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# EI SERIES CURRENT CONTROL RELAY

UL cUL listed

- 3 Product Types for Measurement Accuracy
- Under or Over Current - Selectable
- Space Saving 22.5mm Wide
- DIN-Rail / Surface Mount



Three product types; EIL (2 to 500 mA), EIH (.1 to 10A) and EIT (10 to 100A with current transformers) provide selectable over or under current control.

**AC/DC control without memory.**

When the value of the controlled current, either AC or DC, reaches the threshold displayed on the front face, the output relay change state at the end of time delay T1. It returns to the initial state instantly when the current drops below the hysteresis threshold, or when the power supply is disconnected.

**AC/DC control with memory.**

When the value of the controlled current reaches the displayed threshold, the output relay changes status at the end of time period T1 and remains locked in this position. To reset the memory function the auxiliary supply must be disconnected.

**Over-current function (UPPER).**

The power-on time delay T2 prevents current peaks due to motor starting. The delay on upward crossing of threshold T1 provides immunity to transients and other interference, thereby preventing spurious triggering of the output relay.

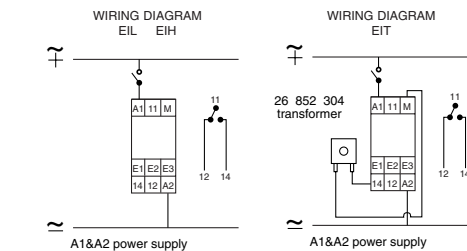
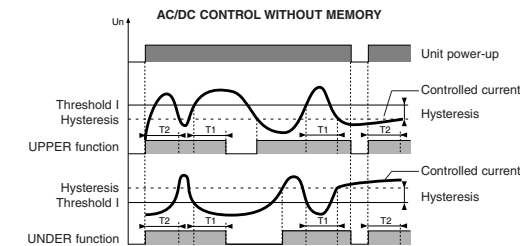
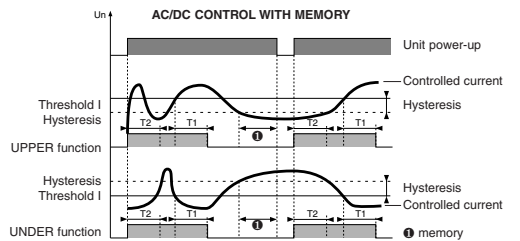
**Under-current function (UNDER).**

The power-on delay T2 prevents the occurrence of current troughs. The delay on downward crossing of threshold T1 provides immunity to random dips, thereby preventing spurious triggering of the output relay.

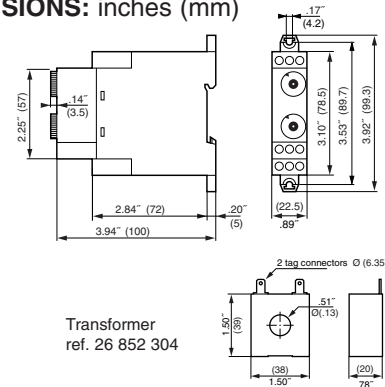
*Note: In underload function, the absolute value of the hysteresis cannot be greater than the measurement range maximum.*

**SPECIFICATIONS:**

Input power	24 VDC, 24, 110 to 230 VAC ±15%, 50/60 Hz
Power Consumption	3 VA
Hysteresis Selection	5 to 50% of Displayed Threshold
Threshold Value	10 to 100% of Measurement Range
Setting Accuracy-Threshold	±10%
Repeat Accuracy	±0.1% with constant parameters
Voltage drift	±0.1% (±10% of input voltage)
Temperature drift	±0.02%
Power up delay T2	1 s to 20 s, ±30%
Delay on threshold overrun T1	0.1 s to 3 s, ±20%
Output relay	SPDT Relay
Contact Material	AgCdO
Maximum Loading	8A AC resist
Operating temperature	to 140°F, -20°C to 60°C
Storage temperature	-30°C to 70°C
Weight	(140g)



**DIMENSIONS: inches (mm)**



	Types	EIL			EIH			EIT
		Inputs	E1-M	E2-M	E3 M	E1-M	E2-M	E3 M
Measurement range	Sensitivity	2 to 10	10 to 50	50 to 100	.01 to 1	.5 to 5	1 to 10	10 to 100
		20 mA	100 mA	500 mA	1 A	5 A	10 A	100 A
	Input resistance	5 Ω	1 Ω	0.2 Ω	0.1 Ω	0.02 Ω	0.01 Ω	20 Ω

*Note: 24VDC input power version. The input voltage and the measured current must be from separate sources. The "negative" poles of the auxiliary power supply and the measurement circuit are connected inside the unit*

**PART NUMBER FOR ORDERING**

Type	EIL	EIH	EIT
Measurement range	2 to 500 mA	0.1 to 10 A	10 to 100 A with current transformer
Supply voltage			
24 VDC	84 871 020	84 871 030	84 871 040
24 VAC	84 871 021	84 871 031	84 871 041
48 VAC	84 871 022	84 871 032	84 871 042
120 VAC	84 871 023	84 871 033	84 871 043
230 VAC	84 871 024	84 871 034	84 871 044
Current transformer			26 852 304

Products and specifications subject to change without notice.  
 Consult factory for application assistance.