

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.

ACU AMP™ ACS200 Series Switches



ACS200 series current operated switches provide the same dependable status indication as the ACS150 series, but with added resolution. A choice of three jumper-selectable input ranges allows the ACS200 to be tailored to an application and provides more precision in setpoint adjustment. Self-powered, isolated solid-state relay outputs and multiple input ranges are standard features.

Applications

Electronic Proof of Flow

- Current operated switch eliminates the need for multiple pipe or duct penetrations, lowering installed costs
- Solid-state technology more reliable than electromechanical pressure or flow switches

Conveyors

- Detect jams and overloads; useful when interlocking multiple conveyor sections

Lighting, Heating Circuits

- Detect ON/OFF status, easier to install and less expensive than photocell or temperature sensor alternatives

Features

- Five-year warranty
- N.O. Universal Outputs
1A @ 240 VAC or 0.15 A @ 30 VDC
- Status LED provides visual indication of setpoint trip and contact action
- Self-powered operation cuts installation time and operating costs
- Field-adjustable trip points speed start-up and allow for tailored operation
- Choose fixed-core or split-core enclosure style. Split-core allows easy installation on existing systems; fixed-core offers more compact package for OEM or new installations
- Integral mounting feet provide secure mounting

Agency Approvals

UL, cUL, CE approvals accepted worldwide

ACS200 Current Operated Switches				
Part Number	Description	Pcs/Pkg	Wt/lb	Price
ACS200-AA-F	N.O. AC adjustable current switch, fixed core	1	0.40	<--->
ACS200-AA-S	N.O. AC adjustable current switch, split core	1	0.40	<--->
ACS200-AD-F	N.O. DC adjustable current switch, fixed core	1	0.40	<--->
ACS200-AD-S	N.O. DC adjustable current switch, split core	1	0.40	<--->
Accessories				
DRA-2	DIN rail adapters, 1.69"x0.39"x0.75" (43x10x19 mm)	2	0.40	<--->

ACS200 Series Specifications	
Power Supply	None - Self-powered
Output	Isolated solid-state switch
Output Rating	N.O. AC: 1A @ 240 VAC N.O. DC: 0.15A @ 30 VDC
Response Time	40 - 120 ms
Off State Leakage	< 10 μ A
Input Ranges	Jumper selectable: Fixed-core: 1 to 175 A. Split-core: 1.75 to 200 A
Hysteresis	low: 0.15A; mid: 0.3; high: 0.9A
Overload (1 second duration)	low: 600 A; mid: 800 A; high: 1,200 A
Isolation Voltage	UL listed to 1,270VAC. Tested to 5,000 VAC (1 minute max)
Frequency Range	6 to 100 Hz
Case	UL 94V-0 flammability rated
Environmental	Temperature
	Humidity
Agency Listings	UL listed 508, UL file E222847, CE approved

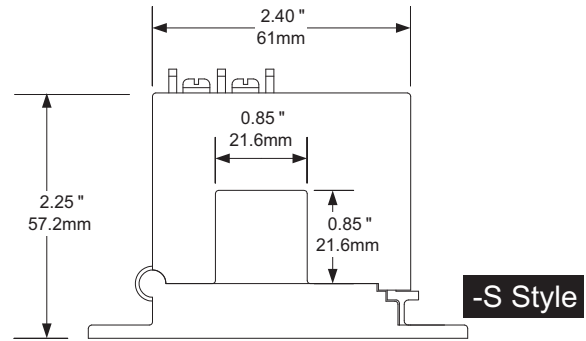
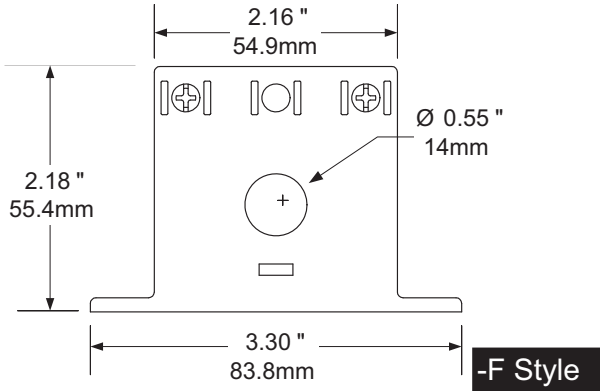
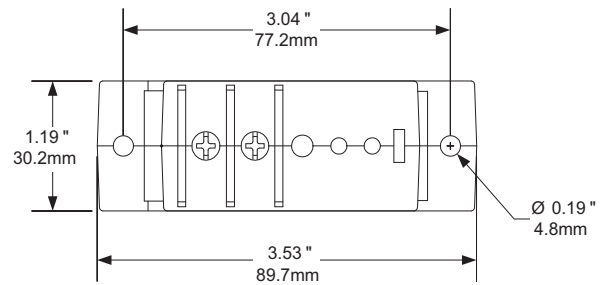
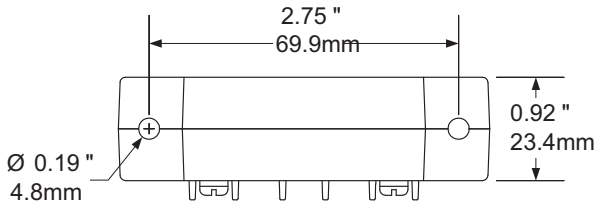
Maximum Input Ranges				
Range Jumper	Range - Fixed Core	Range Split Core	Maximum Input Amps	
			6 Sec max	1 Sec max
NONE	1 to 6 A	1.75 to 6 A	400	600
MID	6 to 40 A	6 to 40 A	500	800
HIGH	40 to 175 A	40 to 200 A	800	1200

Switching Delay			
Delay	LOW Range	MID Range	HIGH Range
ON Delay	0.23 sec max	0.05 sec max	0.03 sec max
OFF Delay	0.02 sec max	0.02 sec max	0.01 sec max
Hysteresis			
	6%	4%	3%

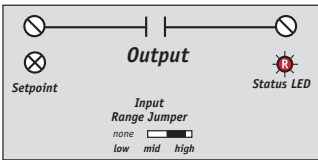
ACS200 Minimum Load/MTBF		
Part Number	Minimum Load Operating	MTBF (Mean Time Between Failure) x 10 ⁶
ACS200-AA-F	20 mA	4.29 hours
ACS200-AA-S	20 mA	4.29 hours
ACS200-AD-F	1 mA	4.39 hours
ACS200-AD-S	1 mA	4.39 hours

ACUAMP™ ACS200 Series Switches

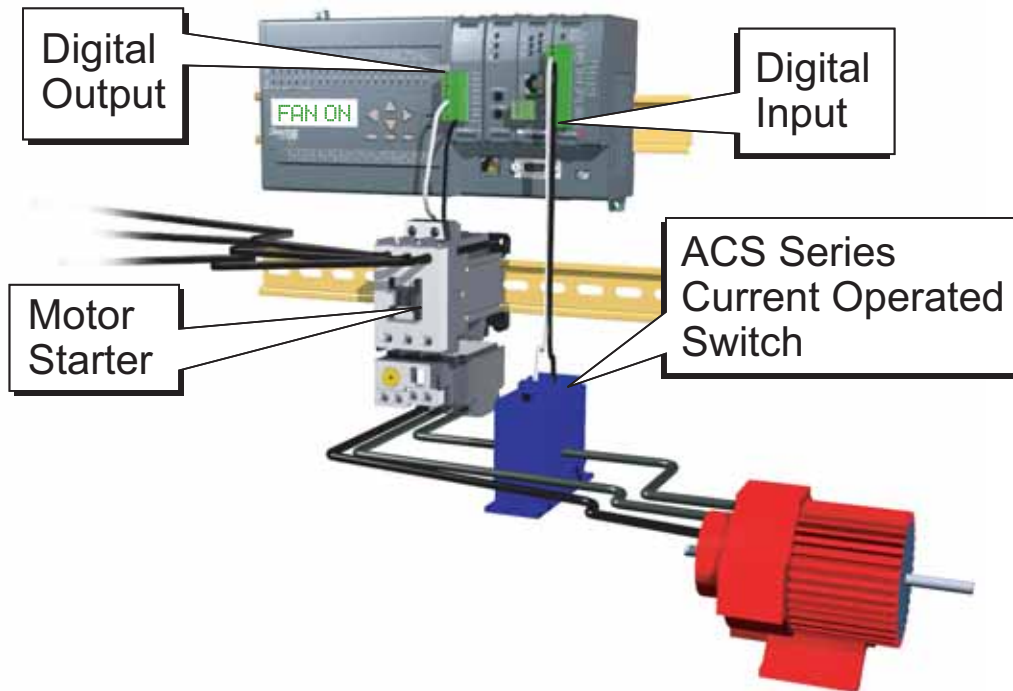
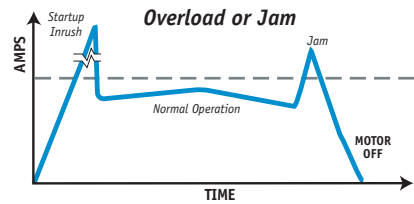
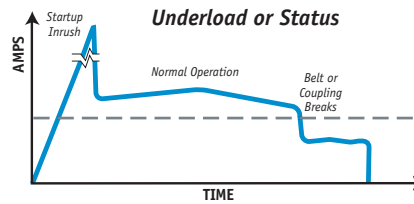
Dimensions (in/mm)



Connections



Terminals are #6 screws
 Use up to 14 AWG copper wire



- PLC Overview
- DL05/06 PLC
- DL105 PLC
- DL205 PLC
- DL305 PLC
- DL405 PLC
- Field I/O
- Software
- C-more HMIs
- Other HMI
- AC Drives
- Motors
- Steppers/Servos
- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
- Encoders
- Current Sensors**
- Pushbuttons/Lights
- Process
- Relays/Timers
- Comm.
- TB's & Wiring
- Power
- Circuit Protection
- Enclosures
- Appendix
- Part Index