



## EI EIH Part number 84871033



- Current transformer fitted by passing a cable through the front
- AC current treshold adjustable from 1 to 20 A AC (30 Hz to 400 Hz) via button on front
- Relay output 5 A - 250 V AC - 1 N/O contact
- Multivoltage power supply : 100 to 230 V AC 50-60 Hz  
24 V AC / DC
- 17.5 mm casing clips on symmetrical DIN rail

### Part numbers

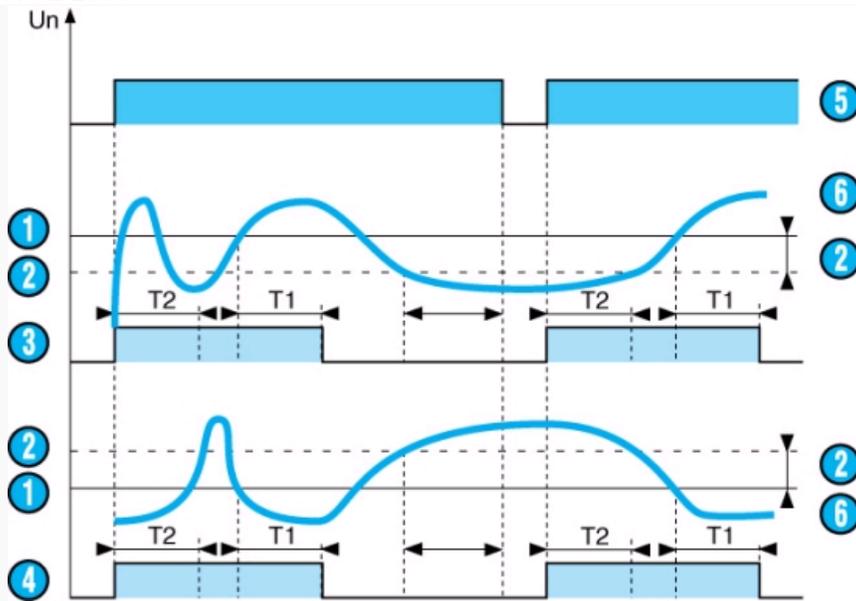
	Type	Measurement range	Supply voltage
84871033	EIH	0,1 →10 A	120 V AC

### Specifications

Supply voltage Un	230 V, 110 V, 48 V, 24 Va 50 / 60 Hz (galvanic isolation by transformer) 24 V DC (No galvanic isolation). In this case, the product power supply and measuring circuit power supply must be electrically isolated.
Operating range	0.85 →1.15 Un
Maximum power consumption	3 VA AC 1 W DC
Frequency of measured signal	40 →500 Hz
Adjustable hysteresis	5 →50 % of the displayed threshold
Threshold value	10 →100 % of the measurement range
Display accuracy of the preset threshold	± 10 %
Repetition accuracy with constant parameters	± 0.1 %
Drift Voltage	± 0,1 % (±10 % Un)
Drift Temperature	± 0,02 %
Delays on power up (T2)	0.1 s →20 s ± 10 %
Delay on thresold crossing Tt	0.1 s →3 s ± 10 %
Delay on pick-up	500 ms
Output relay	1 changeover AgNi, 8A AC max
Operating temperature range (°C)	-20 →+50
Storage temperature range (°C)	-30 →+70
Weight (g)	140

Inputs	E1-M E2-M E3-M
Sensitivity	E1-M : 0.1 →1 A E2-M : 0.5 →5 A E3-M : 1 →10 A
Input resistance	E1-M : 0.1 Ω E2-M : 0.02 Ω E3-M : 0.01 Ω

### Principles



**Operating principle**

**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 changes state at the end of time delay T1. It returns instantly to the initial state when the current drops below the hysteresis threshold, or when the power supply is disconnected.

**AC/DC control with memory**

The output relay changes state at the end of time delay T1 and remains latched in this position. To reset the memory function the auxiliary supply must be disconnected.

**Over-current function (UPPER)**

The time delay on energisation 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.

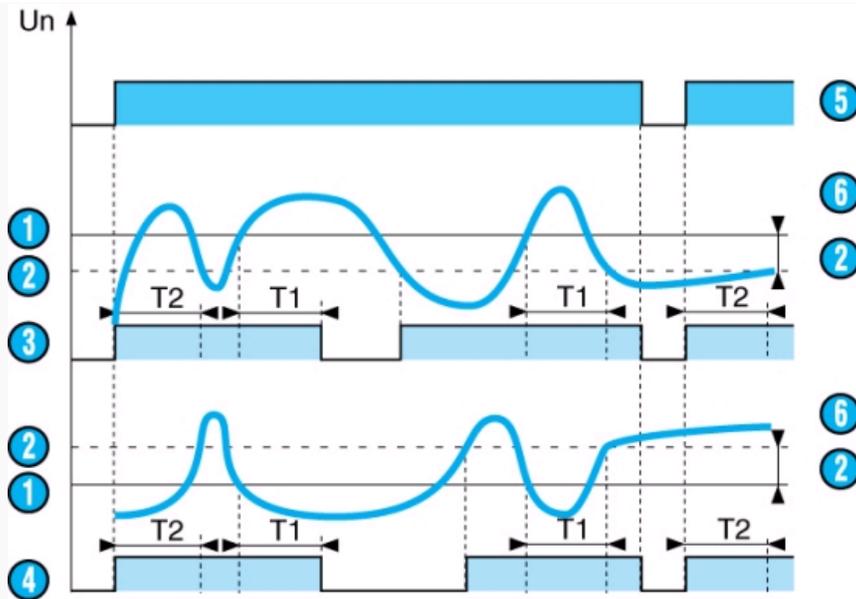
**Under-current function (UNDER)**

The time delay on energisation 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.

N°	Legend
1	Threshold
2	Hysteresis
3	UPPER function
4	UNDER function
5	Unit powe-up
6	Controlled current

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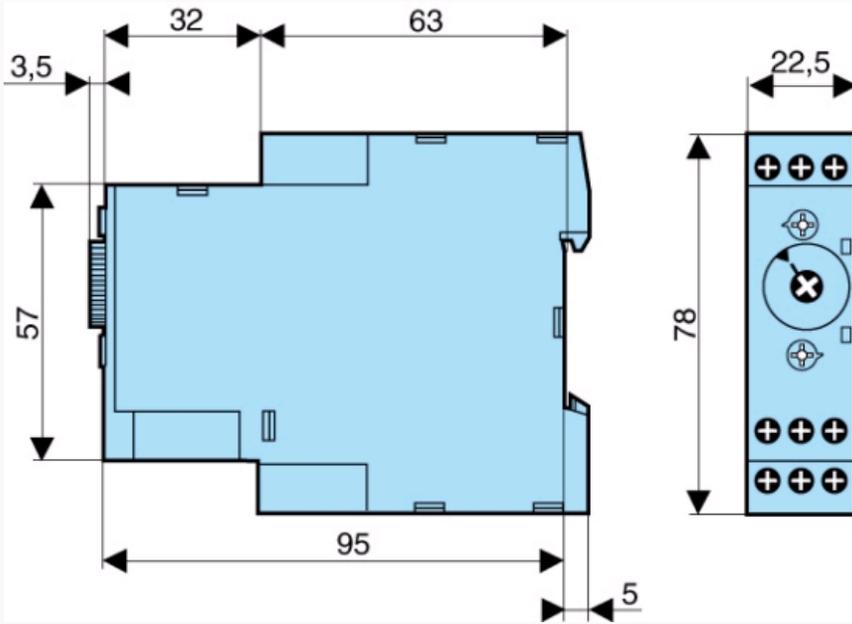
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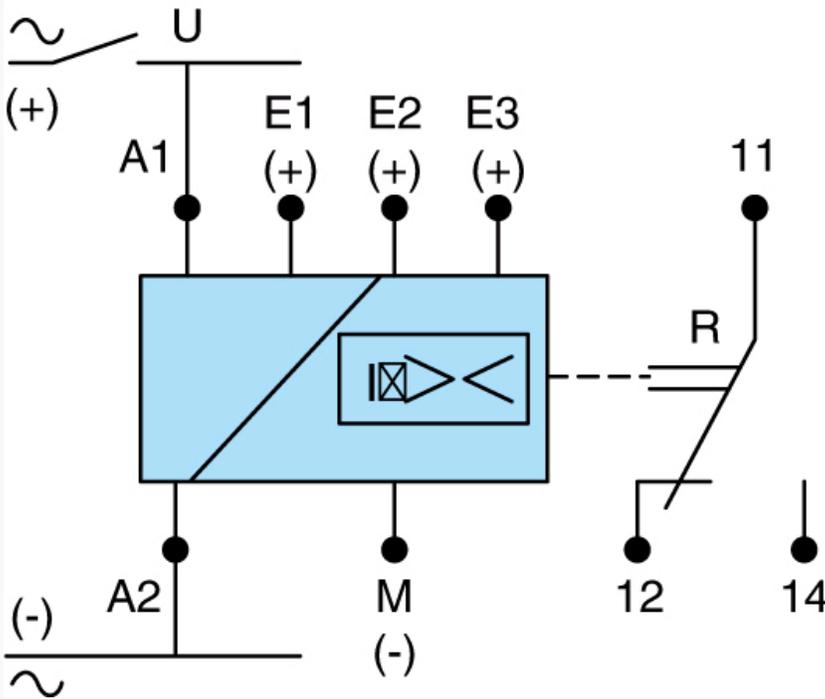
**Dimensions (mm)**

EIL / EIH / EIT



**Connections**

EIL / EIH



A1 - A2 : Power supply

**Legend**