

Terminal Protection to IP20



- **\*NEW\* 17.5mm DIN rail housing**
- **Instantaneous Contact (Relay 1)**
- **Delay On Operate timing function (Relay 2)**
- **7 Selectable time ranges (0.1 seconds – 100 hours)**
- **Fine adjustment of selected time range**
- **Multi-voltage input (12 – 230V AC/DC)**
- **2 x SPDT relay output 8A**
- **Green LED indication for supply / timing status**
- **Red LED indication for relay statuses**
- **Conforms to IEC 61812**

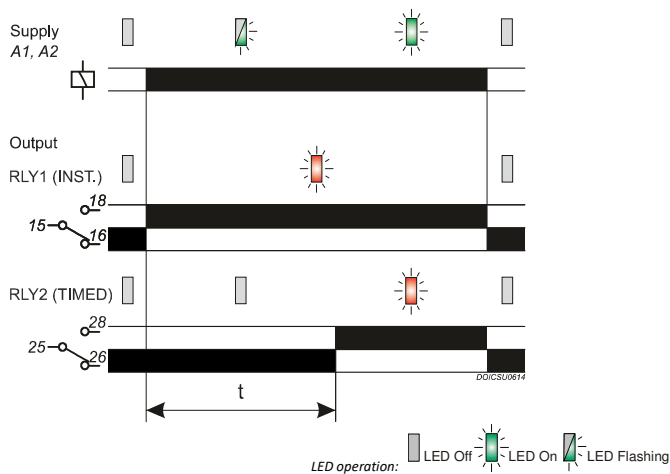
Dims: to DIN 43880  
W. 17.5mm

**Wiring Information and Product Demonstration**  
Videos can also be found on our YouTube channel

<https://www.youtube.com/user/BroyceControlLtd>



### FUNCTION DIAGRAMS



### TECHNICAL SPECIFICATION

Supply voltage U (A1, A2):	12 – 230V AC/DC
Frequency range:	48 - 63Hz (AC supplies)
Supply variation:	AC: +15/-10% DC: +/-15%
Overvoltage category:	III (IEC 60664)
Rated impulse withstand voltage:	4kV (1.2/50µs) IEC 60664
Power consumption (max.):	12V 24V 110V 230V
	AC: 0.6VA 0.8VA 2.6VA 6.8VA
	DC: 0.52W 0.48W 0.94W 1.9W
Timing function (RLY1):	Instantaneous Contact
Time delay:	<100ms (to relay energising)
Timing function (RLY2):	Delay On Operate
Timing ranges (7):	Seconds: Minutes: Hours:
	0.1 – 1 0.1 – 1 0.1 – 1
	1 – 10 1 – 10 1 – 10
	10 - 100
Reset time <sup>2</sup> :	<100ms
Accuracy:	± 1% of maximum full scale
Adjustment accuracy:	< 5% of maximum full scale
Repeat accuracy:	± 0.5% at constant conditions (IEC 61812)
Drift with temperature:	± 0.05% / °C
Drift with voltage:	± 0.2% / V
Power on indication / Timing <sup>1</sup> :	Green LED
Relay status (Instantaneous - RLY1)	Red LED
Relay status (Delay On Op. - RLY2)	Red LED
Ambient temp:	-20 to +60°C
Relative humidity:	+95%
Output (15, 16, 18 / 25, 26, 28):	SPDT relay (x2)
Output rating:	AC1 250V 8A (2000VA)
	AC15 250V 5A (no), 3A (nc)
	DC1 25V 8A (200W)
Electrical life:	≥ 150,000 ops at rated load
Dielectric voltage:	2kV AC (rms) IEC 60947-1
Rated impulse withstand voltage:	4kV (1.2/50µs) IEC 60664
Housing:	Grey flame retardant UL94
Weight:	≈ 80g
Mounting option:	On to 35mm symmetric DIN rail to BS EN 60715 or direct surface mounting via 2 x M3.5 or 4BA screws using the black clips provided on the rear of the unit.
Terminal conductor size	≤ 2 x 2.5mm <sup>2</sup> solid or stranded
Approvals:	Conforms to IEC 61812.
	<b>UL LISTED</b> IND. CONT. EQ. E111187
	CE, UKCA, C-tick and RoHS Compliant.
	EMC: Immunity: EN 61000-6-2 (EN 61000-4-3 10V/m 80MHz - 2.7GHz)
	Emissions: EN 61000-6-4

### INSTALLATION AND SETTING

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as required.



Installation work must be carried out by qualified personnel.

#### Setting the unit.

- Set the "Range" ④ to the required position (depending on whether seconds, minutes or hours are required), then set the "Set %" adjustment ⑤ as required. The "Set %" is a % of the selected range, so 60% of the 1 – 10 hour range will give 6 hours.

#### Applying power.

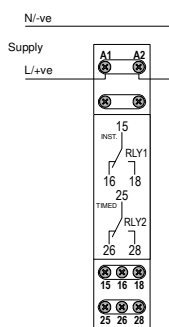
- Apply power and the green LED ① will start flashing to indicate timing is in progress. Contacts 15 and 18 will close as soon as power is applied (Instantaneous Relay - RLY1) and the red relay LED ② will illuminate. Contacts 25 and 26 (Timed Relay - RLY2) will remain closed during this period
- At the end of the delay period "t" contacts 25 and 26 will open 25 and 28 will close. The red relay LED ③ will illuminate.
- Both relays will remain in the energised state until power is removed. Re-applying power will repeat the whole process again.

#### Note:

<sup>1</sup> In accordance with IEC 61812, the green LED is permitted to extinguish during a voltage dip or momentary interruption of the power supply providing the state of the output relay does not change.

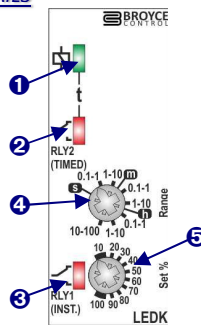
<sup>2</sup> The dip / interruption (reset) duration and levels are defined in the product standard however, the standard allows for these to be different from the levels actually specified.

### CONNECTION DIAGRAM



### SETTING DETAILS

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



### DIMENSIONS

