

WRA 2 SERIES

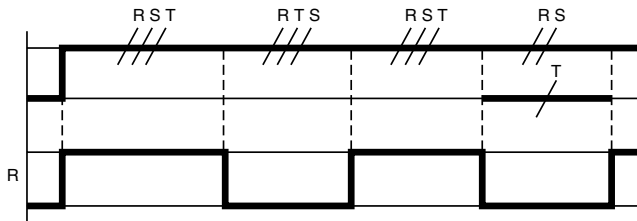
PHASE CONTROL RELAY

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**
- **DPDT 5 Amp Relay Output**

MODE OF OPERATION:



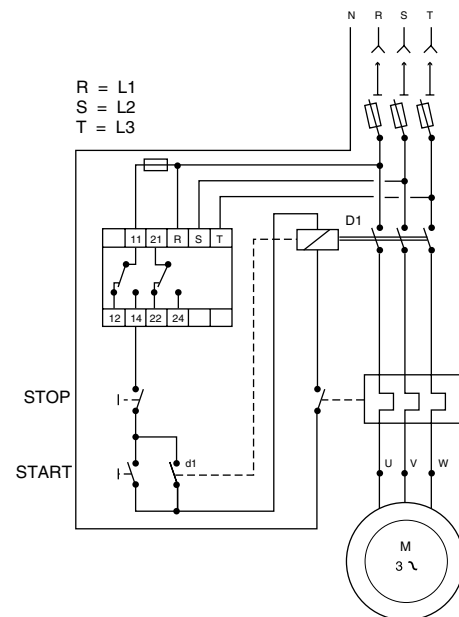
The WRA 2 Phase Control Relay monitors the sequence loss or reversal of three phase power supplies. The output relay is energized when the phase sequence is correct and is de-energize when the phase sequence is wrong or one phase is lost. It monitors the symmetry of 3 voltages and a loss of phase even when the voltage is reinjected through a machine. The rate of asymmetry is controlled between 5% and 15% by a top mounted potentiometer.

SPECIFICATIONS:

Power consumption	3 VA at 220 V	
Output	DPDT relay	
Contact material	AgCdO	
Maximum Loading	5 A AC resistive	1 A DC inductive
Maximum switching voltage	250 VAC	250 VDC
Relay max. power rating	1250 VA	30 W
Mechanical life of relay	30 x 10 ⁶ operations	
Electrical life of relay	2 x 10 ⁶ operations at 2200 VA resistive load	
Operating temperature	+14°F to +140°F	-10°C to +60°C
Weight	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 2	11	12	14	R	S	T	21	22	24
LWRA 2	1	4	3	5	6	7	11	8	9

ORDERING INFORMATION:

L
MOUNTING

MOUNTING

D = DIN-rail mounting or panel mounting
L = 11 pin plug-in

WRA 2
SERIES

SERIES
WRA 2

380 A
INPUT POWER

INPUT POWER

220A = 3 x 220 VAC
380A = 3 x 380 VAC
440A = 3 x 415/440 VAC

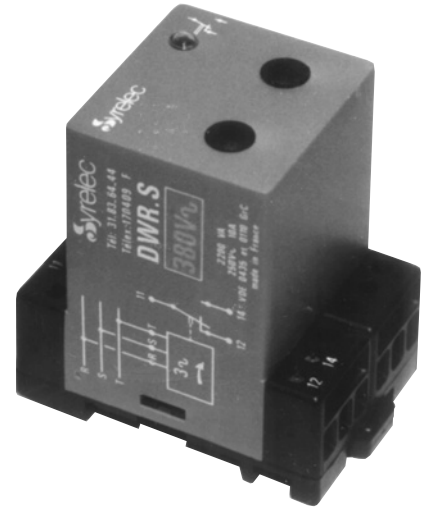
Products and specifications subject to change without notice.
Consult factory for application assistance.

WRS SERIES

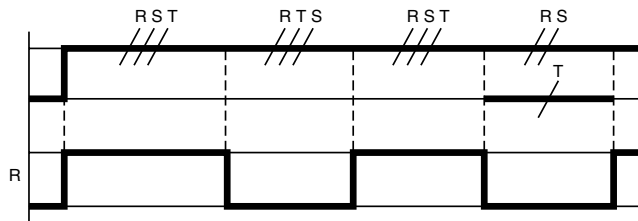
PHASE CONTROL RELAY

UL listed CSA recognized

- **Monitors**
 - Phase Sequence**
 - Loss of Any Phase**
- **LED Indicator**
- **10 Amp SPDT Output**
- **Low Cost**



MODE OF OPERATION:

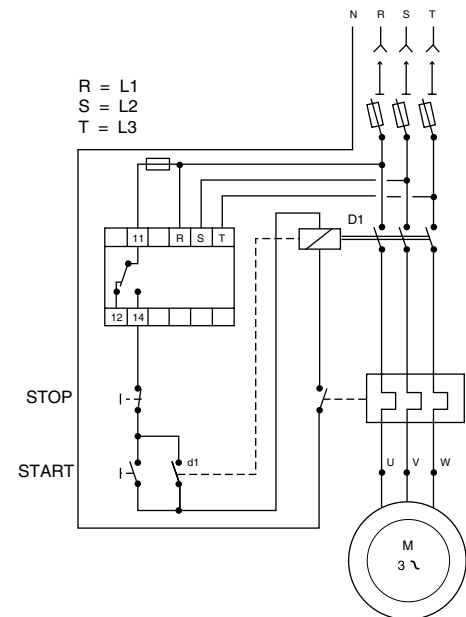


The WRS Phase Control Relay monitors the sequence loss or reversal of three phase power supplies. The output relay is energized when the phase sequence is correct and is de-energized when the phase sequence is wrong or one phase is lost.

SPECIFICATIONS:

Input Power Directly	3 x 220 60 Hz	
from controlled voltage $\pm 15\%$	3 x 380 60 Hz	
	3 x 440 60 Hz	
Power consumption	3 VA at 220 V	
Output	SPDT relay	
Contact material	AgCdO	
Maximum Loading	10 AC resistive	1 A SC inductive
Maximum switching voltage	250 VAC	250 VDC
Relay max. power rating	2200 VA	30 W
Mechanical life of relay	30 x 10 ⁶ operations	
Electrical life of relay	2 x 10 ⁵ operations at 2200 VA resistive load	
Operating temperature	+14°F to +140°F	-10°C to +60°C
Weight	7 oz. (200g)	

WIRING DIAGRAM:



DWRS	11	12	14	R	S	T
LWRS	1	4	3	5	6	7
PWRS	1	2	8	3	4	5

ORDERING INFORMATION:

MOUNTING

L
MOUNTING

D = DIN-rail mounting or panel mounting
L = 11 pin plug-in
P = 8 pin plug-in

WRS
SERIES

SERIES
WRS

380
INPUT POWER

INPUT POWER

220A = 3 x 220 VAC
380A = 3 x 380 VAC
440A = 3 x 415/440 VAC

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