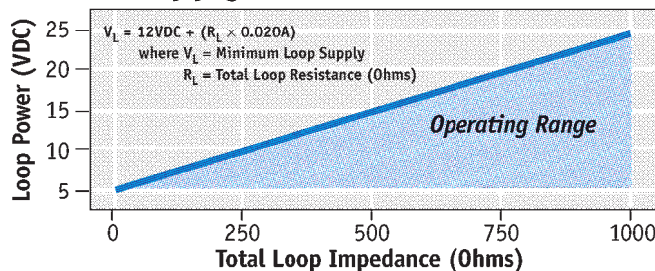
- FF Case: 0.55" (14mm) dia.
- FT Case: 0.74" (19mm) dia.
- SP Case: 0.85" (21.6mm) sq.

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

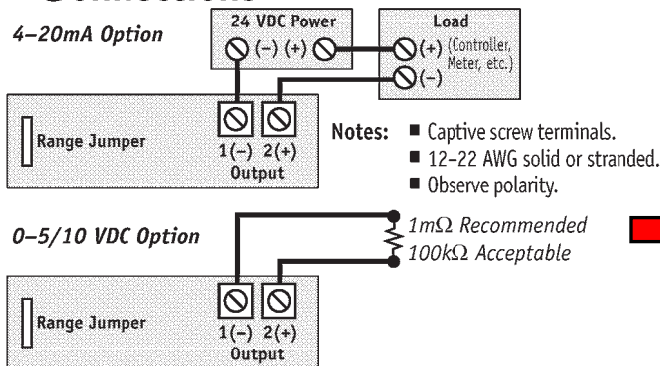
*For sinusoidal waveforms only. Select ATR Transducers for distorted waveforms.



Power Supply (4-20mA output only)



Connections

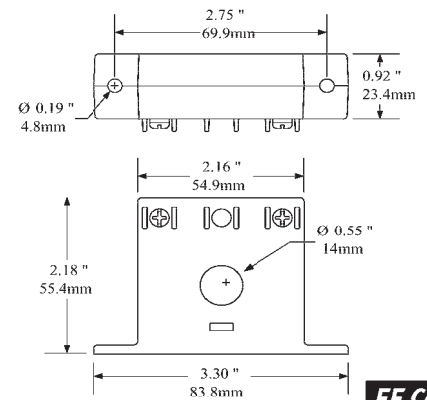


Ordering Information

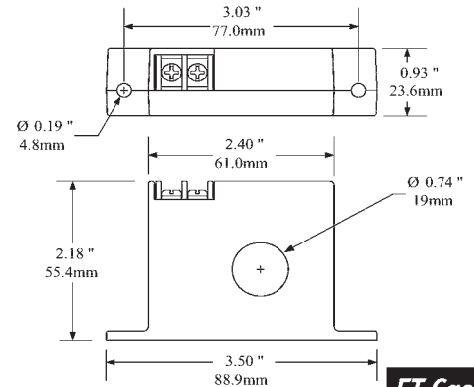
Example: AT1-005-000-SP
 AC current transducer, 10/20/50A range, self-powered with a 0-5VDC output in a split-core case.

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

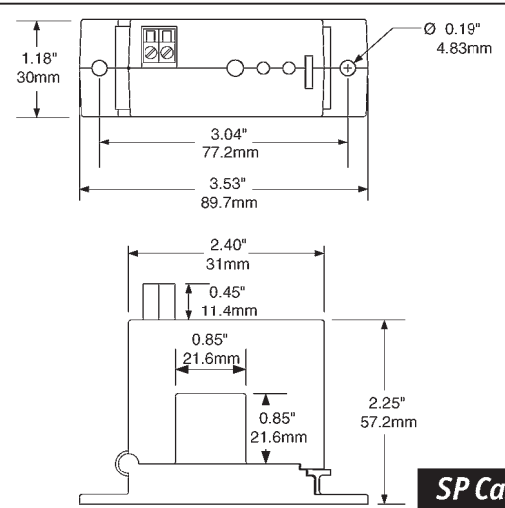
AC Current Transducers
 0-5/10VDC or 4-20mA Output



FF Case



FT Case



SP Case