

Protection Relays

Alternating Relays

50R-400-ALT

480 V ac application, panel mount



OBSOLETE



Description

The 50R-400-ALT alternating relays are used to alternate between two loads, most commonly in duplex pumping and compressor applications to balance the runtime of both loads.

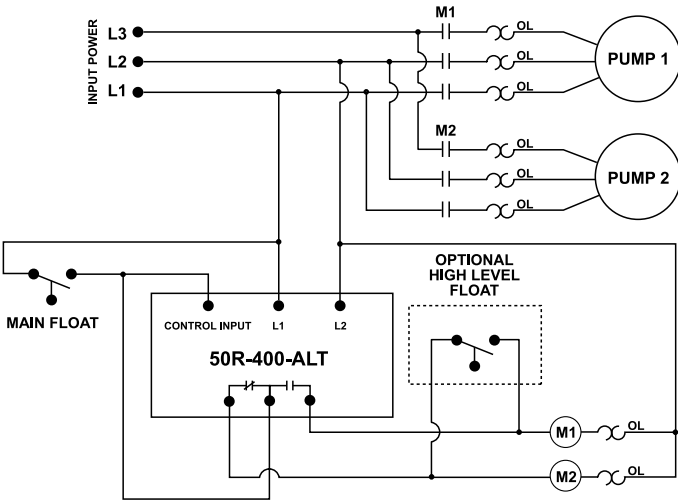
When used in single float applications, the alternating relay changes state after the float switch opens*, forcing the other pump to run the next time the float closes. When used in dual float applications, the alternating relay will allow both pumps to run simultaneously when the lead and lag floats are both closed.

An adjustment knob provides the option to force one pump to run every time the float switch is closed. This is helpful when one pump has been removed for repair or for test purposes.

A built-in debounce feature prevents the alternating relay from changing state if the float contact bounces momentarily.

*The alternating relay will not switch states while current is flowing. Switching will only occur after current has been sensed, followed by loss of current for the duration of the debounce time delay.

Wiring Diagram



Features & Benefits

FEATURES	BENEFITS
Debounce time delay	Prevents rapid cycling caused by waves or splashing in the tank
LED indicators	Visual indication of load operation in duplex application
Built-in manual switch to force load operation	Helpful to control load operation when performing periodic maintenance or pump repair
Operates from 380–480 V ac	No transformer required to provide 120–240 V for control circuit

Specifications

Input Characteristics	
Supply Voltage	380–480 V ac
Supply Current	40 mA
Functional Characteristics	
Control Input Impedance (min)	1 MΩ
Output Characteristics	
Output Contact Rating	
Pilot Duty	470 VA @ 600 V ac
General Purpose	10 A
Debounce Time Delay	1 second
General Characteristics	
Maximum Input Power	5 W
Terminal	
Torque	7 in.-lbs.
Wire Size	12 – 18 AWG
Safety Marks	
UL	UL 508 (File #E68520)
CE	IEC 60947
Dimensions	H 74.4 mm (2.93"); W 133.9 mm (5.27"); D 74.9 mm (2.95")
Weight	0.98 lb. (15.68 oz., 444.52 g)
Mounting Method	#8 screws