

Terminal Protection to IP20

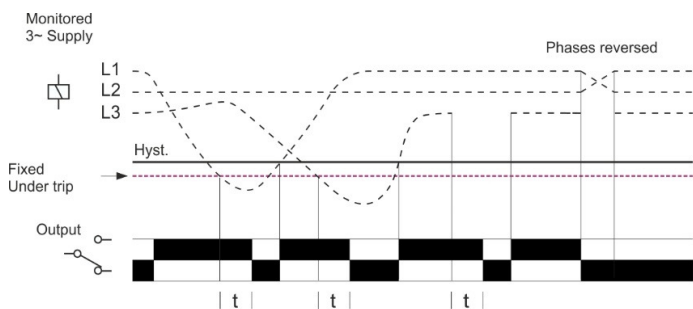


Dims: to DIN 43880  
W. 17.5mm

- 3-Phase voltage monitoring with fixed under voltage trip level
- True R.M.S. monitoring
- Monitors own supply and detects an under voltage condition on one or more phases
- Measures phase to phase voltages
- Detects incorrect phase sequence and phase loss
- Fixed under voltage trip level – 285V AC
- Fixed time delay – 100ms
- 1 x SPDT relay output 8A
- Green LED indication for supply status
- Red LED indication for relay status
- 17.5mm DIN rail housing



### FUNCTION DIAGRAM



### TECHNICAL SPECIFICATION

Supply/monitoring voltage	400V AC
U (L1, L2, L3):	400V AC
Frequency range:	48 – 63Hz
Supply variation:	± 30%
Overvoltage category:	III (IEC 60664)
Rated impulse withstand voltage:	4kV (1.2/50µs) IEC 60664
Power consumption (max.):	8VA
Monitoring mode:	Under voltage
Trip level (fixed) ± 2%:	285V AC
Hysteresis:	≈ 2% of trip level (factory set)
Repeat accuracy:	± 0.5% at constant conditions
Time delay (t):	≈ 100ms
Response time:	<50ms
Immunity from micro power cuts:	<50ms
Power on delay:	<1s
Power on indication:	Green LED
Relay status indication:	Red LED
Ambient temp:	-20 to +70°C (Supply voltage not to exceed 480V AC. If voltage above this, derate max. ambient temperature to +60°C)
Relative humidity:	+95% max.
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:	Orange flame retardant UL94 V0
Weight:	75g
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. <b>UL LISTED</b> IND. CONT. EQ. E111187 CE,  and RoHS Compliant. EMC: Immunity: EN 61000-6-2 (EN 61000-4-3 15V/m 80MHz - 2.7GHz) Emissions: EN 61000-6-4

### INSTALLATION AND SETTING

Installation work must be carried out by qualified personnel.

- 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 Phase monitoring relay. 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.

#### Applying power.

- Apply power and the green “Power supply” ① and red “Relay” ② LED’s will illuminate, relay energise and contacts 15 and 18 will close. Refer to the troubleshooting table if the unit fails to operate correctly.

#### Note:

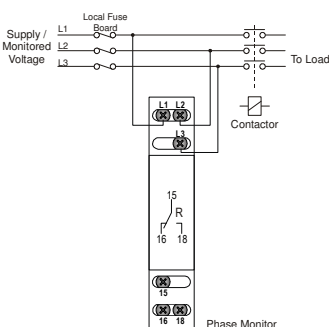
If the supply voltage increases above the maximum supply/monitoring voltage range by approx. 10% or more, the relay will de-energise immediately.

#### Troubleshooting.

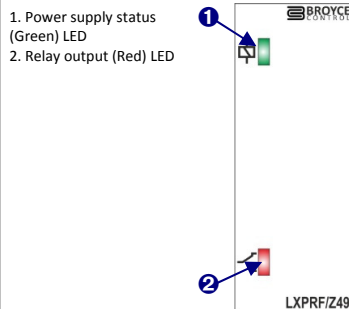
The table below shows the status of the unit during a fault condition.

Supply fault	Green LED	Red LED	Relay
Phase missing	On	Off	De-energised
Phases reversed (no delay)	Flashing	Off	De-energised
Phases below 285V	On	Off	De-energised

### CONNECTION DIAGRAM



### SETTING DETAILS



### DIMENSIONS

