

advanced control electronic solutions

Kilovac - WD47-XXX Phase Sequence Relay **Din Rail Mounting**





Function: 47

- ANSI/IEEE C37.90-1978
- UL file No. E58048
- DIN EN50022-35



Operation:

WD47 Series phase sequence relays are designed to monitor the correct phase rotation and loss of phase of three phase ac systems from 50 to 400 Hz. An incorrect phase sequence or loss of any phase will cause the WD47 to pickup. When the phase sequence is corrected or the lost phase is restored the contacts dropout. Red LED's light to indicate a fault condition. A green LED indicates power to the relay. The WD47 is often used to detect reverse phase rotation or loss of phase to generators, busses, motors, and transformers.



Notes:

- Snap Mounting for DIN rail (DIN EN 50022-35) 1. or Screw Mounting M4 (#8) or M5 (#10)
- 2. Max Conductor Size: 2x 14 awg. (2.5mm²) solid to DIN 46288 or 2x 16 awg. (1.5mm²) stranded w/ end sleeves









CONTROL VOLTAGE				
Model WD47	-001	-002	-003	
Input Voltage Vdc	18 to 54	13.5 to 32	100 to 200	
Input Voltage Vac			100 to 140	
Power Consumption	2.5 VA (max.)			

PART NUMBER SELECTION

Sample Part No. WD47-002

Type:

- WD47 Phase Sequence
- **Control Voltage** 001 - 18 to 54 Vdc
- 002 13.5 to 32 Vdc
- 003 100 200 Vdc or 100-140 Vac

Part Number	Unit	WD47
Nominal Operating Voltage	Vac	120 to 480
Maximum Sensing Voltage	Vac	575
Frequency Range	Hz	50 to 400
Contact Form		2 form C
Contact Ratings	А	5 A resistive at 240 Vac
		5 A resistive at 30 Vdc.
Isolation from Control to Sense Inputs	Vac	2500
Operating Temperature Range	°C	-40 °C to +60 °C
Mechanical Life (operations)		1 x 10 ⁷
Shock	g	10
Vibration		0.062" DA at 10-55 Hz
Weight	lb.	.9 (.4 kg)

PRODUCT SPECIFICATIONS

Instructions for WD47-XXX

INSTALLATION

Wilmar WD47 Phase Seq. Relays mount on standard DIN rails (DIN-EN 50022) or surface mounted using screws. To mount the relay on a DIN rail hook the top edge of the cutout on the base of the case over one edge of the DIN rail then press the opposite side of the cutout containing the release clip over the opposite side of the DIN rail. To remove or reposition the relay, lever the release clip and move the relay as required. WD47 relays should be installed in a dry location where the ambient temperature does not exceed the operating temperature range.

MAINTENANCE

Wilmar Protective Relays are solid-state devices that require no maintenance. If the relay requires repair contact CII Technologies – Kilovac and Wilmar Products for return authorization.

CALIBRATION

The WD47 has no adjustments and no calibration is necessary. Proper operation may be verified as follows:

- 1. Apply a nominal, three-phase input with the correct phase sequence. The output relay should dropout and the green LED should light.
- Apply a nominal, three-phase input with an incorrect phase sequence. The output relay should pickup and the red LED should light.
- Apply only one or two phases with the correct phase sequence. The output relay should pickup and the red LED should light.



BI-DIRECTIONAL AC OR DC INPUT