

Specifications

Output Signal	4-20mA, 0-5VDC, 0-10VDC
Output Limit	112% of standard output range maximum value
Frequency Range	ATP: 40-100 Hz (sinusoidal) ATPR: 10-400Hz
Response Time	100ms (to 90% step change)
Accuracy	1.0% FS
Loading	4-20mA models: 500 ohm maximum 0-5/10VDC models: 250K ohm for stated accuracy
Power Supply	120VAC; 24VAC/DC Nom., 40 Volts Max. 2 VA Max.
Isolation Voltage Case	Tested to 5kV UL 94V-0 Flammability rated thermoplastic
Environmental	-20 to 50 Deg. C, (-4-122 Deg F) 0-95% RH, non-condensing
Listing	CE, UL 508 Industrial Control Equipment (Pending, USA & Canada)

Power Supply

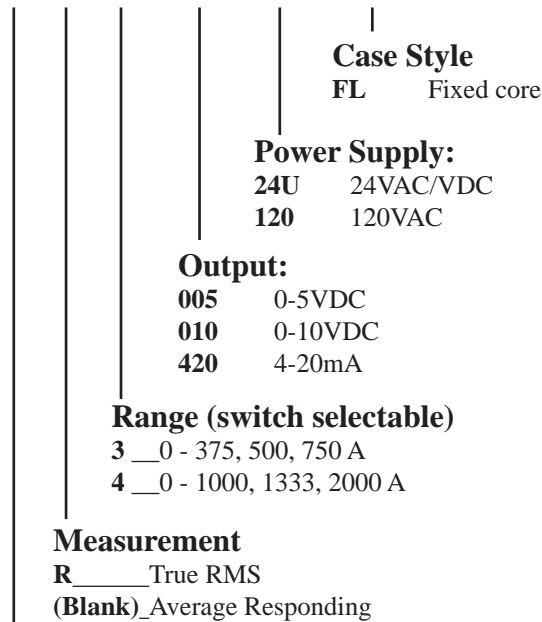
This product is available to be used with either 120 VAC or 24 VDC or AC. Two wires supply the power to run the transducer, and two wires are used to provide the output signal to the load (display, controller, PLC, etc.). The maximum power consumption is 2 VA.

Input Maximums

MODEL	-----MAXIMUM AMPS-----		
	1 SEC	6 SEC.	CONTINUOUS
ATP3	3,750A	1,500A	750A
ATPR3	3,750A	1,500A	750A
ATP4	10,000A	4,000A	2,000A
ATPR4	10,000A	4,000A	2,000A

Model Number Key

ATP R 3 - 420 - 120 - FL



Sensor Type:

ATP - Powered AC current transducer

Know Your Power



Other NK Technologies Products Include:

AC & DC Current Transducers
AC & DC Current Operated Switches
1 ϕ & 3 ϕ Power Transducers
Current & Potential Transformers (CTs&PTs)



NK Technologies

3511 Charter Park Drive
San Jose, CA 95136

Phone: 800-959-4014 or 408-871-7510

Fax: 408-871-7515

sales@nktechnologies.com, www.nktechnologies.com



INSTRUCTIONS



ATP & ATPR 3 & 4 SERIES

Powered AC Current Transducers

0-5/10VDC, 4-20mA Output

True RMS or Average Responding

Quick "How To" Guide

1. Run the wire you are monitoring through aperture.
2. Mount the sensor to a surface if needed.
3. Connect output wiring.
 - A. Use up to 14 AWG copper wires.
 - B. Make sure output load does not exceed product specifications.
 - C. Connect proper power supply and load in series.
4. Select Range
 - A. Chose correct range by positioning the Range switch.

Description

ATP and ATPR Series transducers combine a current transformer and a signal conditioner into a single package. This provides higher accuracy, lower wiring costs, easier installation and saves valuable panel space. ATP/R Series products are available in solid core with 0-5VDC, 0-10VDC and 4-20mA outputs.

ATPR Series products feature a True RMS output designed for applications on distorted current waveforms such as VFD outputs.

Installation

Run wire to be monitored through the sensing aperture.

ATP and ATPR Series transducers are designed for use in the same environment as motors, contactors, heaters, pull-boxes, and other electrical enclosures.

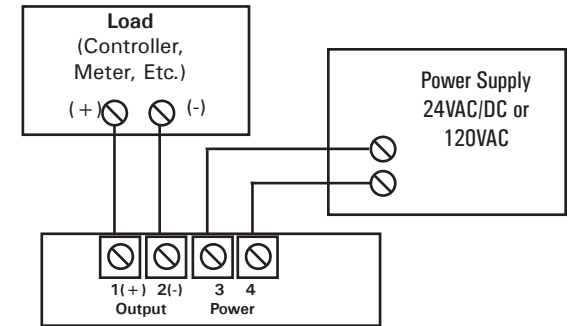
Mount ATP/ATPR transducer using the screw holes in mounting base, taking care maintain at least one-inch clearance in all directions between the sensor and other magnetic devices for proper operation. *Note: The transducer is not directionally sensitive, so the transducer label side can face either the source or the load, and the transducer can be mounted in any position.*

Output Wiring

Connect control or monitoring wires to the sensor. Use up to 14 AWG copper wire and tighten terminals to 3.5 inch-pounds torque. Be sure the output load does not exceed 500 Ohms for product with the 4-20 mA output, and should be at least 25K ohm for voltage output models.

Connection Notes:

- Captive screw terminals.
- 14-22 AWG solid or stranded.
- Observe Polarity of Output Connections
- See label for ranges & jumper positions



Range Select

ATP and ATPR Series transducers feature field selectable ranges. The ranges are factory calibrated, eliminating time consuming and inaccurate field setting of zero or span.

Trouble Shooting

1. Sensor has low or no output

- A. Power supply is not properly sized. *Check power supply voltage and current rating.*
- B. Polarity is not properly matched. *Check and correct wiring polarity.*
- C. Monitored load is not AC or is not on. *Check that the monitored load is AC and that it is actually on.*

2. Output Signal Too Low

- A. Switch-selectable Input Range may be set too high for current being monitored. *Move switch to the correct range.*
- B. Confirm load current is sinusoidal. *If not, an ATPR transducer designed for use with distorted waveforms should be used.*
- C. Output load (monitored current) is below minimum

1. Determine the normal operating amperage of your monitored circuit
2. Select the range that is equal to or slightly higher than the normal operating amperage.
3. Move the three position range selector switch to the appropriate position.

required. *Loop the monitored wire several times through the aperture until the "sensed" current rises above minimum. Sensed Amps = (Actual Amps) x (Number of Loops). Count loops on the inside of the aperture.*

3. Output Signal is always pegged at 20mA

- A. Range may be too low for current being monitored. *Select different ATP/ATPR model with higher range.*