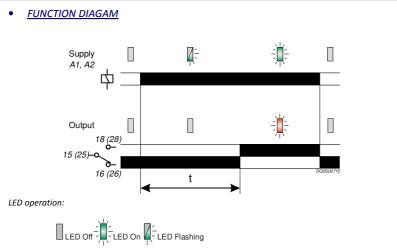
## **TMR02**

## ON DELAY TIMER RELAY 0.1S - 100hours AC/DC INPUT



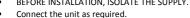


- \*NEW\* 17.5mm DIN rail housing
- Supply Initiated Delay On Operate timing function
  - 7 Selectable time ranges (0.1 seconds 100 hours)
- □ Fine adjustment of selected time range
- Multi-voltage input (12 230V AC/DC)
- □ 1 x DPDT relay output 8A
- □ Green LED indication for supply / timing status
- □ Red LED indication for relay status
- Conforms to IEC 61812



#### INSTALLATION AND SETTING





# Installation work must be carried out by qualified personnel.

#### Setting the unit

- Set the "Range" (1) to the required position (depending on whether seconds, minutes or hours are required).
- Set the "Set %" adjustment 
   • as required. The "Set %" is a % of the selected range; so for example, a 30% setting on the 1 − 10 hour range will give 3 hours.

#### Applying power

- Apply power across terminals "A1" and "A2" and the green LED 
   will start flashing indicating timing in progress.
- The relay will remain de-energised (contacts 15 / 16 and 25 / 26 closed, 15 / 18 and 25 / 28 open) and red LED @ extinguished.
- After the delay period "t" has elapsed, the relay will energise (contacts 15 / 16 and 25 / 26 open, 15 / 18 and 25 / 28 closed) and the red LED will illuminate.
- The green LED will remain permanently lit.
- The whole timing process is repeated by removing and re-applying power.

#### Note:

In accordance with IEC 61812, the green LED is permitted to extinguish during a voltage dip or momentary interruption of the power supproviding the state of the output relay does not change.

<sup>2</sup> The dip / interruption (reset) duration and levels are defined in the product standard however, the standard allows for these to be differen from the levels actually specified.

III (IEC 6066 4kV (1.2/50) 12V 0.6VA 0.52W Delay On Op Seconds: 0.1 – 1 1 – 10 <100mS ± 1% of max < 5% of max	0% DC: +/-15% (4) μS) IEC 60664 24V 0.8VA 0.48W perate (Supply Init Minutes: 0.1 – 1 1 – 10  ximum full scale ximum full scale constant conditions		230V 6.8VA 1.9W Hours: 0.1-1 1-10 10-100
III (IEC 6066 4kV (1.2/50) 12V 0.6VA 0.52W Delay On Or Seconds: 0.1 – 1 1 – 10 <100mS ± 1% of max < 5% of max ± 0.5% at cc ± 0.05% / V Green LED Red LED	14) μS) IEC 60664 24V 0.8VA 0.48W perate (Supply Init Minutes: 0.1 – 1 1 – 10  ximum full scale constant conditions	2.6VA 0.94W ciated)	6.8VA 1.9W Hours: 0.1 – 1 1 – 10 10 - 100
III (IEC 6066 4kV (1.2/50) 12V 0.6VA 0.52W Delay On Or Seconds: 0.1 – 1 1 – 10 <100mS ± 1% of max < 5% of max ± 0.5% at cc ± 0.05% / V Green LED Red LED	14) μS) IEC 60664 24V 0.8VA 0.48W perate (Supply Init Minutes: 0.1 – 1 1 – 10  ximum full scale constant conditions	2.6VA 0.94W ciated)	6.8VA 1.9W Hours: 0.1 – 1 1 – 10 10 - 100
4kV (1.2/50) 12V 0.6VA 0.52W Delay On Or Seconds: 0.1 – 1 1 – 10 <100mS ± 1% of max ± 0.5% at co ± 0.05% / ° C ± 0.2% / V Green LED Red LED	μS) IEC 60664 24V 0.8VA 0.48W perate (Supply Init Minutes: 0.1 - 1 1 - 10  ximum full scale ximum full scale constant conditions	2.6VA 0.94W ciated)	6.8VA 1.9W Hours: 0.1 – 1 1 – 10 10 - 100
12V 0.6VA 0.6VA 0.6VA Delay On Op Seconds: 0.1 - 1 1 - 10 <100mS ± 1% of max < 5% of max ± 0.5% at co ± 0.05% / °C ± 0.2% / V Green LED Red LED	24V 0.8VA 0.48W perate (Supply Init Minutes: 0.1 - 1 1 - 10  ximum full scale ximum full scale constant conditions	2.6VA 0.94W ciated)	6.8VA 1.9W Hours: 0.1 – 1 1 – 10 10 - 100
0.52W Delay On Op Seconds: 0.1 - 1 1 - 10 <100mS ± 1% of max ± 0.5% at co ± 0.05% / °C ± 0.2% / V Green LED Red LED	0.48W perate (Supply Init Minutes: 0.1 - 1 1 - 10  ximum full scale dimum full scale constant conditions	0.94W iiated)	1.9W Hours: 0.1 - 1 1 - 10 10 - 100
Delay On Or Seconds: 0.1 – 1 1 – 10 <100mS ± 1% of max < 5% of max ± 0.05% / °C ± 0.2% / V Green LED Red LED	perate (Supply Init Minutes: 0.1 - 1 1 - 10  ximum full scale ximum full scale constant conditions	iated)	Hours: 0.1 – 1 1 – 10 10 - 100
Seconds: 0.1 – 1 1 – 10 <100mS ± 1% of max < 5% of max ± 0.5% at co ± 0.05% / °C ± 0.2% / V Green LED Red LED	Minutes: 0.1 – 1 1 – 10  kimum full scale kimum full scale constant conditions		0.1 - 1 1 - 10 10 - 100
Seconds: 0.1 – 1 1 – 10 <100mS ± 1% of max < 5% of max ± 0.5% at co ± 0.05% / °C ± 0.2% / V Green LED Red LED	Minutes: 0.1 – 1 1 – 10  kimum full scale kimum full scale constant conditions		0.1 - 1 1 - 10 10 - 100
0.1 – 1 1 – 10 <100mS ± 1% of max < 5% of max ± 0.5% at co ± 0.05% / °C ± 0.2% / V Green LED Red LED	0.1 – 1 1 – 10 ximum full scale ximum full scale onstant conditions	:	0.1 - 1 1 - 10 10 - 100
1 – 10  <100mS ± 1% of max < 5% of max ± 0.5% at co ± 0.05% / °C ± 0.2% / V  Green LED  Red LED	1 – 10  ximum full scale ximum full scale constant conditions		1 – 10 10 - 100
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< 5% of max ± 0.5% at co ± 0.05% / °C ± 0.2% / V Green LED Red LED	kimum full scale onstant conditions	i (IEC 61812)	)
$\pm$ 0.5% at co $\pm$ 0.05% / °C $\pm$ 0.2% / V Green LED Red LED	onstant conditions	(IEC 61812)	)
± 0.05% / °C ± 0.2% / V Green LED Red LED		(IEC 61812)	)
± 0.05% / °C ± 0.2% / V Green LED Red LED			
± 0.2% / V Green LED Red LED			
Red LED			
-20 to +60°C			
	С		
+95%			
DPDT relay			
AC1		250V 8A	(2000VA)
AC15		250V 5A	(no), 3A (nc)
DC1		25V 8A (2	200W)
≥ 150,000 o	ps at rated load		
2kV AC (rms	s) IEC 60947-1		
4kV (1.2/50)	μS) IEC 60664		
Orange flam	ne retardant UL94		
≈ 70g			
or direct sur using the bla	rface mounting via ack clips provided	a 2 x M3.5 o on the rear	r 4BA screws
≤ 2 x 2.5mm	n² solid or strande	d	
Conforms to IEC 61812.			
	DC1 ≥ 150,000 c 2kV AC (rms 4kV (1.2/50 Orange flan ≈ 70g On to 35mr or direct su using the bl ≤ 2 x 2.5mn Conforms tc CE, C-tick	DC1 ≥ 150,000 ops at rated load 2kV AC (rms) IEC 60947-1 4kV (1.2/50µS) IEC 60664 Orange flame retardant UL94 ≈ 70g On to 35mm symmetric DIN r or direct surface mounting via sing the black clips provided ≤ 2 x 2.5mm² solid or strande Conforms to IEC 61812. CE, C-tick  and RoHS Comp	DC1 25V 8A (2 ≥ 150,000 ops at rated load 2kV AC (rms) IEC 60947-1 4kV (1.2/50µS) IEC 60664 Orange flame retardant UL94 ≈ 70g On to 35mm symmetric DIN rail to BS EN or direct surface mounting via 2 x M3.5 o using the black clips provided on the rear ≤ 2 x 2.5mm² solid or stranded

Emissions: EN 61000-6-4

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## SETTING DETAILS

1. Power supply status / Timing (Green) LED 2. Relay output status (Red) LED 3. "Set %" adjustment 4. Time delay "Range" selector

