# **OLR600**

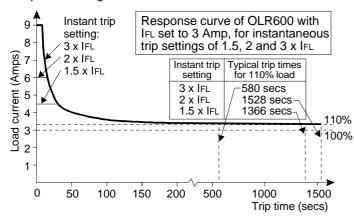
# THREE PHASE OVER CURRENT RELAY WITH DC AUXILIARY POWER SUPPLY

The OLR600 is a relay-based unit for use in the protection of mains or generator AC supplies against overload or short-circuit faults. The trip relay provides a measured response, giving an instant trip for large over currents or longer time delays for less severe overload faults.

The unit is powered from a DC supply: 12 or 24V versions are available. The measurement inputs operate with three current transformers, wired in star formation as shown below right. The OLR requires the CT's to give an output of between 3 and 5 Amps at system full load current; CTs with 5 Amp rated secondary coils are normally therefore used.

The front facia 'set full load' potentiometer is user set (between 3 and 5 Amps) to match the full load CT secondary current. With DC power applied and all 3 phase currents below this 'set load' level, the OLR's relay is energised and the left-hand front facia LED is lit.

The right hand 'full load' LED lights if any of the phase currents rise above the full load setting. If any phase current rises above 110% of full load, the OLR begins a timed response, with the relay de-energising at the end of the time delay. The relay trip time automatically varies with overload conditions, giving a quicker trip response for higher current levels:-



A front facia 'set instant trip' potentiometer, expressed in multiples of the full load current, allows the current versus time response to be limited to a preset maximum (above which the relay trips instantly).

Once the relay de-energises and the load current reduces, the automatic timing circuit ensures that the relay does not re-energise for some time. The actual time is again dependent on the level of measured load current (typically 15 seconds if the load current falls to zero).

The OLR is housed in a robust DIN rail or surface mountable case.

# When ordering, please specify:-

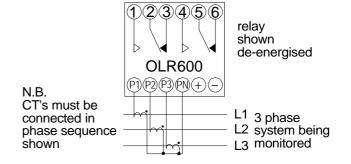
- a) Product type number (OLR600)
- b) DC supply voltage (12 V or 24 V)



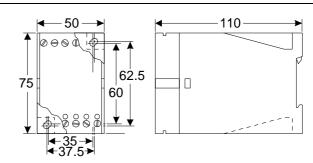
## **Product Specifications**

Power supply:	
operating voltage range	12 V units: 9 - 15 VDC
	24 V units: 18 - 30 VDC
power consumption	< 1.5 W
Relay output:	
contact type	volt free DPCO contacts
current rating	5 A max. @ 240 V AC1
rated operations	2 x 10 <sup>5</sup> operations
trip time	load variable (see curve left)
General:	
operating temp.	−10 to +55°C
weight	approx. 360 g
EMC emission/immunity	to EN50081-2/EN50082-2

### Connection



#### **Dimensions**





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