

# WRA SERIES

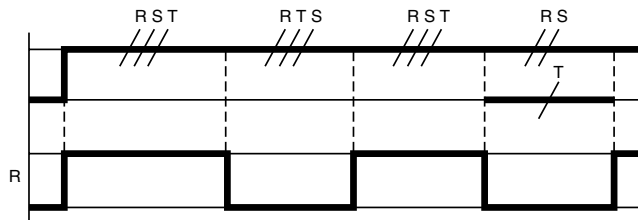
## PHASE CONTROL RELAY

UL listed CSA recognized (220 VAC Version Only)

- **Monitors**
  - Phase Sequence**
  - Loss of Any Phase even if Induced Voltage reaches 95% of Nominal Voltage**
- **LED Relay Status Indicator**
- **SPDT 10 Amp Relay Output**



### MODE OF OPERATION:



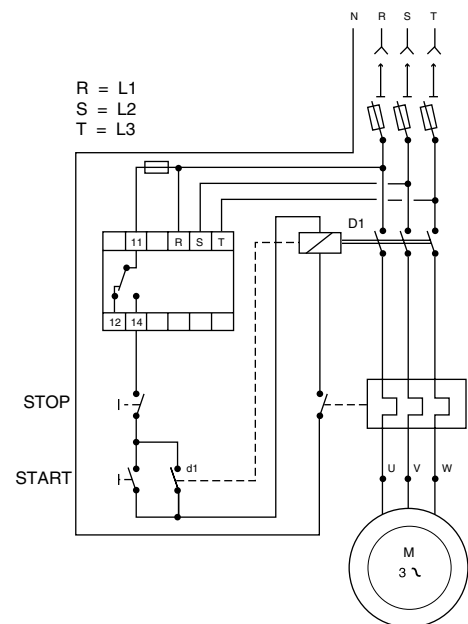
The WRL Phase Control Relay monitors the sequence loss or reversal of three phase power supplies. The output relay is energized when the phase sequence is correct and is de-energized when the phase sequence is wrong or one phase is lost. It monitors the symmetry of 3 voltages and a loss of phase even when the voltage is reinjected through a machine. The rate of asymmetry is controlled between 5% and 15% by a top mounted potentiometer.

### SPECIFICATIONS:

<b>Input Power Directly</b>	3 x 220 60 Hz	
<b>from controlled voltage <math>\pm 15\%</math></b>	3 x 380 60 Hz	
	3 x 440 60 Hz	
<b>Power consumption</b>	3 VA at 220 V	
<b>Output</b>	SPDT relay	
<b>Contact material</b>	AgCdO	
<b>Maximum Loading</b>	10 AC resistive	8A DC inductive
<b>Maximum switching voltage</b>	250 VAC	250 VDC
<b>Relay max. power rating</b>	220 VA	80 W
<b>Mechanical life of relay</b>	30 x 10 <sup>6</sup> operations	
<b>Electrical life of relay</b>	2 x 10 <sup>5</sup> operations at 2200VA resistive load	
<b>Operating temperature</b>	+14°F to +140°F	-10°C to +60°C
<b>Weight</b>	7 oz. (200g)	

**Note:** The alarm threshold adjustment is 5% to 15% of asymmetry between the phases. The initial response time is .1 seconds at 5% asymmetry and 1 second at 15% after input power is applied. When a phase loss or failure occurs, the "off delay" response time is 100 ms.

### WIRING DIAGRAM:



	11	12	14	R	S	T
DWRA						
LWRA	1	4	3	5	6	7
PWRA	1	2	8	3	4	5

### ORDERING INFORMATION:

**L**  
MOUNTING

**MOUNTING**  
D = DIN-rail mounting  
L = 11 pin plug-in  
P = 8 pin plug-in

**WRA**  
SERIES

**SERIES**  
WRA

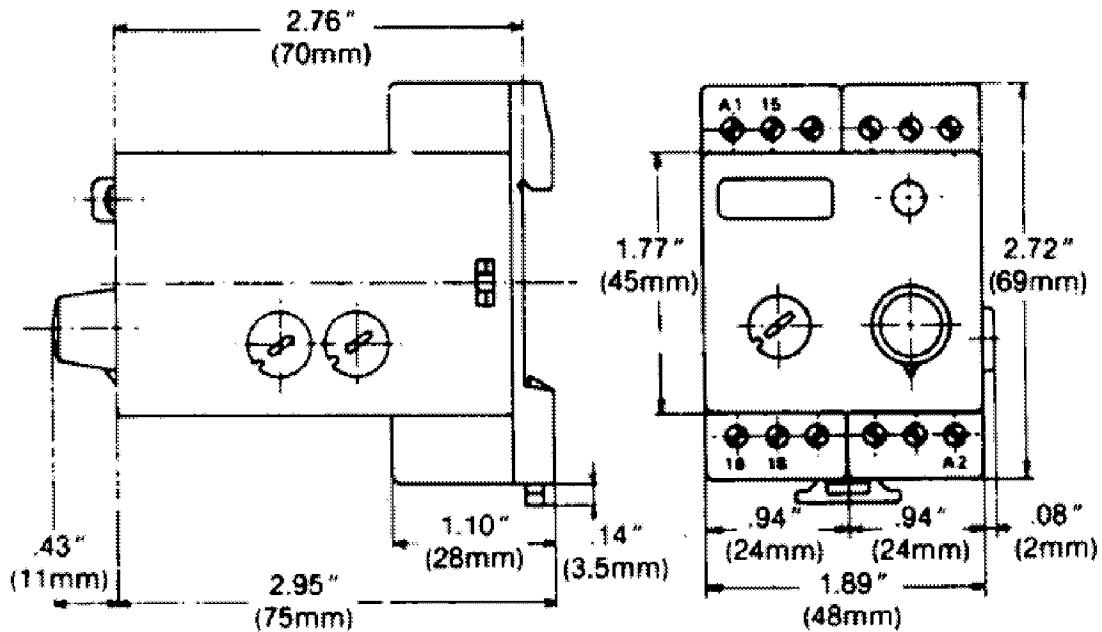
**380 A**  
INPUT POWER

**INPUT POWER**  
220A = 3 x 220 VAC  
380A = 3 x 380 VAC  
440A = 3 x 415/440 VAC

Products and specifications subject to change without notice.  
Consult factory for application assistance.

## DIMENSIONS:

## D - DIN-Rail



## L &amp; P - Sockets

