WA5

Current Window Comparator

Description

The WA5 is a precise UNDER / OVER current window monitoring relay. The unit can be ordered in many AC / DC current ranges, making it ideal for many current monitoring applications. The over and under set points can be adjusted with separate potentiometers. The unit also incorporates a latch facility to prevent undetected failures.

FEATURES

- Monitoring relay for current control
- Measures separate current input
- Rear DIP switch selection of relay On in or outside limits
- Rear DIP switch selection for 10 sec start-up delay
- Upper and lower limits separately adjustable
- LED indication for over / under frequency
- Latch facility incorporated
- Output 10A SPDT relay

Input Specifications

Input	Pin 5 & 7
Measuring Ranges (5A)	
Upper limit	1 - 5 A
Lower limit	1 - 5 A
Internal Resistance	0.1Ω
Maximum Overload Current	10 A (30 sec)
Measuring Ranges (1A	
Upper limit	0.2 - 1A
Lower limit)	0.2 - 1A
Internal Resistance	5.6 Ω
Maximum Overload Current	5 A (30 sec)
Hysteresis	5%

Output Specifications

Output Specifications	SPDT
Rated Isolation Voltage	6000 VAC (contact / electric) 1000 VAC (contact / contact)
Nominal Rate in AC1 (Ag-Ni)	1500 VA
Rated Current	10A
Rated Voltage	250V
Mechanical Life	$10x10^6$ cycles
Electrical Life	$110x10^3$ cycles (at max load)
Operation Frequency	≤ 1800 cycles/h

Supply Specifications

Power Supply AC Type (Galvanic)	110, 230, 400V 525V ± 10% 50 / 60 Hz ± 5Hz
Isolation	4kV
Consumption	± 3VA ± 6VA 525 V
Power Supply DC Types (Non-galvanic)	12,24,48 V ± 10%
Isolation	None
Consumption	± 100 mA

General Specifications

Power ON Delay	≤ 300 ms
Power OFF Delay	≤ 200 ms
Indication for	
Power Supply ON	LED yellow
Output ON	LED yellow
Environment	
Degree Of Protection	IP 20
Operating Temperature	-10 to + 50°C
Storage Temperature	-50 to + 85°C
Weight	200g

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Mode of Operations

Over Current

The relay will de-energize if the current exceeds the set upper limit or drops below the set lower limit. If the current reduces by 5% of the set upper limit or increases by 5% of the set lower limit the relay will energize,

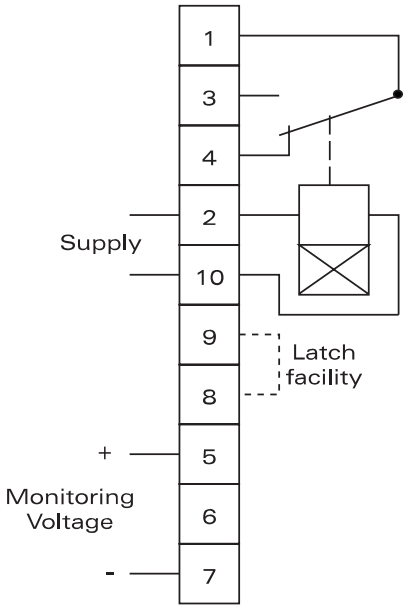
Example
Protection for over current of equipment.

Under Current

The relay will de-energize if the current drops below the set upper limit or exceeds the set lower limit. If the current increases by 5% of the set upper limit or decreases by 5% of the set lower limit the relay will de-energize.

Example
Detection of conveyor belt break.

Wiring Diagram



Operations Diagram