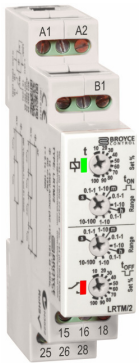


Terminal Protection to IP20



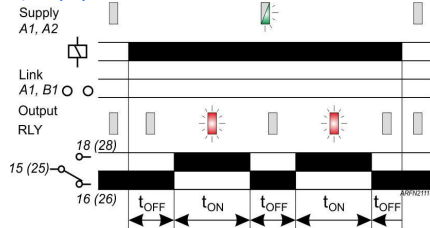
Dims: to DIN 43880  
W. 17.5mm

- ❑ **\*NEW\* 17.5mm DIN rail housing**
- ❑ **Microprocessor based**
- ❑ **Dual Function - Asymmetrical recycling "Off/On" **AF** or Delayed Pulse **DP****
- ❑ **Separate adjustments for "on" and "off" ranges**
- ❑ **7 Selectable time ranges (0.1 seconds – 100 hours)**
- ❑ **Fine adjustment of selected time range**
- ❑ **Multi-voltage input (12 – 230V AC/DC)**
- ❑ **DPDT relay output 8A**
- ❑ **Green LED indication for supply / timing status**
- ❑ **Red LED indication for relay status**
- ❑ **Conforms to IEC 61812**



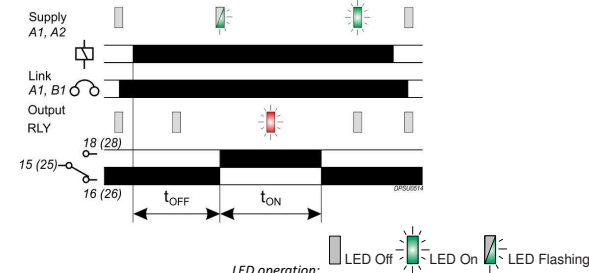
### FUNCTION DIAGRAMS

#### Asymmetrical Recycling Off / On (AF)



#### Delayed Pulse (DP)

(terminals A1 and B1 linked)



### INSTALLATION AND SETTING

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as required.
- If the Delayed Pulse function is required, place a link between terminals A1 and B1.



Installation work must be carried out by qualified personnel.

#### Setting the unit.

- Set the "t<sub>OFF</sub>" ④ and "t<sub>ON</sub>" ⑥ "Range" selectors to the required position (depending on whether seconds, minutes or hours are required).
- Set the "Set %" adjustment for the "t<sub>OFF</sub>" ③ and "t<sub>ON</sub>" 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.
- The red relay LED ② will illuminate to indicate the relay is the energised state when the "t<sub>ON</sub>" delay is running.
- When the "t<sub>OFF</sub>" delay is running and relay is de-energised, the red LED will remain extinguished.
- If the Delayed Pulse function is selected, the green LED will stop flashing and remain illuminated when the relay de-energises after the "t<sub>ON</sub>" period.

#### 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.

### TECHNICAL SPECIFICATION

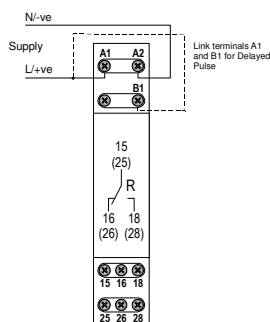
|                                                         |                                                                                                                                                            |                  |          |       |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------|-------|
| 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:                                        | Asymmetrical Recycling “Off / On” or Delayed Pulse (A1 > B1 linked)                                                                                        |                  |          |       |
| Timing ranges (7):                                      | Seconds:                                                                                                                                                   | Minutes:         | Hours:   |       |
| (applies to “t <sub>ON</sub> ” and “t <sub>OFF</sub> ”) | 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                                                                                                                                               |                  |          |       |
| Power on indication / Timing <sup>1</sup> :             | Green LED                                                                                                                                                  |                  |          |       |
| Relay status:                                           | Red LED                                                                                                                                                    |                  |          |       |
| Ambient temp:                                           | -20 to +60°C                                                                                                                                               |                  |          |       |
| Relative humidity:                                      | +95%                                                                                                                                                       |                  |          |       |
| Output (15, 16, 18 / 25, 26, 28):                       | DPDT relay                                                                                                                                                 |                  |          |       |
| Output rating:                                          | AC1                                                                                                                                                        | 250V 8A (2000VA) |          |       |
|                                                         | AC15                                                                                                                                                       | 250V 3A          |          |       |
|                                                         | 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                                                                                                                 |                  |          |       |
| Terminal screw:                                         | M3                                                                                                                                                         |                  |          |       |
| Tightening torque:                                      | 0.4Nm Max.                                                                                                                                                 |                  |          |       |
| Approvals:                                              | Conforms to IEC 61812.                                                                                                                                     |                  |          |       |



IND. CONT. EQ.  
E111187

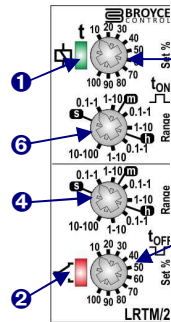
CE, UKCA, C-tick and RoHS Compliant.  
EMC: Immunity: EN 61000-6-2 (EN 61000-4-3 10V/m 80MHz - 2.7GHz)  
Emissions: EN 61000-6-4

### CONNECTION DIAGRAM



### SETTING DETAILS

- Power supply status / Timing (Green) LED
- Relay output status (Red) LED
- "t<sub>OFF</sub>" delay "Set %" adjustment
- "t<sub>OFF</sub>" delay "Range" selector
- "t<sub>ON</sub>" delay "Set %" adjustment
- "t<sub>ON</sub>" delay "Range" selector



### DIMENSIONS

