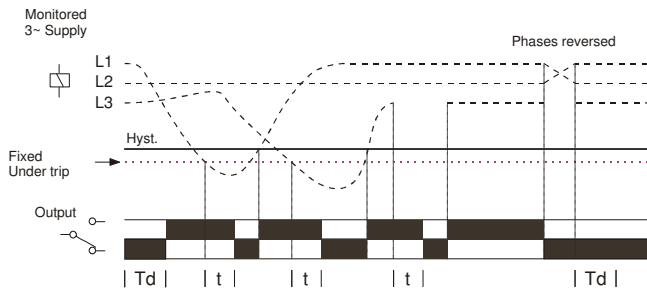




- **\*NEW\* 17.5mm DIN rail housing**
- **Microprocessor based**
- **True R.M.S. monitoring**
- **Monitors own supply and detects an Under voltage condition on one or more phases**
- **Measures phase to phase voltages**
- **Detects incorrect phase sequence and phase loss**
- **Fixed Under voltage trip level**
- **Fixed Time delay**
- **1 x SPDT relay output 8A**
- **Green LED indication for supply status**
- **Red LED indication for relay status**

### 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 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.

Installation work must be carried out by qualified personnel.

#### 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.

This device is not suitable for applications where there could be a percentage of re-regenerative voltage present during a fault condition, i.e. fuse failure. During these conditions a monitor that includes an adjustable under voltage trip level is necessary which allows this type of fault to be detected. It is therefore recommended that the LXPRT or LXPRT-4W phase monitors be considered.

#### Troubleshooting.

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

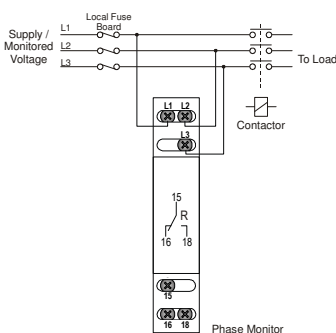
Supply fault	Green LED	Red LED	Relay
Phase missing	On	Off	De-energised
Phases reversed (no delay)	Flashing	Off	De-energised
Phase below 70% of Un (fixed under trip level [2])	On	Off	De-energised

### TECHNICAL SPECIFICATION

Supply/monitoring voltage	77 - 143V, 161 - 300V, 280 - 520V <sup>1</sup> AC	
U* (L1, L2, L3):	48 - 63Hz	
Frequency range:	± 30%	
Supply variation:	III (IEC 60664)	
Overvoltage category:	14kV (1.2/50µS) IEC 60664	
Rated impulse withstand voltage:	8VA	
Power consumption (max.):	Under voltage	
Monitoring mode:	Under	
Trip level (fixed) ± 2%:	77 - 143V: 77V	
Supply voltage	161 - 300V: 161V	
	280 - 520V: 280V	
Hysteresis:	≈ 2% of trip level (factory set)	
Repeat accuracy:	± 0.5% at constant conditions	
Immunity from micro power cuts:	<50mS	
Response time:	≈ 50mS	
Time delay (t):	≈ 100mS	
	<i>Note: actual delay (t) = delay + response time</i>	
Delay from Phase loss (tr):	≈ 150mS (worst case = tr x 2)	
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% 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, CE,  and RoHS Compliant. EMC: Immunity: EN 61000-6-2 (EN 61000-4-3 15V/m 80MHz - 2.7GHz) Emissions: EN 61000-6-4	

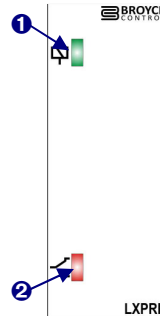
\* Please state Supply/monitoring voltage when ordering

### CONNECTION DIAGRAM



### SETTING DETAILS

1. Power supply status (Green) LED
2. Relay output (Red) LED



### DIMENSIONS

