UNIVERSAL ELECTRONIC SUPPLY CO.

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

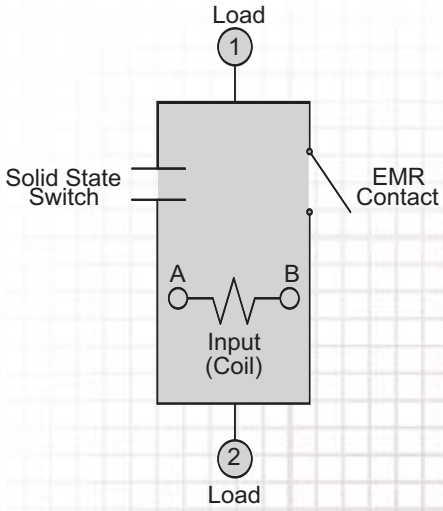
- Hybrid Technology – Electromechanical and Solid-State relays in parallel
  - Solid-State relay alone - would require large heatsink
  - Electromechanical relay alone - large contacts to switch 75 Amps
- 120VAC 75 Amp switching (at 74° C)
- Drop-in replacement for MDR – no rewire or drilling
- LED indication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

General Specifications

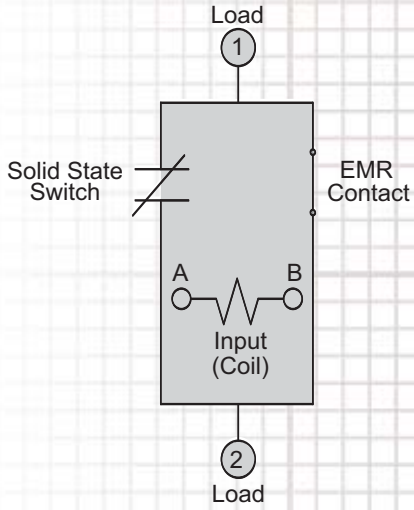
Contacts	418AXXL-120VAC	418XXAL-120VAC
Contact Configuration	SPST - NO	SPST - NC
Component Type	Hybrid Relay	Hybrid Relay
Mounting Type	Panel Mount	Panel Mount
Input Voltage	120VAC	120VAC
Output Voltage Range	24 to 240VAC	24 to 240VAC
Output Characteristics		
Switching Device	Triac + EMR	SCR + EMR
Current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

Wire Diagram

Normally Open (AXX)



Normally Closed (XXA)



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

Outline Dimensions

Dimensions shown in inches & (millimeters)