

TYPES: CLA 1xxx, CLA 2xxx, CLA 3xxx, CLA 4xxx (spco)

■ FEATURES

- Din rail mounted Modular housing
- Under current monitoring
- Over current monitoring
- Over & under current monitoring
- Choice of 1 Amp, 2 Amps, 5 Amps monitoring ranges
- Calibrated current control scales on settings
- Three LED's for indication



■ DESCRIPTION & MODE OF OPERATION

A range of Din rail mounted Modular housing AC current level monitoring relays, available either as under current monitoring, over current monitoring or combined under and over current monitoring. Available in four mode of operation configurations as follows:-

CLA 1 – Under current monitoring, setpoint adjustable between 10-100% of nominal I_n , with an adjustable delay on tripping timer 1-10 secs. Providing the monitored current level is above the set under current trip level the output relay will energise and the green “Healthy” LED will illuminate. If the current falls below the set trip level the unit will start timing, this will be indicated by the yellow “Timing” LED. If the monitored current does not recover before the set time period has elapsed the output relay will de-energise and the red “Fault” LED will illuminate. The unit will reset automatically when the current level returns to normal.

CLA 2 – Under and over current monitoring, both setpoints individually adjustable between 10-100% of nominal I_n , without an adjustable delay on tripping timer. Providing the monitored current level is above the set under current trip level and below the set over current trip level the output relay will energise and the green “Healthy” LED will illuminate. If the current level deviates outside these limits the output relay will de-energise and the corresponding “U/C” or “O/C” red “Fault” LED will illuminate. The unit will reset automatically when the current level returns to normal.

CLA 3 – Over current monitoring, setpoint adjustable between 10-100% of nominal I_n , with an adjustable delay on tripping timer 1-10 secs. Providing the monitored current level is below the set over current trip level the output relay will be de-energise and the green “Healthy” LED will be illuminated. If the current rises above the set trip level the unit will start timing, this will be indicated by the yellow “Timing” LED. If the monitored current remains above the trip level for the full set time period then the output relay will energise and the red “Fault” LED will illuminate. The unit will reset automatically when the current level returns to normal.

CLA 4 – Over current monitoring, setpoint adjustable between 10-100% of nominal I_n , with an adjustable 1-10 secs “Initial Start Up Delay Timer”. The “Initial Start Up Delay Timer” prevents the unit from tripping for a timed period from application of the coil voltage, indicated by the yellow “Timing” LED. After the timed period has elapsed and providing the current has by then fallen to less than the set over current trip level the green “Healthy” LED will illuminate. If the monitored current subsequently rises above the set over current trip level the output relay will energise immediately ($\leq 100\text{mSec}$) and the red “Fault” LED will illuminate. The unit will reset automatically when the current level returns to normal.

All four configurations are available with a choice of three current input ranges 0.1-1 Amps, 0.2-2 Amps and 0.5-5 Amps, above 5 amps an external current transformer is required with either a 1 Amp or 5 Amp secondary matched to a 1 Amp or 5 Amp relay as appropriate. **A range of 1 Amp & 5 Amp secondary CT's can be found from our CT section pages 156 to 164.**

The setpoint(s) potentiometers are current calibrated to allow accurate setting of the trip level/s. Isolation of the monitored current is provided by an internal current transformer.

■ SPECIFICATIONS

Current monitoring

Ranges: 1 Amp, 2 Amps, 5 Amps
 Overload ratings: 100% of In continuous
 150% of In for 30 seconds
 250% of In for 5 seconds
 U/C trip level: Adjustable 10-100% of In
 O/C trip level: Adjustable 10-100% of In
 Hysteresis: Fixed + 4% of trip level

General

Isolation: Via internal CT
 2KV for 1 min
 LED indication: Green "Healthy"
 Yellow "Timing"
 Red "Fault"
 CE marked: Yes

Timing

Delay timer: 1-10 secs (not CLA 2 versions)
 Response time: <100 mSec

Coil voltages

Coil voltages: 24VDC +/- 15%
 24VAC, 110VAC, 230VAC +/- 15%

Power consumption:

8VA

Contact output

Type: SPCO
 Rating: 8 Amps / 250VAC AC1
 Mechanical life: 30 Million ops



■ ORDERING INFORMATION

TYPE	CONFIGURATION	CURRENT RANGE	COIL SUPPLY
CLA	1 Under Current with timer	1 0.1-1 Amp	37 24VDC
	2 Under & Over Current without timer	2 0.2-2 Amps	07 24VAC
	3 Over Current with timer	5 0.5-5 Amps	01 110VAC
	4 Over Current with timer *		50 230VAC

*The timer on the CLA 4 acts as an initial start up delay timer and only prevents tripping on the initial application of the coil supply, thereafter the trip is within 100mSec.

