

TB822 Timers

Electronic timers are used to control operation of equipment, machinery, systems or processes in a wide range of industrial applications. The timers offer many different timing functions together with accurate, long term switching reliability and high current (10 Amp) switching contacts.

The TB822 timers are housed in a DIN rail mounting enclosure and are auxiliary powered from a large choice of AC or DC auxiliary power options. Time ranges from 1 second to 10 hours are available, adjustable through the calibrated front control knob.

The single or double pole changeover relay output contacts are isolated from the supply voltage and all timers have an LED to indicate relay status.



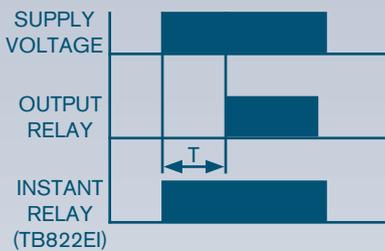
Models Available

- TB822E** Delay on Energise Timer
- TB822EI** Delay on Energise Timer with Instant Contact
- TB822A** Delay on De-energise Timer
- TB822N** Interval Timer
- TB822C** Cyclic Symmetrical Timer
- TB822CA** Cyclic Asymmetrical Timer
- TB822B** Flasher Timer
- TB822AH** Delay after Supply Off Timer
- TB822S** Star/Delta Timer
- TB822MA** Multi-attempt Start Timer

Product Features

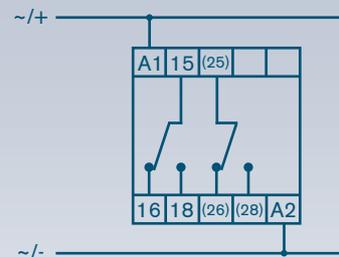
- Time ranges from 1 second to 10 hours
- Supply voltages from 12Vdc to 415Vac
- DIN rail mounting enclosure
- Screw type terminals

For timing control of machinery, systems and operational processes

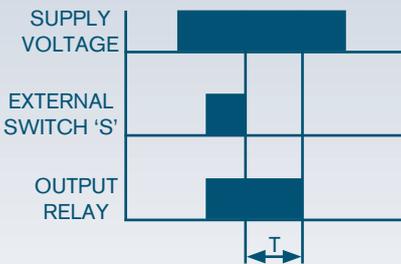


TB822E (Delay on Energise)
TB822EI (with Instant Contact)

The time period starts when the supply voltage is applied. At the end of the time period, the changeover relay energises and remains energised until the supply voltage is removed. The TB822EI has an additional relay which energises when the supply is applied.

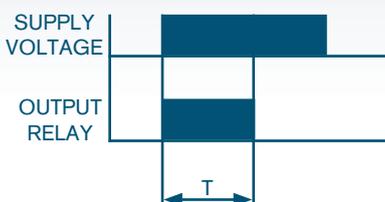
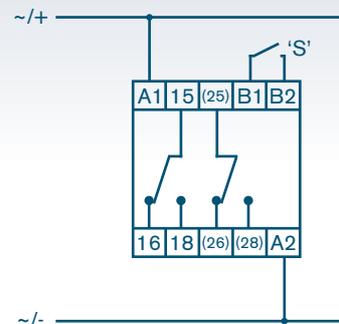


TB822EI 25, 26, 28: INSTANT CONTACT



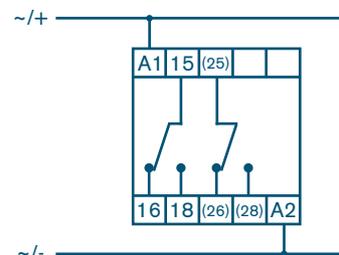
TB822A (Delay on De-energise)

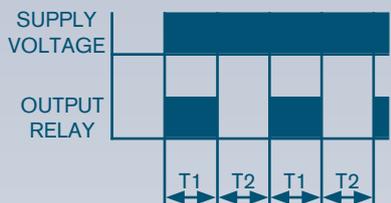
With the supply voltage applied, closing the external switch 'S' energises the changeover relay. When the switch opens, the time period starts and the relay de-energises at the end of the time period. Closing switch 'S' at any point resets the timer.



TB822N (Interval)

The changeover relay energises when the supply voltage is applied. At the end of the time period the relay de-energises.

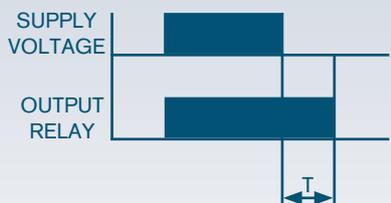
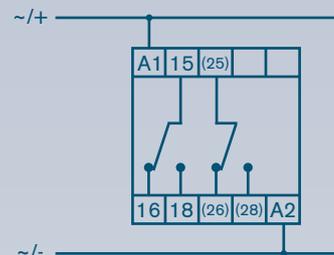




TB822C T1=T2
TB822CA T1≠T2
TB822B T1=T2=0.5 sec

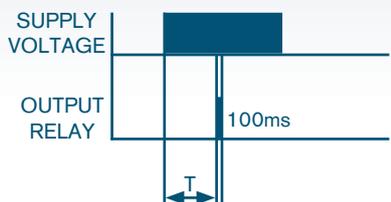
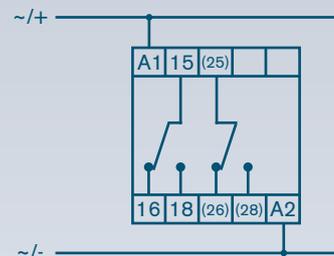
TB822C (Cyclic Symmetrical)
TB822CA (Cyclic Asymmetrical)
TB822B (Flasher)

With the supply voltage applied the changeover relay energises for the on time period (T1) then de-energises for the off time period (T2), repeating indefinitely until the supply voltage is removed.



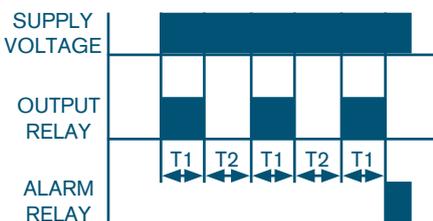
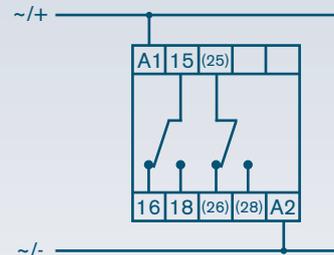
TB822AH (Delay After Supply Off)

With the supply voltage applied, the changeover relay energises. When the supply voltage is removed the time period starts and the relay remains energised. The relay then de-energises at the end of the time period.



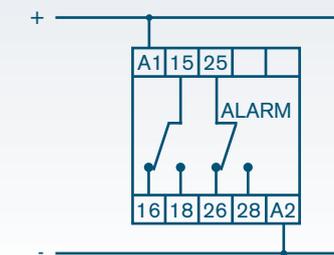
TB822S (Star/Delta)

With the supply voltage applied, the adjustable 1-30 second time period starts. At the end of the time period the changeover relay energises for 100ms before de-energising.

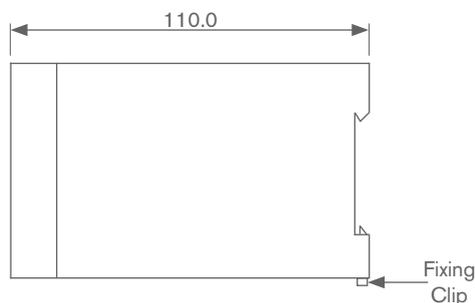
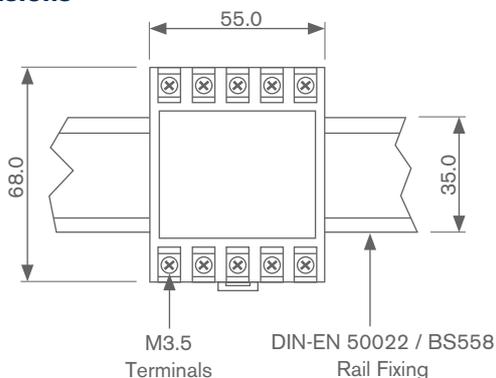


TB822MA (Multi-attempt Start)

With the supply voltage applied the changeover relay energises for the on time period T1 (2-60sec) then de-energises for the off time period T2 (2-60sec), repeating 3 times or until the equipment starts and hence the supply voltage is removed. Available in 12Vdc or 24Vdc only.



Dimensions



All dimensions in mm

Ordering information

Model	Code	Description
	TB822E	Delay on Energise Timer
	TB822EI	Delay on Energise Timer with Instant Contact
	TB822A	Delay on De-energise Timer
	TB822N	Interval Timer
	TB822C	Cyclic Symmetrical Timer
	TB822CA	Cyclic Asymmetrical Timer
	TB822B	Flasher Timer
	TB822AH	Delay after Supply Off Timer
	TB822S	Star/Delta Timer
	TB822MA	Multi-attempt Start Timer

Time Range	Code	Description
	0.03-1 sec	0.03 to 1 second
	0.1-3 sec	0.1 to 3 seconds
	0.3-10 sec	0.3 to 10 seconds
	1-30 sec	1 to 30 seconds
	2-60 sec	2 to 60 seconds
	3-100 sec	3 to 100 seconds
	10-300 sec	10 to 300 seconds
	0.3-10 min	0.3 to 10 minutes
	1-30 min	1 to 30 minutes
	2-60 min	2 to 60 minutes
	0.1-3 hours	0.1 to 3 hours
	0.3-10 hours	0.3 to 10 hours (N/A TB822AH)
	N/A	TB822S and TB822MA

Auxiliary Power	Code	Description
	12V	12Vdc
	24V	24Vac/dc
	110V	110Vac
	230V	230Vac
	415V	415Vac
	Other	Specify (subject to technical viability)

Output / Options	Code	Description
	1C/O	1 Pole Change-over Relay Output
	2C/O	2 Pole Change-over Relay Output
	Preset	Factory Preset Fixed Time Range (specify)

Example **TB822A - 1-30 min - 230V - 2C/O**

Options**Timer Relay Output**

All timers are supplied with a single pole changeover relay output however a two pole changeover relay output is available as an option (not available on the TB822EI and TB822MA).

Terminal Cover

Available for all TB822 timers is the PC55-10 plastic terminal cover to finger-proof the terminals.

Fixed Time Range

Timers can be supplied with a factory preset time range fixed during manufacture and a blanking plug fitted replacing the front control knob.

Specification**Repeat Accuracy:**

- $\pm 0.5\%$ at constant ambient
- $\pm 3\%$ to temperature spec. VDE 0435
- Setting accuracy $\pm 15\%$

Power Supply Voltage:

- 24Vac/dc, 110Vac, 230Vac ($\pm 15\%$)
- 12Vdc, 415Vac ($\pm 15\%$)

Burden:

- $< 2VA$

Frequency:

- 50/60Hz

Relay Output:

- 1 or 2 pole changeover contact(s)

Contact Rating:

- 1 Pole: 10A at 250Vac/30Vdc
- 2 Pole: 5A at 250Vac/30Vdc

Contact Life:

- 1,000,000 operations at 5A
- 10,000,000 operations at 1A

Reset Time:

- 100ms approximately

Operating Temperature:

- 0°C to 60°C

Enclosure:

- 55mm wide black ABS
- Mount: 35mm DIN rail (DIN-EN 50022)

Enclosure Code:

- Case IP40, terminals IP10

Vibration Resistance:

- To VDE 0160

Weight:

- 175g

Markings:

- CE marked

Specification subject to change without notice.