LA5

Current Monitor

Description

The LA5 is a precise UNDER / OVER current monitoring relay. The unit can be ordered in many AC / DC current ranges, making it ideal for many current monitoring applications. The set point and hysteresis 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 UNDER / OVER current
- Rear DIP switch selection for 10 sec start-up delay
- Potentiometer adjustable current limits
- Potentiometer adjustable hysteresis limits
- Power supply ON and Relay ON LEDs
- Latch facility incorporated
- Output 10A SPDT relay

Input Specifications

Input	Pin 5 & 7
Measuring Ranges (5A)	1 - 5 A
Internal Resistance	0.1Ω
Maximum Overload Current	10 A (30 sec)
Measuring Ranges (1A)	0.2 - 1A
Internal Resistance	5.6 Ω
Maximum Overload Current	5 A (30 sec)
Hysteresis	5 - 50%
Repeat Accuracy	< 1%
Response Time	1 sec
Start-up Delay	10 sec

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 red
Output ON	LED red
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 limit. If the current reduces by the percentage hysteresis of the set value the relay will energize. If the latch is activated (pins 8 & 9) the relay will not recover from a trip condition unless the latch is opened or the supply is removed. During the start-up time the latch is disabled.

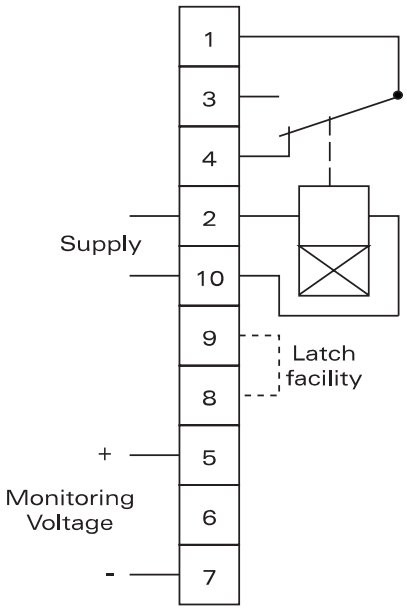
Example
Protection of pumps.

Under Current

The relay will energize if the current exceeds the set limit. If the current reduces by the percentage hysteresis of the set value the relay will energize. If the latch is activated (pins 8 & 9) the relay will not recover from a trip condition unless the latch is opened or the supply is removed. During the start-up time the latch is disabled.

Example
Detection of conveyor belt break.

Wiring Diagram



Operations Diagram