

Undercurrent Relays for DC currents

Models AM24D32B01/AM24D32B02

Description and overview

The undercurrent relays monitor DC systems for undercurrent and displays the real-time value on a LED display.

The measuring circuitry is very accurate and is perfect for usage with LED-based lighting units with low current consumption.

Applications

Monitoring of electrical loads such as lighting units used for obstruction lamps.

Relay Operation

The monitored current is connected through terminals 7 and 9 (see wiring diagram). When the current drops below the threshold value for the duration of the trip delay, the control relays are activated and the Trip LED is lit.

Detailed operation: (Refer to picture on bottom right)

PWR LED (3) is lit green while the relay is connected to a power source. The digital display (1) shows the current value in [mA]. TRIP LED (4) is lit green when the current is above the threshold value. TRIP LED flash red when the current is below the threshold value during the trip delay (2). After the duration of the trip delay, if the current is still below the threshold value, TRIP LED is lit a constant red and the control relays are activated.

Relay Setting

Set the current threshold value using SET TRIP potentiometer (5). Turning OFF DIP sw. #1 (6) shows the current threshold value on the display for 30 seconds.

NOTE: Any change in SET TRIP potentiometer, changes the threshold value, even if it is not displayed (using DIP sw. #1). Set the TRIP Delay using the "Sec." potentiometer (2).

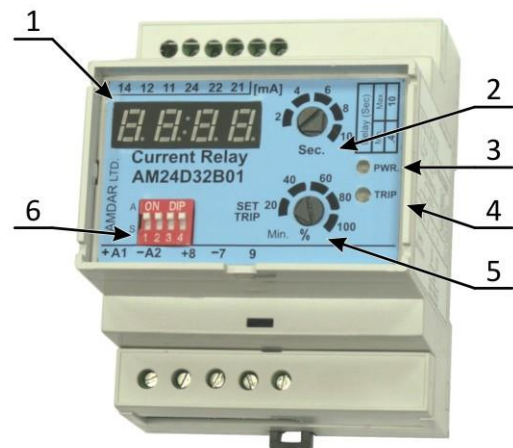
DIP Switches setting:

	ON	OFF
Sw.#1	Display shows real time current value.	After turning the switch OFF, the display shows threshold value for 30 seconds.
Sw.#2	Not in use	Not in use
Sw.#3	Trip delay for each undercurrent detection	Trip delay for power ON only. No trip delay for subsequent undercurrent detection.
Sw.#4	On TRIP, Relays are energized.	Safe Mode: On TRIP, Relays are de-energized.



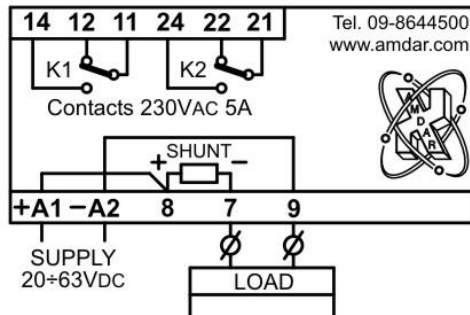
Characteristics

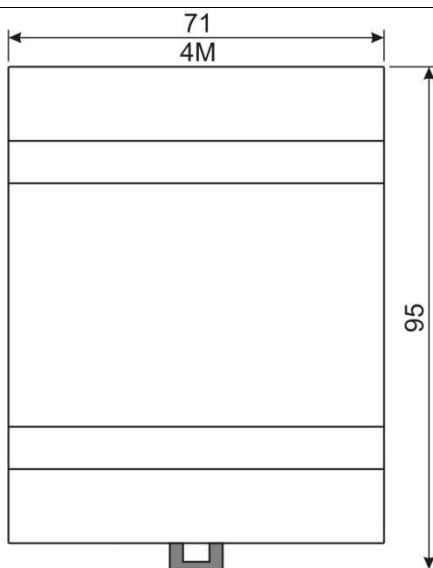
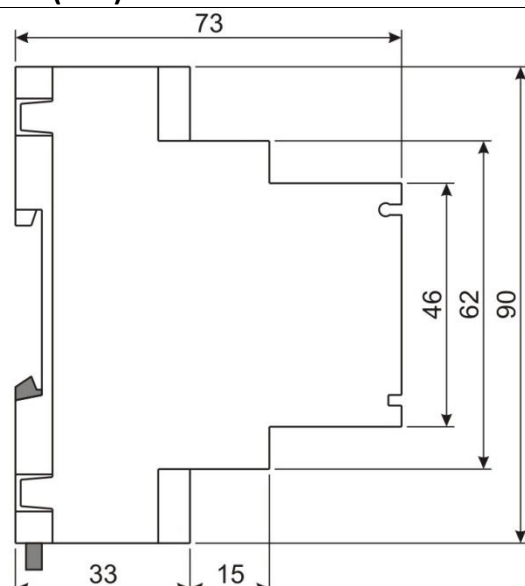
- Digital Display of monitored value and threshold value
- High measuring resolution
- Trip delay
- Normal or Fail-Safe trip relay operation
- Quick and simple load connection
- Standard 3 modules box for easy mounting on a DIN rail.



The above data may be changed without prior notice

Technical Data			
Supply Voltage Range		20VDC÷60VDC	
Max. Power Consumption		2W	
Connection Type		Permanent	
Max. Input Current (Points 7 and 9)		5000mA	
Set trip Range (Max. displayed value)		AM24D32B01 50mA÷1000mA	AM24D32B02 50mA÷2000mA
Delay time Range		0.4 sec. ÷ 10 sec.	
Relay Information	Relay Standards	UL, VDE, SA	
	Changeover Contacts	Galvanically insulated from supply voltage	
	Insulation according to standard IEC60664-1	Rated ins. Volt. Pollution Degree Over Voltage Cat.	250V 3 III
	Insulation level between contacts and coil	4000 V _{RMS}	
	Nominal Current	3.5A@230V _{AC} ; cos ø=0.4 0.5A@110V _{DC}	
Max. Storage temperature		0°C÷60°C	
Max. Operating temperature		0°C÷60°C	
Wiring Connection type		Screw type 14÷24AWG	
Max. weight		250 grams	
Normal work order		Constant Monitoring	
Installation		Standard 35mm DIN rail	
Flammability Rating		UL94V-0	
Protection Class		IP30	

Wiring Diagram	
Tel. 09-8644500 www.amdar.com	
	

Dimensions (mm)	
	

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