



NK Technologies

AS3 Series



Current Operated Switches

'AS3' Current Switches from NK Technologies combine a current transformer, signal conditioner and a limit alarm into a single package.

The AS3 Series has three jumper selected current input ranges, solid-state AC output and a wide frequency range. Available in a split core or front terminal solid core case.

Applications

Electronic Proof of Flow

- No need for pipe or duct penetrations.
- More reliable than electro-mechanical pressure or flow switches.

Conveyors

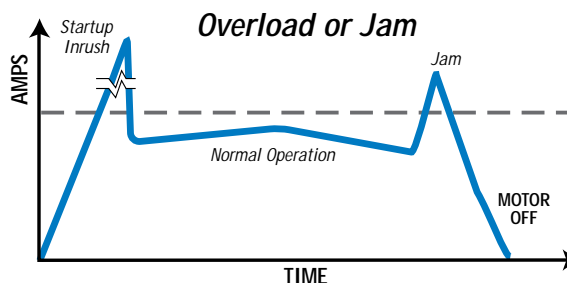
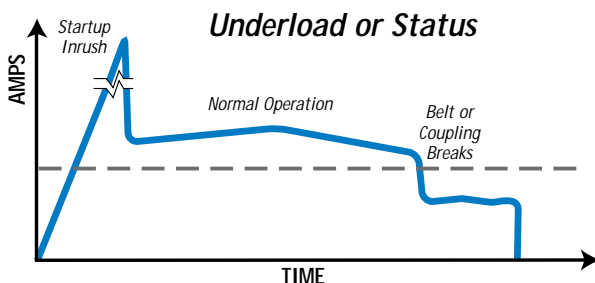
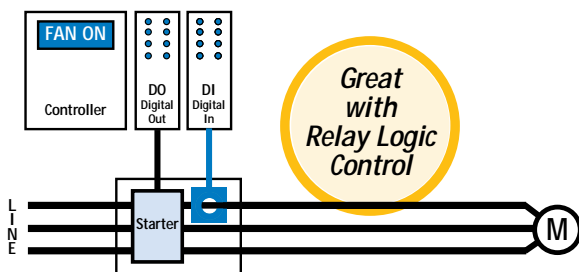
- Detects jams and overloads.
- Interlocks multiple conveyor sections.

Lighting Circuits

Easier to install and more accurate than photocells.

Electric Heaters

Faster response than temperature sensors.



Features

- **Choice of Outputs**
 - Solid state switch N.C. or N.O.
 - 1A @ 240VAC.
 - 15A @ 120VAC.
- **Self-powered**
 - Cuts installation and operating costs.
- **Adjustable Setpoint**
 - Speeds startup.
- **Solid or Split Core Case**
 - Choose the right version for each installation.
- **Built-in Mounting Bracket**
 - Provides the solid installation inspectors want.
- **UL, CUL and CE Approval**
 - Accepted worldwide.

Current Operated Switches

AS3 Series



Know your power...

because with knowledge comes control.

Specifications

Power Supply	None — Self-powered			
Output	Isolated Solid State Switch			
Output Rating	1.0A @ 240VAC (Standard Units), 15A @ 120VAC, 10A @ 240VAC (–15 Option)			
Off State Leakage	<ul style="list-style-type: none">■ NOAC: NONE,■ NCAC: 2.5mA			
Response Time	0.04 to 0.120 Second			
Setpoint Range	<ul style="list-style-type: none">■ Fixed Core: 1–6, 6–40 & 40–175A■ Split Core: 1.5–6, 6–40 & 40–200A			
Hysteresis	5% of Setpoint			
Overload	MODEL	CONTINUOUS	6 SEC	1 SEC
	■ 1–6A	150A	400A	600A
	■ 6–40A	150A	500A	800A
	■ 40–175A	210A	800A	1,200A
Isolation Voltage	UL listed to 1,270VAC, tested to 5,000VAC			
Frequency Range	6–100Hz, works on VFDs			
Sensing Aperture	<ul style="list-style-type: none">■ –FF Case: 0.55" (14mm) dia.■ –SP Case: 0.85" (21.5mm) sq.			
Case	UL 94V-0 Flammability Rated			
Environmental	–58 to 149°F (–50 to 65°C), 0–95% RH, non-condensing			
Listings	UL 508 Industrial Control Equipment (USA & Canada), CE			

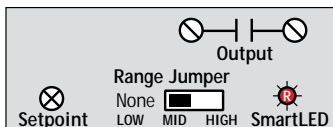
0.125
3.2mm



MULTI-POLE VERSION (SEE PAGE 16 FOR DESCRIPTION):

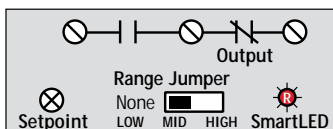
Switch Rating	0.15A @ 30VDC
Off State Leakage	<ul style="list-style-type: none"> AADC: NONE CCDC: 0.3mA (NC terminal only)

Connections

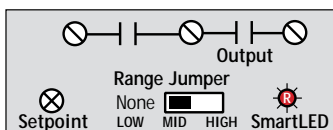


Typical of NOAC
and NOAC-15

NCAC and NCAC-15
Similar



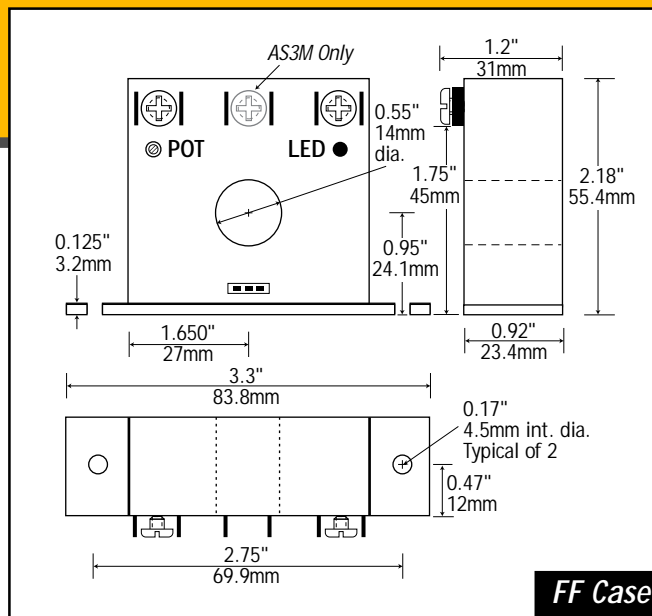
Typical of
AS3-CCDC
(See page 16)



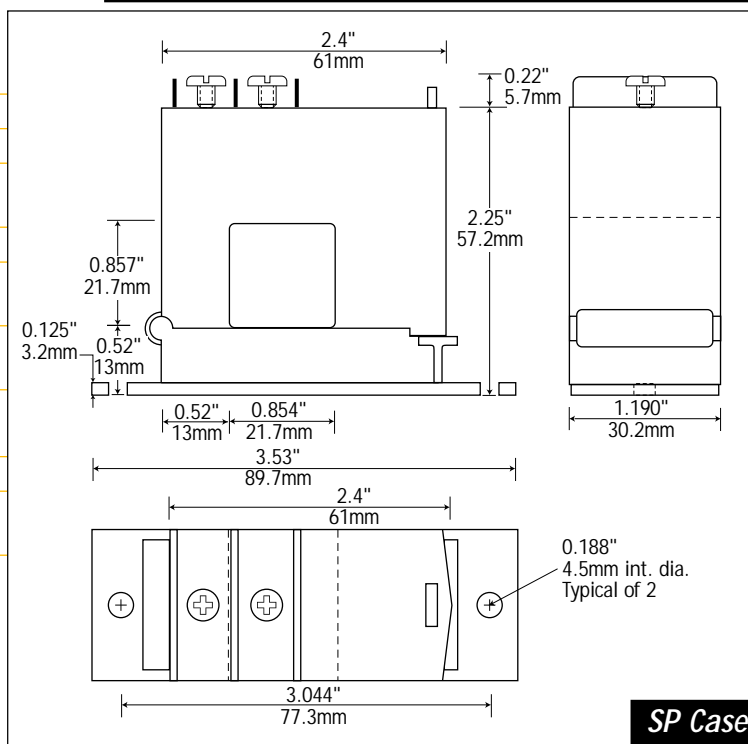
Typical of
AS3-AADC
(See page 16)

Notes:

- Terminals are #6 screws.
- DC contacts are polarity sensitive.



FF Case



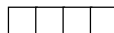
SP Case

Ordering Information

Example: AS3-NOAC-SP-NL

Adjustable AC current switch, split core without indicating LED.

AS3



Output Rating

NCAC Normally Closed, 1A @ 240VAC
NOAC Normally Open, 1A @ 240VAC



Case Style

FF Fixed Core,
Front Term.
SP Split Core



Options

NL No LED
15 15A @ 120VAC
output

Current Operated Switches

AS3 Series

AS3 Series *continued*



'AS3' Current Switches are a multi-pole version of the popular AS3 Series. The AS3 Series combines a current transformer, signal conditioner and two limit alarms into a single package. The AS3 Series has three jumper-selected current input ranges, solid-state DC output and a wide frequency range. Available in a front terminal solid core case.

Multi-pole Current Operated Switches

Applications

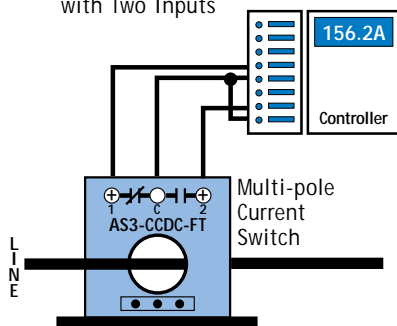
Pump Control

Individually adjustable indication of overload (jam) and underload (suction loss).

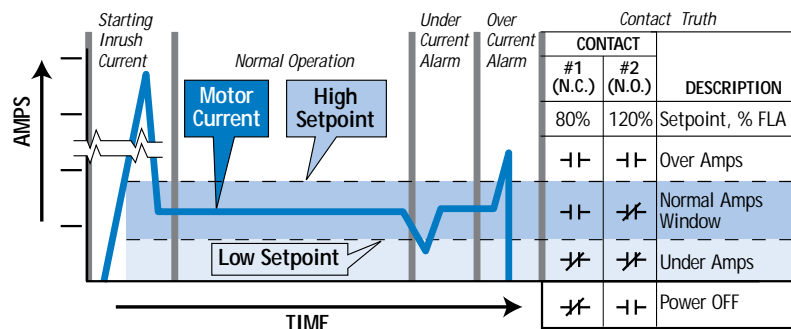
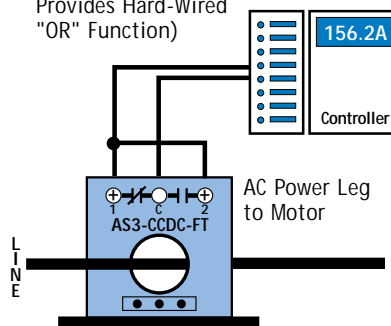
Dual Alarm

Easy setup for dual level alarms.

Over/Under Current Alarm
with Two Inputs



Over/Under Current Alarm
with One Input (Jumper
Provides Hard-Wired
"OR" Function)



Features

- **Multi-pole Output**
Monitor two setpoints with one sensor.
- **Self-powered**
Cuts installation and operating costs.
- **Easily Adjustable Setpoint**
Speeds startup.
- **Solid or Split Core Case**
Choose the right version for each installation.
- **Built-in Mounting Bracket**
Provides the solid installation inspectors want.
- **UL, CUL and CE Approval**
Accepted worldwide.

Specifications

See page 15, "AS3 Series" specifications and dimensional drawings.

Ordering Information

Example: AS3-CCDC-FF

Adjustable multipole current switch, "Super" Form C output, fixed core with front terminals.

AS3

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F	F
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Output Rating

AADC Dual Normally Open,
Individually Adjustable,
0.15A @ 30VDC
CCDC "Super" Form C SPDT,
Individually Adjustable,
0.15A @ 30VDC

Case Style

FF Fixed Core,
Front Term.

Current Operated Switches

AS3 Series