ACUAMP™ Switches and Transducers

Overview

The ACUAMP series is a family of high performance current sensors offering outstanding features, flexibility and durability at an incredible price. Choose from a wide selection of Current Transducer and Current Switch models, all designed in a rugged industry standard feed-through package, consisting of both fixed core and split core models. Each model has multiple input ranges (set by movable jumpers) for maximum flexibility across many current ratings. The current transducer output choices include 4-20 mA, 24 VDC loop-powered and 0-10 volt self-powered analog outputs. The Current Switch outputs are isolated solid state switches and are available in Normally Open configurations. A unit featuring field adjustable time delay is also offered in the Current Switch series . All models are panel-mountable as standard, and convenient DIN-rail adapter accessories are available. Use the selection guide to find the best sensor module for your requirements.

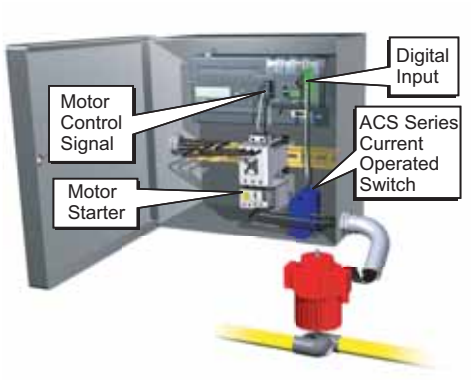
ACUAMP **Specifications by Model Type**					
Specifications	***Transducer***	***Transducer with True RMS***	***Switch***	***Switch***	***Switch***
Model	***ACT***	***ACTR***	***ACS150***	***ACS200***	***ACSX***
Input Range	Jumper selectable: ACT005: 0 to 2 A, 0 to 5 A ACT050: 0 to 10 A 0 to 20 A, 0 to 50 A ACT200: 0 to 100 A, 0 to 150 A, 0 to 200 A	Jumper selectable: ACTR005: 0 to 2 A, 0 to 5 A ACTR050: 0 to 10 A 0 to 20 A, 0 to 50 A ACTR200: 0 to 100 A, 0 to 150 A, 0 to 200 A	-F core: 1 to 150 A -S core: 1.75 to 150 A	Jumper Selectable: -F core: 1 to 6 A, 6 to 40 A, 40 to 175 A -S core: 1.75 to 6 A, 6 to 40 A, 40 to 200 A	Jumper Selectable: -F core: 1 to 12 A, 12 to 55 A, 55 to 175 A -S core: 2 to 12 A, 12 to 55 A, 55 to 200 A
Output Range	-10 models: 0 - 10 VDC -42L models: 4 - 20 mA, loop-powered	4 - 20 mA, loop-powered true RMS	0.15 A @ 240 VAC or VDC	-AA Model: 1A @ 240 VAC -AD Model: 0.15A @ 30 VDC	-AA Model: 1A @ 240 VAC -AE Model: 0.15A @ 240 VAC/VDC
Frequency Range	-10 models: 50 to 60 Hz sinusoidal waveforms only -42L models: 20 - 100 Hz	10 to 400 Hz non-sinusoidal waveforms	6 to 100 Hz	6 to 100 Hz	50 to 100 Hz
Response Time	-10 models: 100 ms -42 models: 300 ms	600 ms	120 ms	40 to 120 ms	Field adjustable time delay: 0.2 to 15 seconds
Sensing Aperture	-F core: 0.75" (19mm) dia. -S core: 0.85" (21.6mm) sq.	-F core: 0.75" (19mm) dia. -S core: 0.85" (21.6mm) sq.	-F core: 0.75" (19mm) dia. -S core: 0.85" (21.6mm) sq.	-F core: 0.75" (19mm) dia. -S core: 0.85" (21.6mm) sq..	-F core: 0.75" (19mm) dia. -S core: 0.85" (21.6mm) sq.

ACUAMP™ Switches and Transducers Application Guide

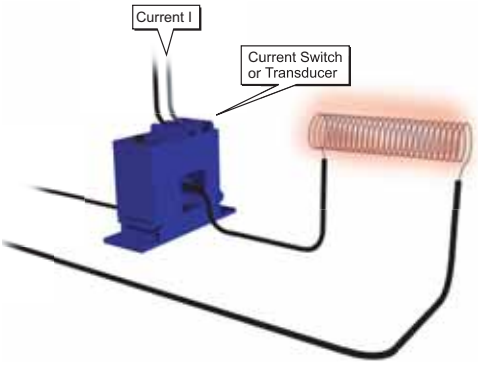
Application Guide

ACUAMP Current Sensors are a great fit for many applications, including material handling, fan and pump applications, and heating systems. With two basic models, Current Transducers and Current Switches, this sensor family is a great fit for almost any current sensor need, ranging from monitoring loads to preventive maintenance. Models with the ability to read True RMS non-sinusoidal waveforms make it easy to monitor applications containing variable frequency drives. Use the application examples to help choose the best sensor model for your application.

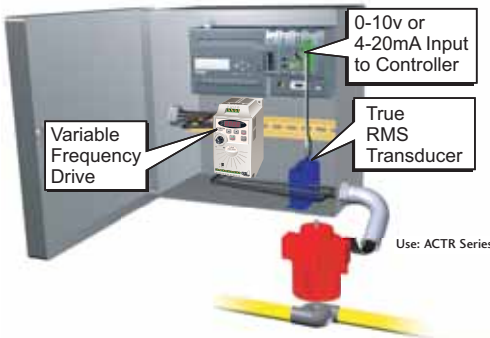
Pump Jam & Suction Loss Protection



Heater Life Prediction



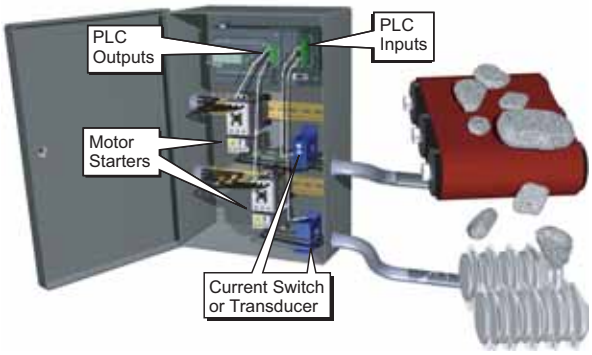
Pump Load Monitoring



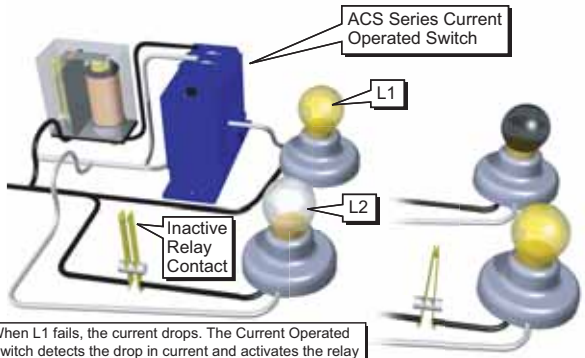
Use: ACTR Series - True RMS Current

Crusher/Grinder/Shredder Motor Interlocks

The performance of size reduction equipment like crushers or grinders can be optimized by controlling the in-feed in order to
- Help prevent jamming
- improve the uniformity of the resultant product
- Enhance overall production efficiency



Lamp Failure Detection



When L1 fails, the current drops. The Current Operated Switch detects the drop in current and activates the relay which turns on the back-up lamp L2. The system may be configured fail-safe by using a Normally Open Current switch together with Normally Closed relay contacts