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ISRD SERIES DC CURRENT SENSOR RELAY OUTPUT

FEATURES

- Output Contact Ratings Up to 30 Amperes
- 5% Hysteresis to Prevent Rapid Switching
- Over Current Sensing
- Encapsulated to Withstand Harsh Environment
- UL/cUL Pending

SPECIFICATIONS

1. Control

- 1.1 Type: Sensed Current Via Internal Shunt Resistor
- 1.2 Sense Voltage: 12 VDC
- 1.3 Sense Range: 0.5 - 5 Amperes in 3 Ranges

2. Input

- 2.1 Control Circuit Voltage: 12, 24, & 36 VDC
24, 120, & 230 VAC
- 2.2 Tolerance: ±20% of Nominal

3. Output

- 3.1 Type: Electromechanical Relay
- 3.2 Form: SPST or SPDT, Isolated & Non-Isolated
(See Ordering Info)
- 3.3 Rating: See Output Contact Rating Chart
- 3.4 Life: Medium Power -
Electrical - Full Load - 100,000 Operations
Mechanical - 10,000,000 Operations
High Power and Heavy Duty -
Electrical - Full Load - 100,000 Operations
Mechanical - 10,000,000 Operations

4. Trip Point

- 4.1 Fixed: Specify In Ordering Information
- 4.2 Knob Adjustable: User Settable Throughout Sensing Range
- 4.3 Hysteresis: ≈±5%
- 4.4 Trip Point vs. Voltage and Temperature: ±5%

5. Protection

- 5.1 Transient: ±1500 Volts for 150 Microseconds
- 5.2 Dielectric Breakdown: 1500 Volts RMS

6. Mechanical

- 6.1 Mounting: One #8 or #10 Screw
- 6.2 Control Circuit Termination: 1/4" Quick Connect
- 6.3 Style: Surface Mount/Encapsulated

7. Environmental

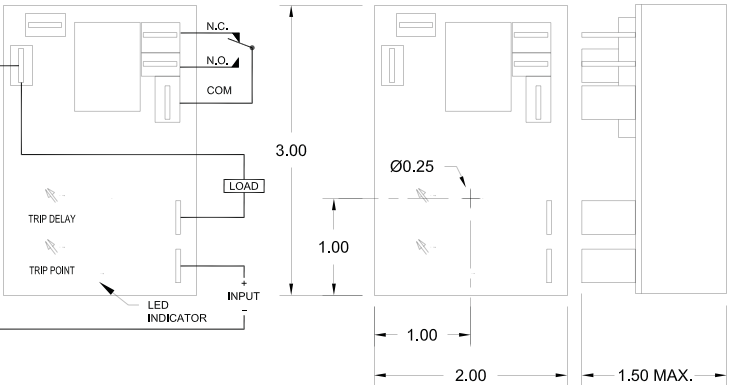
- 7.1 Operating Temperature: -20°C to +80°C
- 7.2 Storage Temperature: -30°C to +85°C
- 7.3 Humidity: 95% Relative, Non-Condensing



MODE OF OPERATION OVERCURRENT SENSING

Power must be applied to the control circuit at all times. When the level of current flow in the circuit being monitored is greater than the trip point, the trip delay begins. Upon completion of the trip delay, the current sensor's control circuit contacts transfer. When the current flow in the circuit being monitored drops below the trip point, the startup delay begins. Upon completion of the startup delay, the control circuit contacts revert back to their original position.

DIMENSIONS & CONNECTION DIAGRAMS



OUTPUT CONTACT RATING CHART			
	30 VDC	125 VAC	240 VAC
MEDIUM POWER			
N.O.	10A	10A, 1/4hp	10A, 1/4hp
N.C.	5A	5A, 1/4hp	5A, 1/4hp
HIGH POWER			
N.O.	20A	20A, 1hp	20A, 2hp
N.C.	10A	10A, 1/4hp	10A, 1/2hp
HEAVY DUTY			
N.O.	30A	30A, 1hp	30A, 2hp

ORDERING INFORMATION

SERIES	INPUT VOLTAGE	OUTPUT	TRIP POINT	TRIP DELAY	STARTUP DELAY
ISRD	1 - 12 VDC 2 - 24 VDC 4 - 24 VAC 5 - 120 VAC 6 - 230 VAC 9 - 36 VDC	A - Medium Power (SPDT, Isolated) B - High Power (SPDT, Isolated) C - Heavy Duty (SPST, Isolated) E - Medium Power (SPDT, Non-Isolated) F - High Power (SPDT, Non-Isolated) G - Heavy Duty (SPST, Non-Isolated)	Fixed (Specify 2-50 in 1A increments) Adjustable 0A - 0.5-5 A 0B - 2-20 A 0C - 5-50 A	F - Fixed -Specify 0.08-50 Seconds Adjustable A - 0.150-7 Seconds B - 0.5-50 Seconds	Blank - 0 Seconds C - 1 Second D - 2 Seconds E - 3 Seconds F - 4 Seconds G - 5 Seconds H - 6 Seconds