

Electronic Motor Protection Relay

NewElec OLR 8 and UCR 80 Series



The OLR 8 and UCR 80 series of electronic motor protection relays monitor one phase of a 3 phase motor through a 1Amp secondary input from a current transformer.

Overcurrent related problem

The NewElec OLR 8 is able to prevent mechanical breakdowns related to impact torque conditions such as:-

- Damaged screw conveyors
- Damaged bucket elevators
- Damaged gear boxes, chains, etc
- Preparatory overload warning
- Stall detection
- Regulating of current demand
(Especially if used in conjunction with the NewElec UCR 80)

Ordering Details

OLR 8 MC 1 S

Equipped with one main trip contact which energises after a user selectable time delay and one instantaneous changeover contact which energises upon detection of the fault.

Undercurrent related problems

The NewElec UCR 80 is able to prevent problems related to:-

- Blocked delivery or loss of prime in pumping applications
- Conveyor belt installations where they are running idle, or couplings break
- V-belt slippage or blocked filters on ventilation fans
- Drop in efficiency due to pump impeller wear

Ordering Details

UCR 8 MC 1 S

NewElec OLR 8 and UCR 80 Series

Settable parameters

	OLR 8	UCR 80
Load setting dial*	30 to 120%	30 to 120%
Trip time delay	1 to 10s	5 to 50 s
Auto or manual reset	selectable	selectable

* $\frac{\text{Load to be monitored}}{\text{Current transformer ratio}} \times 100 = \% \text{ load setting}$

Additional Benefits

- The OLR 8 and UCR 80 are chassis mounted relays incorporating an 11-pin plug-in base
- The main trip output relay is Fail-safe
- Localised reset facility
- Three LED displays for 'power on', 'over or under load' detection and 'trip indication' are provided
- User-selectable auxillary supply voltage of 110 or 220V A.C.
- A 1 year warranty is offered with the product

NewElec OLR 8 and UCR 80 Series

Technical Information

Product Specifications

Input Converter

Overload	: 600% Load setting 5 min
Capacity	: 800% Load setting 1min

Control Supply

110 or 220Volt A.C.	: ± 10%
Frequency	: 42 to 67 Hz
Power	: 1,5 VA
Fail-safe operation	: Unit trips on loss of Control supply

Trip Delay

OLR 8	: 1 to 10 sec
UCR 80	: 5 to 50 sec
Level setting	: 4%
Linearity	: 4%
Time Accuracy	: 10%

Load Level Setting

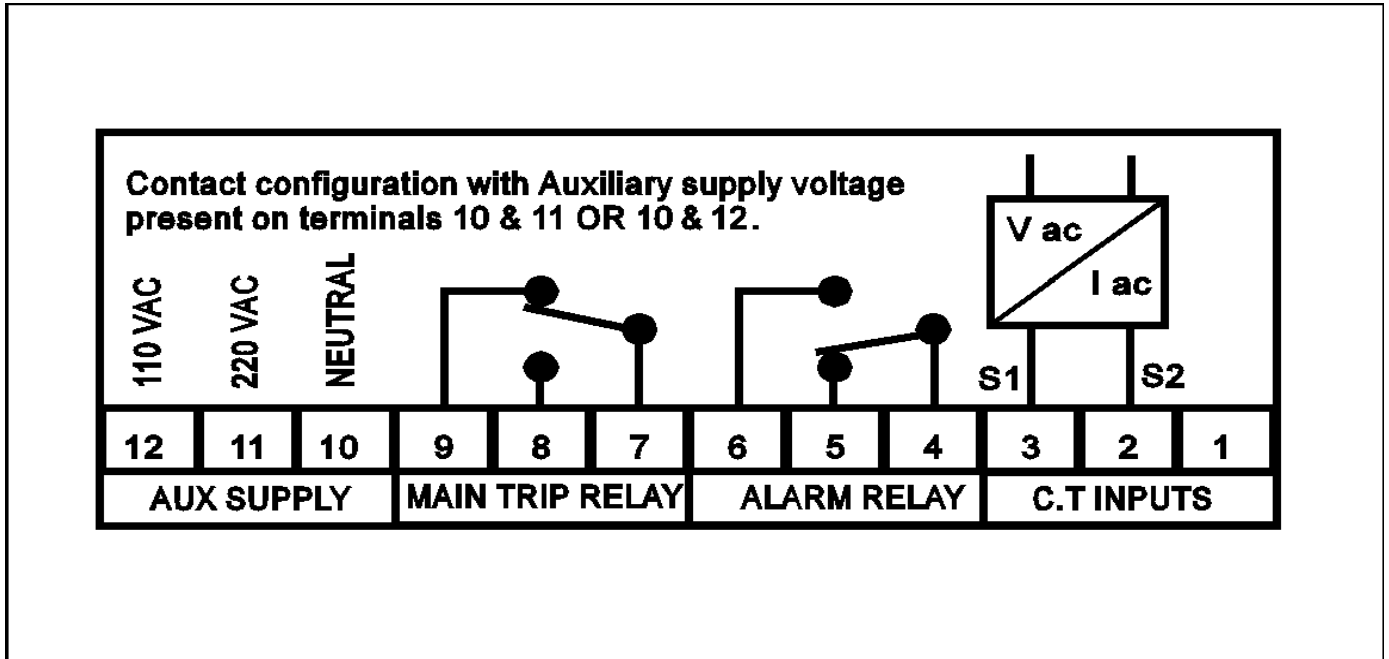
Span	: 30% to 120% In
Level Setting Accuracy	: ± 4%
Linearity	: ± 4%
Repeatability	: ± 1%
Detection Level	: ± 4%

Main Trip and Auxillary Relay Contacts

Current rating	: 6Amp 220V A.C.
Configuration	: 1 x Form C

NewElec OLR 8 and UCR 80 Series

Electrical Wiring Diagram



Dimensional Diagram

