

Terminal Protection to IP20

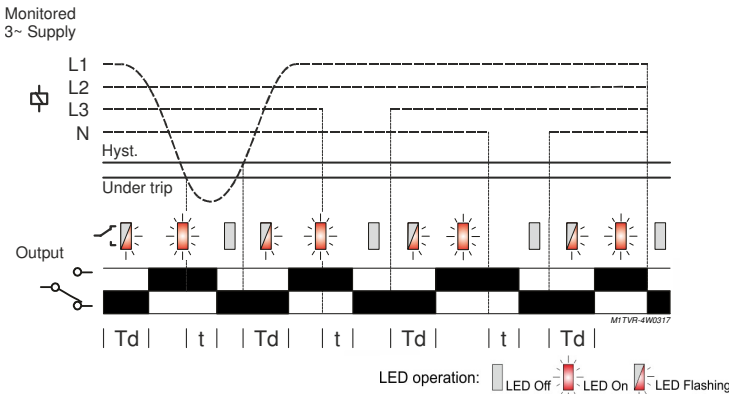


Dims: to DIN 43880
W. 17.5mm

- ❑ Red LED flashes during restart delay period (Td) confirming power is present and all phases are above the 75% trip level
- ❑ Meets DEWA regulations (Section 8.2)*
- ❑ Temperature rating up to +60°C
- ❑ Monitors own supply and detects an Under voltage condition on one or more phases
- ❑ Detects phase loss and neutral loss
- ❑ Fixed Under voltage trip level (75% of Un)
- ❑ Adjustable Time delay (5 – 10m)
- ❑ SPDT relay output 6A
- ❑ Red LED also used for relay status
- ❑ Compact 17.5mm DIN rail housing



FUNCTION DIAGRAM



INSTALLATION AND SETTING

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as required. The Connection Diagram below shows a typical installation, whereby the supply to a load is being monitored by the unit. If a fault should occur (i.e. fuse blowing), the relay will de-energise and assuming control of the external Contactor, de-energise the Contactor as well.

Installation work must be carried out by qualified personnel.

Applying power.

- Apply power and assuming all phases and neutral are present, the phase voltages are above the fixed trip level (plus hysteresis) the delay period (Td) will commence. The relay will remain de-energised and red LED flash during this period.
- After the set delay has elapsed, the relay will energise red LED will remain on.

Setting the unit

- Set the "Delay (Td)" adjustment as required.

Troubleshooting.

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

Supply status	Red LED	Relay
Phase or neutral missing	Off	De-energised
Under voltage condition	Off	De-energised
Following phase/neutral loss or voltage returning > 75% of Un	Flashing	De-energised for delay period (Td)

TECHNICAL SPECIFICATION

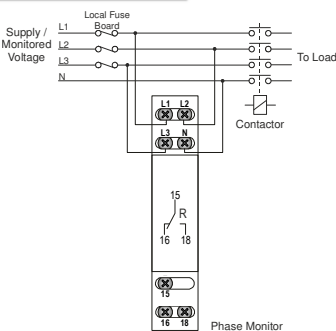
Supply/monitoring voltage	230/400V AC	
Un (L1, L2, L3, N):	230/400V AC	
Frequency range:	48 – 63Hz	
Supply variation:	70 – 110% Un	
Overtoltage category:	III (IEC 60664)	
Rated impulse withstand voltage:	4kV (1.2/50µs) IEC 60664	
Power consumption (max.):	10VA (L3), <0.1VA (L1, L2) @ 1.1 x Un	
Monitoring mode:	Under voltage	
Trip levels:	Under:	75% of Un (Fixed)
Trip accuracy:	± 5%	
Hysteresis:	≈ 2% of fixed trip level (factory set)	
Response time (t):	< 150ms	
Restart time delay (Td):	5 – 10m (± 5%)	
Setting accuracy:	± 5%	
Repeat accuracy:	± 0.5% at constant conditions	
Reset time:	≈ 150ms	
LED indication:	Red LED (Relay/timing status)	
Ambient temperature:	-20 to +60°C	
Relative humidity:	+95% max.	
Output (15, 16, 18):	SPDT relay	
Output rating:	AC1	250V 6A (1500VA)
	AC15	250V 5A (no), 3A (nc)
	DC1	25V 6A (150W)
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:	65g	
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	
Terminal screw:	M3 (Designed for use with PZ1 "pozi-driver")	
Tightening torque:	0.6Nm Max.	
Approvals:	Conforms to IEC, CE, UKCA, and RoHS Compliant. EMC: Immunity: EN 61000-6-2 Emissions: EN 61000-6-4	

* The following extract is taken from DEWA Regulations for Electrical Installations

8.2 UNDER VOLTAGE (U.V.) RELAYS WITH AUTO-RESET TIMER

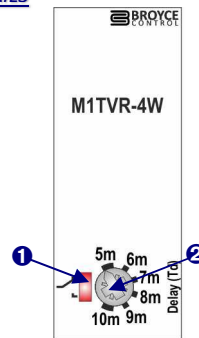
- 8.2.1 All air-conditioners or air-conditioning units/plants/equipment installed within the consumer's installation shall be provided with Under Voltage (U.V.) relays with fixed voltage cut off setting at 75% of the nominal supply voltage and auto-reset timer with adjustable time setting between 5 and 10 minutes.

CONNECTION DIAGRAM



SETTING DETAILS

1. Relay output/timing status (Red) LED
2. "Delay (Td)" adjustment



DIMENSIONS

