



NK Technologies

AP/APR Series



The **AP/APR Series** is a family of DIN-rail compatible, split-core current transducers which utilize a patented current sensing technology called PRiME. Product features include a large aperture, switch-selectable inputs and outputs and isolation between primary and secondary circuits. PRiME technology eliminates the use of a magnetic core and protects the sensor against saturation and damage which can occur from continuous exposure to high currents. Models available from 10A to 400A and with 0-5V/0-10V or 4-20mA outputs as standard.

Split-Core DIN-mount Transducers

Applications

Motor Control Centers

- Motor status monitoring for pumps and conveyors. Compact package and DIN-rail compatibility ease installation.
- Use with panel meters for inexpensive indication of motor current status.

Automation and Datalogging

- 0-10V/4-20mA outputs are ideal for remote monitoring and alarm functions and are compatible with most automation systems and PLCs.
- Self-powered units help conserve data logger batteries.

VFD, Distorted Waveform Applications

- Gives accurate measurements of phase angle fired or burst fired (time proportioned) SCRs.
- True RMS technology allows for accurate measurement of power supply or ballast input power.

Features

■ **Switch-selectable Inputs and Output Ranges**

Field selectable input accommodates multiple ranges; voltage models offer choice of 0-5VDC or 0-10VDC analog outputs.

■ **Designed for Control Panel Installations**

Transducer enclosure snaps securely onto DIN-rail. Snap-fit split-core aperture opens from the front to provide easy access.

■ **Application Versatility**

Supports input ranges of up to 400A and standard 50/60Hz or distorted (VFD, SCR) loads.

■ **Agency Approved, Patented Technology**

Patented PRiME technology eliminates problems inherent with magnetic technology such as core saturation. CE Approved, UL 508 pending.

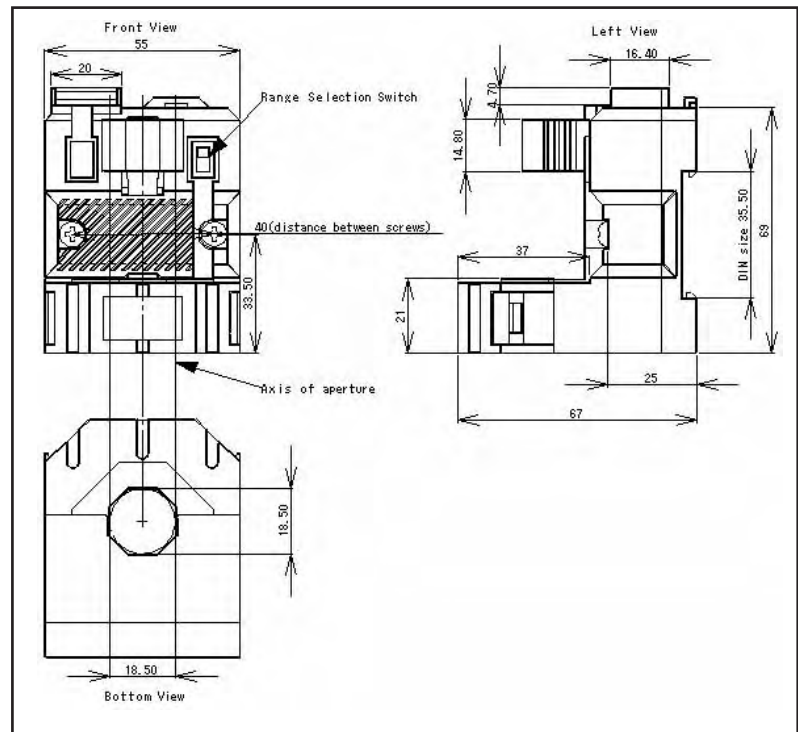
AC Current Transducers

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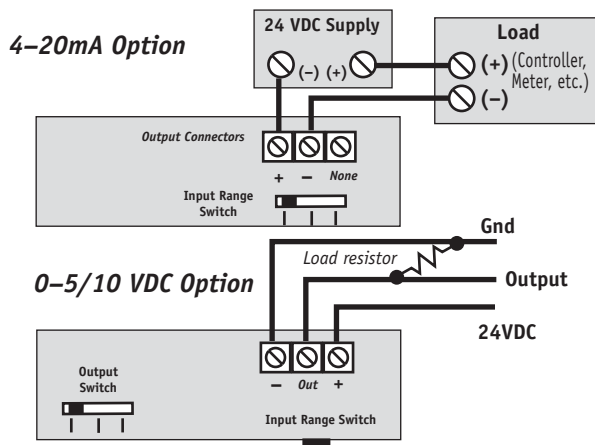
*Know your power...
because with knowledge comes control.*

Specifications

	-510 Models	-420 Models
Output Signal	0-5/0-10VDC	4-20mA
Electrical Offset	<0.5%	4mA
Loading (min.)	10 k Ω	350 k Ω
Response Time	< 500 ms (10-90% step change)	
Frequency Range	10-6000Hz	
Linearity	0.5%	
Accuracy	1.0% FS	
Power Supply	24VDC	
Isolation Voltage	5,000VAC (1 minute max)	
Input Ranges (switch selectable)	0-400A, Refer to Ordering Information	
Sensing Aperture	0.73" (18.5mm) diameter	
Case	UL 94V-0 Flammability Rated, CTI 1	
Environmental	-4 to 140°F (-20 to 60°C), 0-95% RH, non-condensing	
Listings	CE Approved, UL 508 Pending	



Connections



Ordering Information

Example: AP1-420-24L-SP

Average responding AC transducer, 50/75/100A range, 24VDC loop powered, 4-20mA output, split-core case.

Type	Range	Output Signal	Power Supply	Case
R True RMS	0 10, 25, 50A	510 0-5/0-10VDC	24L 24VDC loop pwr	SP Split-core
- Average Responding	1 50, 75, 100A	420 4-20 mA	24S 24VDC separate power supply	
(leave blank)	3 200/300/400A			

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