

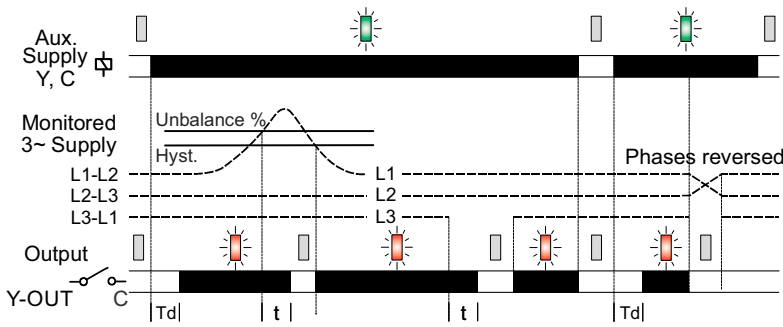
Terminal Protection IP20



- ✓ Wide monitoring range from 190 to 600VAC
- ✓ True R.M.S. monitoring
- ✓ Powered from auxiliary 24 Vac (will also power control circuit, see w/d below)
- ✓ Measures phase to phase voltages
- ✓ Detects incorrect phase sequence and phase loss
- ✓ Fixed time delays from startup and on fault (instantaneous on reversal)
- ✓ SPST output
- ✓ Green LED indication for auxiliary supply status
- ✓ Red LED indication for relay status

Dims.to DIN 43880
W.17.5mm

FUNCTION DIAGRAM



TECHNICAL SPECIFICATIONS

Aux. supply voltage:	24V AC 48-63Hz
Supply variation:	75 - 125% Un
Power consumption (max.):	1W
Monitoring voltage:	190 – 600V AC
Frequency range:	48-63Hz
Over voltage category:	III(IEC60664)
Rated impulse withstand voltage:	4kV(1.2/50µS) IEC60664
Monitoring mode:	Phase unbalance
Unbalance/Loss threshold:	67.5V ± 2.5V between highest & lowest phase to phase voltages
Reset level Hysteresis:	6.5V ± 1.5V below trip level
Repeat accuracy:	±0.5% at constant conditions
Power on delay (Td):	0.5s (worst case = Td x 2)
Time delay from fault (t):	<0.2s
Power on indication:	Green LED
Relay status:	Red LED
Ambient temp:	-20 to +60°C
Relative humidity:	+95%
Output N.O.:	SPST relay
Output rating:	6A @ 24VAC
Electrical life:	≥150,000 ops at rated load
Dielectric voltage:	2kVAC (rms) IEC60947-1
Rated impulse withstand voltage:	4kV (1.2/50µS) IEC60664
Housing:	Orange flame retardant UL94
Weight:	≈90g
Mounting option:	Onto 35mm symmetrical DIN rail or direct surface mounting via 2xM3.5/4 BA screws using the black clips on the unit's base.
Terminal conductor size:	≤ 2 x 2.5mm ² solid / stranded

BEFORE INSTALLATION, ISOLATE THE SUPPLY.



Installation work must be carried out by qualified personnel.

Connect the unit as required. The connection diagram below shows a typical installation, where 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 it as well.

Applying power.

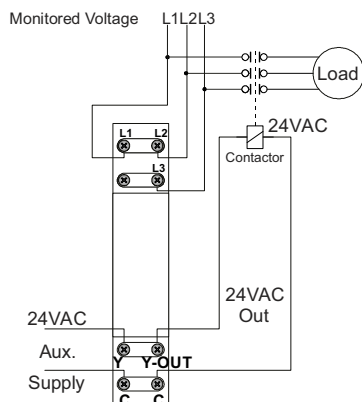
Apply power to terminals Y and C. The green *Power Supply* LED will illuminate. Apply the monitored 3-phase supply to terminals L1, L2 and L3. The red *Relay* LED will illuminate, relay energize and contact Y out & C will make. The voltage that is applied to the 24VAC auxiliary input will now be present on those terminals and the contactor, if connected, will energize.

Refer to the troubleshooting table that follows if the unit fails to operate correctly.

TROUBLE SHOOTING

Type of Fault	Green LED	Red LED	Relay Status
Aux. supply missing	Off	Off	De-energized
Phase reversal	On	Off	De-energized
Phase missing or below threshold <i>see technical specification</i>	On	Off	De-energized
Phase unbalance exceeds threshold	On	Off	De-energized

CONNECTION DIAGRAM



SETTING DETAILS

1. Aux. Power supply status Green LED

2. Relay output status Red LED



DIMENSIONS

