

Terminal Protection to IP20



Dims: to DIN
43880
W. 17.5mm

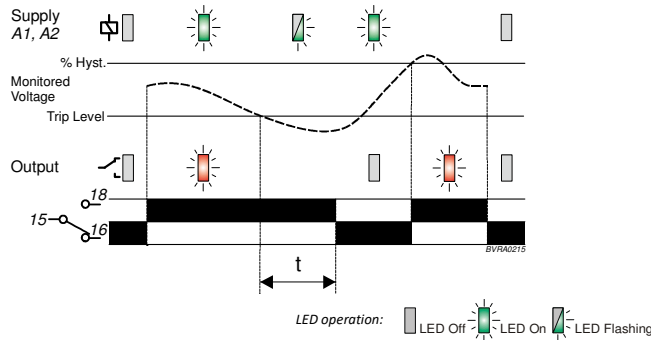
- ***NEW* 17.5mm DIN rail housing**
- **Microprocessor based**
- **Suited to 12V and 24V batteries**
- **Monitors own supply and detects and Under voltage condition**
- **Adjustment for Under voltage trip level (9 – 28V)**
- **Adjustment for Time delay (from an Under voltage condition)**
- **1 x SPDT relay output 8A**
- **Green LED indication for supply status**
- **Red LED indication for relay status**

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

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



FUNCTION DIAGRAM



INSTALLATION AND SETTING



Installation work must be carried out by qualified personnel.

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as required taking note of the polarity of the connections. Terminal A1 is the positive connection and A2 the negative.

Setting the unit.

- Set the Under voltage "Trip Level (V)" ④ adjustment to the voltage required.
- Set the "Delay (t)" ③ to minimum.

Applying power.

- Apply power and the green "Power supply" ① and red "Relay" ② LED's will illuminate, the relay will energise and contacts 15 and 18 will close. Refer to the troubleshooting table if the unit fails to operate correctly.
- If the supply voltage drops below the trip level setting, the green LED will start to flash. The relay will then de-energise (contacts 15 and 18 open) after the delay period "t" and the red LED will extinguish. The green LED will then remain permanently lit.
- When the voltage increases above the trip level + hysteresis, then relay will re-energise and red LED illuminate.

Troubleshooting.

The table below shows the status of the unit during a fault condition.

Supply fault	Green LED	Red LED	Relay
No supply	Off	Off	De-energised
Under voltage condition (during timing)	Flashing	On	Energised for set delay (t)
Under voltage condition (after timing)	On	Off	De-energised

TECHNICAL SPECIFICATION

Supply/monitoring voltage	12 – 24V DC
U (A1, A2):	75 – 125% U
Supply variation:	± 10%
Power consumption (max.):	3W
Monitoring mode:	Under voltage
Trip level:	9 – 28V DC
Hysteresis:	≈ 5% of trip level (factory set)
Setting accuracy:	± 10%
Repeat accuracy:	± 0.5% at constant conditions
Response time:	≈ 100ms
Time delay (t):	0 – 30 Sec. (± 5%) <i>Note: actual delay (t) = adjustable delay + response time</i>
Power on delay (Td):	≈ 1 sec. (worst case = Td x 2)
Power on indication:	Green LED
Relay status indication:	Red LED
Ambient temp:	-20 to +60°C
Relative humidity:	+95%
Output (15, 16, 18):	SPDT relay
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:	70g
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 ² solid or stranded

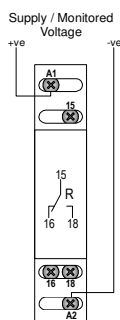
Approvals:



IND. CONT. EQ.
E111187

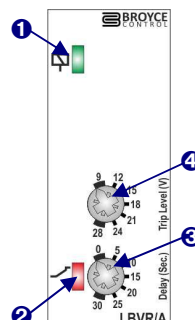
Conforms to IEC, CE, UKCA, and RoHS Compliant.
EMC: Immunity/Emissions to EN 61000-6

CONNECTION DIAGRAM



SETTING DETAILS

1. Power supply status (Green) LED
2. Relay output status (Red) LED
3. "Delay" adjustment
4. "Under" trip level adjustment



DIMENSIONS

