

Current control

EI

- Intensity monitoring
- 3 relays to cover 7 ranges of measurement
- Automatic recognition
- Frequency up to 500 Hz

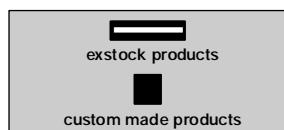


Type	Measurement range	Supply voltage	Code
EIL	2 ◆ 500 mA	24 V	84 871 020
	2 ◆ 500 mA	24 V	84 871 021
	2 ◆ 500 mA	48 V	84 871 022
	2 ◆ 500 mA	120 V	84 871 023
	2 ◆ 500 mA	230 V	84 871 024
EIH	0,1 ◆ 10 A	24 V	84 871 030
	0,1 ◆ 10 A	24 V	84 871 031
	0,1 ◆ 10 A	48 V	84 871 032
	0,1 ◆ 10 A	120 V	84 871 033
	0,1 ◆ 10 A	230 V	84 871 034
EIT	10 ◆ 100 A	24 V	84 871 040
	10 ◆ 100 A	24 V	84 871 041
	10 ◆ 100 A	48 V	84 871 042
	10 ◆ 100 A	120 V	84 871 043
	10 ◆ 100 A	230 V	84 871 044

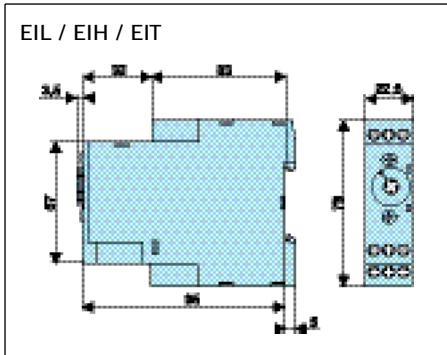
Supply voltage Un	230 V, 110 V, 48 V, 24 Va 50 / 60 Hz (galvanic isolation by transformer) 24 V (No galvanic isolation). The "negative" poles of the auxiliary power supply and the measurement circuit are connected inside the unit
Operating range	0,85 ◆ 1,15 Un
Maximum power consumption	3 VA 1 W
Frequency 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)	1 s ◆ 20 s ±10%
Delay on energisation T1	0,1 s ◆ 3 s ±10%
Delay on pick-up	500 ms
Output relay	1 changeover AgNi, 8A max
Temperature limit operation (°C)	-20 → +50
Temperature limits stored (°C)	-40 → +70
Weight (g)	140

Type	EIL	EIH	EIT
Inputs	E1-M E2-M E3-M	E1-M E2-M E3-M	E1-M
Sensitivity	2 ◆ 20 mA 10 ◆ 100 mA 50 ◆ 500 mA	0,1 ◆ 1 A 0,5 ◆ 5 A 1 ◆ 10 A	10 ◆ 100 A
Input resistance	5 Ω 1 Ω 0,2 Ω	0,1 Ω 0,02 Ω 0,01 Ω	20 Ω

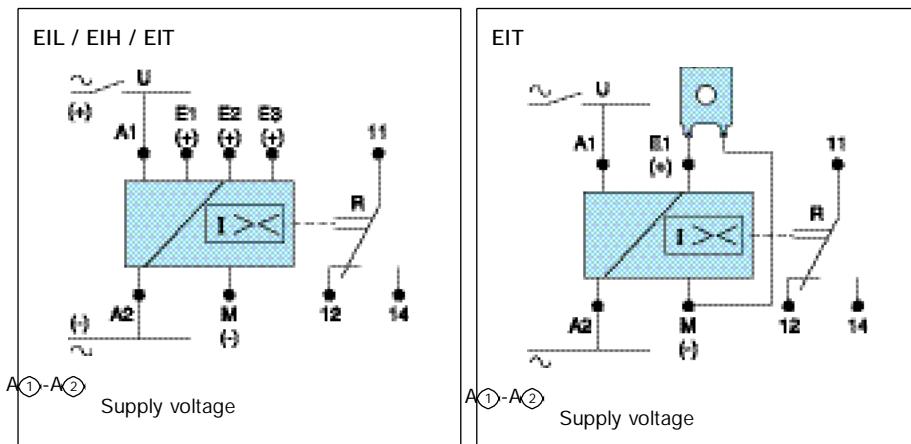
Accessories	Code
Current transformers for EIT	26 852 304



Dimensions



Connections





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.

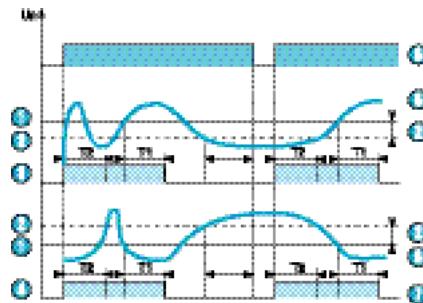
The delay on upward crossing of threshold T1 provides immunity to transients and other interference, thereby preventing spurious triggering of the output relay.

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.

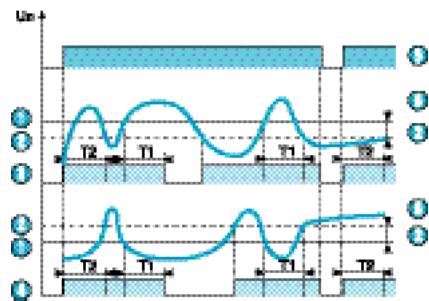
Note : In underload function, the absolute value of the hysteresis cannot be greater than the measurement range maximum.

AC/DC control with memory



- ① Threshold
- ② Hysteresis
- ③ UPPER function
- ④ UNDER function
- ⑤ Unit power-up
- ⑥ Controlled current
- ⑦ Memory

AC/DC control without memory



- ① Threshold
- ② Hysteresis
- ③ UPPER function
- ④ UNDER function
- ⑤ Unit power-up
- ⑥ Controlled current