

## *418 Series - 75 Amp "Hybrid" Power Relay*

**Makes Your Traffic Cabinet Mercury Free!**

The 418 Series Relay is designed as a direct "drop-in" replacement for existing mercury displacement relays. The 418 Series is a single pole hybrid relay which features an LED indicator to verify circuit power which simplifies trouble-shooting by field maintenance personnel.



*Mercury Displacement  
Relay*



*Hybrid Relay Replacement  
418 Series*

- Hybrid Technology – Electromechanical and Solid-State relays in parallel
  - Solid-State relay alone - would require large heatsink
  - Electromechanical relay alone - large contacts to switch 75 Amps
- 120VAC 75 Amp switching (at 74° C)
- Drop-in replacement for MDR – no rewire or drilling
- LED indication – shows power applied to input
- Less weight than MDR, or SSR with large heatsink
- Not position sensitive - flexible placement in panel

## **Struthers-Dunn**

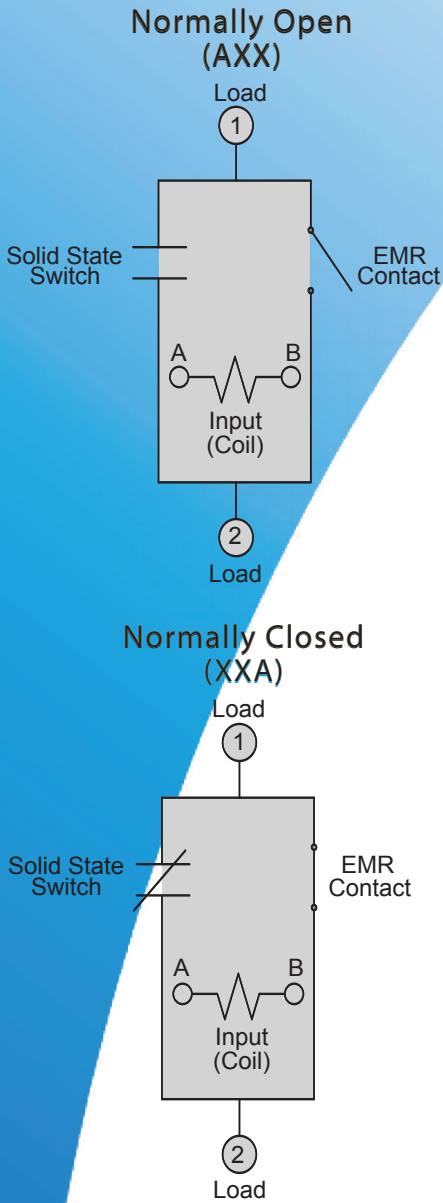
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# General Specifications

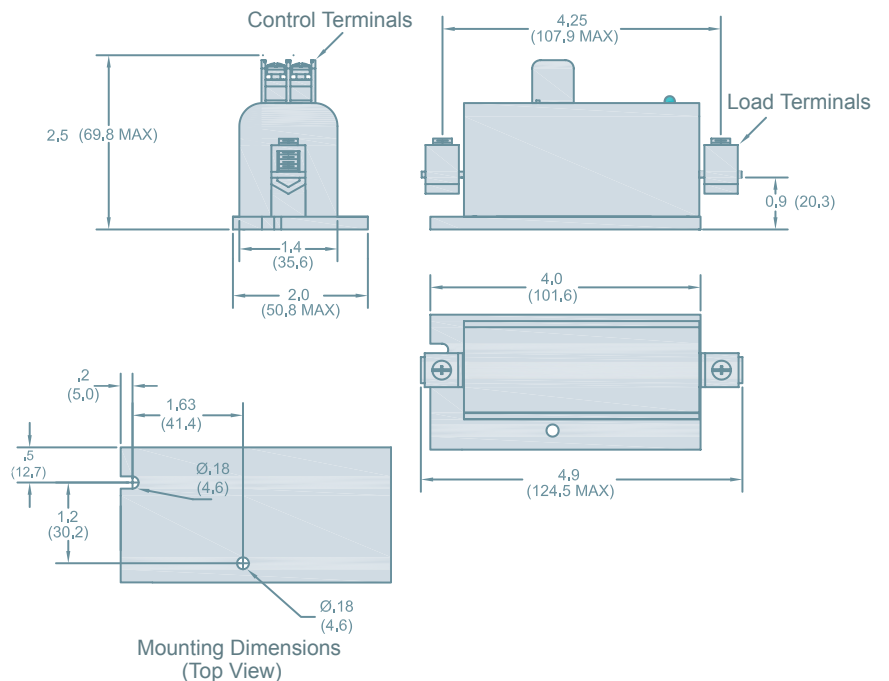
## Wire Diagram



Contacts	418AXXL-120VAC	418XXAL-120VAC
Contact Configuration	SPST - NO	SPST - NC
Component Type	Hybrid Relay	
Mounting Type	Panel Mount	
Input Voltage	120VAC	
Output Voltage Range	24 to 240VAC	
<b>Output Characteristics</b>		
Switching Device	Triac + EMR	SCR + EMR
Current Rating	75 A @ 120VAC 60 A @ 240VAC	
Max. Off State Leakage Current [rms]	10mA	
<b>Input Characteristics</b>		
Voltage Range	89 to 135VAC 50/60 Hz	
Must Release Voltage	12VAC	
<b>Performance Characteristics</b>		
Electrical Life, Operations at Rated Current	4,000,000	
Operate Time (Response Time) - On	.010 s	
Release Time (Response Time) - Off	.100 s	
<b>Environment</b>		
Ambient Temperature - Storage	-40 to +100 °C	
Ambient Temperature - Operation	-40 to +75 °C	
<b>Miscellaneous Characteristics</b>		
Input Indicator	Green LED	
Input Terminal Wire Size	14 AWG Max	
Output Terminal Wire Size	4-12 AWG	
Weight	284g (10 oz)	312g (11 oz)

## Outline Dimensions

Dimensions shown in inches & (millimeters)



## Ordering Code

Ordering Code	418	AXX	L	-120VAC
Series	418			
Contact Arrangement		AXX (Single Pole, N.O.)	XXA (Single Pole, N.C.)	
LED				
Input Voltage				