

## NK Technologies AC Current Transducers

AT and ATP current transducers combine a current transformer and signal conditioner in a single package. These transducers offer jumper selected current input ranges with proportional industry standard 4-20 mA, 0-5 VDC and 0-10 VDC outputs. The AT and ATP series are designed for application on "linear" or sinusoidal AC loads. Available in a split core or two types of solid core cases.

ATR and ATPR transducers combine a current transformer and True RMS signal conditioner in a single package. The ATR and ATPR series provide True RMS outputs on distorted waveforms found on VFD and SCR outputs or on linear loads in "noisy" power environments. Available in a solid or split core case.

### AT & ATP SPECIFICATIONS

	-005 Models	-010 Models	-420 Models
Output Signal:	0-5 VDC	0-10 VDC	4-20 mA
Output Limit:	10 VDC	15 VDC	40 mA
Accuracy:	1.0% FS	1.0% FS	0.5% FS
Frequency Range:	50-60 Hz	50-60 Hz	20-100 Hz
Power Supply:	Self or External	Self or External	Loop or External
Isolation Voltage:	UL Listed to 1270 VAC, Tested to 5 kV		
Sensing Aperture:	-FF Case: 0.55" (14 mm) Diameter -FT Case: 0.75" (19 mm) Diameter -SP Case: 0.85" (21.5 mm) 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 and Canada), CE		

### ATR & ATPR SPECIFICATIONS

Output Signal:	4-20 mA, Loop-Powered, True RMS
Output Limit:	23 mA
Accuracy:	0.8% FS (1.0% on ATR3 & 4)
Frequency Range:	10-400 Hz
Power Supply:	24VDC Nom., 40 VDC Max., 120 VAC
Isolation Voltage:	UL Listed to 1270 VAC, Tested to 5 kV (600 VAC on ATR3 & 4)
Sensing Aperture:	-FT Models: 0.75" (19 mm) Dia. -FL Models: 3.0" (76 mm) Dia. -SP Models: 0.85" (21.5 mm) 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 and Canada)



### Loading (All Models)

Loop Power:	$R_L < 500\Omega$
External Power:	$R_L > 50k\Omega$
Self Powered:	Accuracy for $R_L > 1M\Omega$ , add 1.3% for $R_L = 100 k\Omega$

## ORDERING INFORMATION

A	Model	AT	Average sensing, loop or self-powered
B	Input Ranges	0	0-2/5A
		1	0-10/20/50A
		2	0-100/150/200A
		3	0-375/500/750A
		4	0-1000/1333/2000A
C	Output	420	4-20mA
		005	0-5 VDC (0,1,2 only)
		010	0-10 VDC (0,1,2 only)
D	Power	24L	24 VDC Loop Powered (4-20mA only)
		000	Self powered (DC output only)
E	Case	FF	Fixed core, front terminals (0,1,2 only)
		FT	Fixed core, top terminals (0,1,2 only)
		SP	Split core
		FL	Fixed core (3 & 4 only)

A	Model	ATP	Average sensing, ext. powered
		ATPR	True RMS sensing, ext. powered
B	Input Ranges	0	0-2/5A (ATP only)
		1	0-10/20/50A (ATP only)
		2	0-100/150/200A (ATP only)
		3	0-375/500/750A
		4	0-1000/2000A
C	Output	420	4-20mA
		005	0-5 VDC
		010	0-10 VDC
D	Power	24U	24V AC/DC, isolated output
		120	120VAC
E	Case	FF	Fixed core, front terminals (0,1,2 only)
		FL	Fixed core (3 & 4 only)
		SP	Split core (0,1,2 only)

A	Model	ATR	TRMS sensing, loop powered
B	Input	3	0-375/500/750A
		4	0-1000/1333/2000A
C	Output	420	4-20mA
D	Power	24L	24VDC, loop powered
E	Case	FL	Fixed core