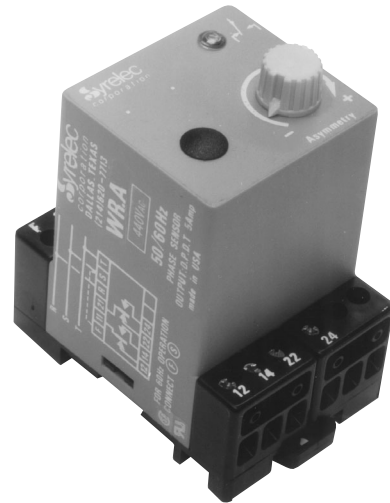


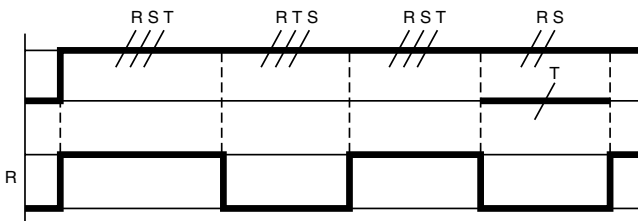
# WRA SERIES PHASE CONTROL RELAY

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:**



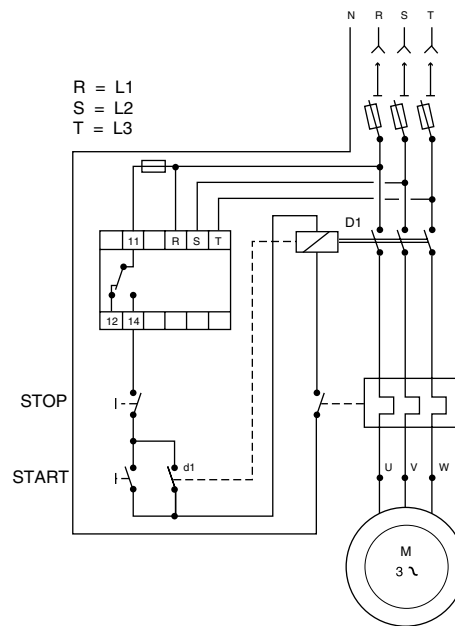
The WRL Phase Control Relay monitors the sequence loss or reversal of three phase power supplies. The output relay is energized when the phase sequence is correct and is de-energize when the phase sequence is wrong or one phase is lost. It monitors the symmetry of 3 voltages and a loss of phase even 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 ±15%</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>6</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:**



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

**ORDERING INFORMATION:**



Products and specifications subject to change without notice.

Order/Technical Support – Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com