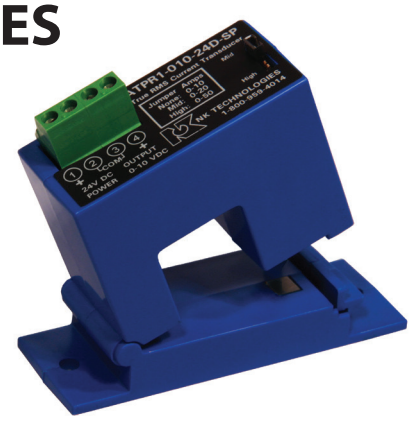
ATPR VOLTAGE OUTPUT SERIES

AC Current Transducers



ATPR AC Current Transducers combine a current transformer with a True RMS signal conditioner in a single package. These current transducers produce a 0–5 or 0–10 VDC True RMS output on distorted waveforms found in the output of variable frequency drives, phase angle fired heating controls and on linear loads in "noisy" power environments. The ATPR Series AC Current Transducers are available in split-core case only.

AC Current Transducer Applications

VFD Controlled Loads

- Monitor the output of variable frequency driven loads, even when the unit is in bypass mode.

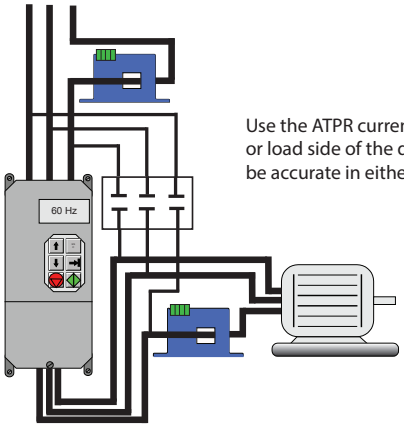
SCR Controlled Loads

- Accurate measurement of phase angle fired heating controls.
- Current measurement produces a quicker response to element failure than temperature controls.

Switching Power Supplies and Electronic Ballasts

- True RMS sensing is the most accurate way to measure power supply and ballast input power.

Monitoring a Variable Frequency Drive



Use the ATPR current transducer on the line or load side of the drive and the signal will be accurate in either position.

For additional Application Examples,

AC Current Transducer Features

True RMS Sensing

- Sensor output is proportional to the current flowing in the circuit, even with high distortion or harmonic loads.
- Compatible with most automation systems.

External Powered

- Provides the highest degree of accuracy and response.

Range-selectable

- One sensor covers a wide variety of loads.
- Field-selectable ranges keep spare part inventory at a minimum and allow for changes in load conditions.

Split-core Case

- Simple installation, release the latch and snap over the conductor.

DC Voltage Output

- Perfect for data acquisition systems, panel meters or controllers with only voltage inputs available.

Built-in Mounting Feet

- Simple, two-screw panel mounting or attach with DIN rail brackets (included).*

Designed for UL/cUL, CE Approval

- Accepted worldwide.

*For information on the DIN rail accessories kit, see page 147.

OEMs **Test & Evaluation Units for OEMs**
Free program expedites evaluation process. See page 3 for details.

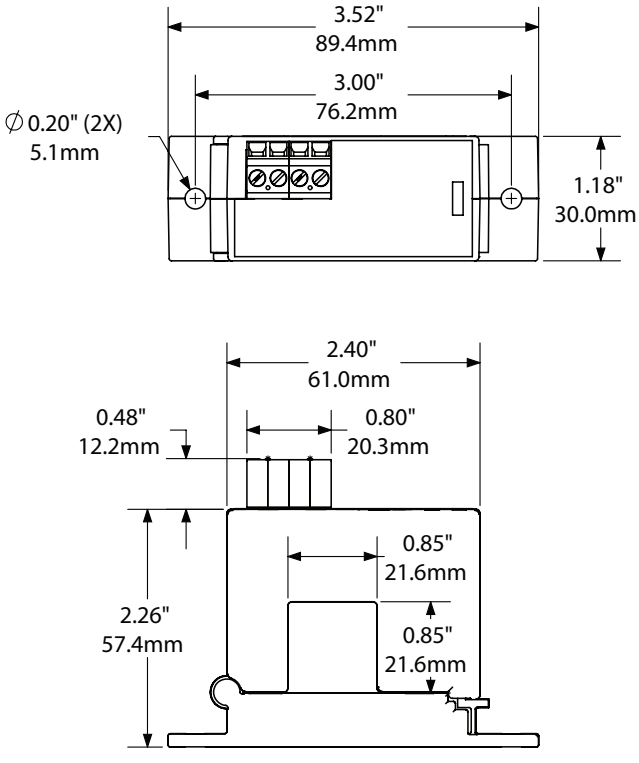
NK Technologies

FIVE YEAR 5 WARRANTY

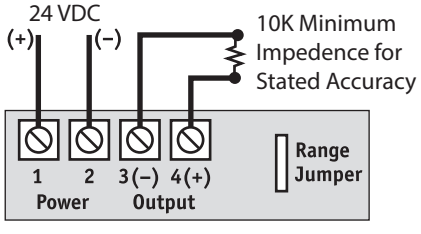
RoHS Compliant

AC Current Transducer Dimensions

SP Case



AC Current Transducer Connections



Observe Polarity. Power and Output are not Isolated.

AC Current Transducer Specifications

Power Supply	24 VDC (20–28 VDC)
Power Consumption	<2 VA
Output Signal	• 0–5 VDC, proportional to True RMS current • 0–10 VDC, proportional to True RMS current
Output Loading	10 KΩ min.
Accuracy	1.0% FS
Response Time	600 ms
Frequency Range	40-100 Hz
Isolation Voltage	Tested to 3 KV
Case	UL94 V-0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	Designed for UL/cUL and CE approval

AC Current Transducer Ordering Information

Sample Model Number: ATPR1-010-24D-SP

True RMS AC current transducer, 10/20/50 A FS input ranges, 0–10 VDC output, 24 VDC power supply, split-core case. (DIN rail adapters are included)

	(1)		(2)				(3)				(4)	
ATPR		–				–	**2**	**4**	**D**	–	**S**	**P**

(1) Full Scale Range

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

(2) Output Type

005	0–5 VDC, True RMS
010	0–10 VDC, True RMS

(3) Power Supply

24D	24 VDC

(4) Case Style

SP	Split-core