# Type: 45150 Current Relay

The unit is designed to monitor an AC or DC current taken by a load. When the supply is switched on the green "supply on" LED will illuminate. As the current being monitored reaches the level set on the front of the unit, the relay will change state after the set time delay. If the monitored current falls below the set level minus the hysteresis, the relay changes state instantly. When YI and M are linked together, the unit remains latched until the link or supply is removed. The unit incorporates an adjustable on delay to ignore motor start up currents.



# INSTALLATION AND SETTING

**BEFORE INSTALLATION, ISOLATE THE SUPPLY.** Connect the supply as shown in the diagram below. Connect the monitored input across '**M**' and '**Y2'**, '**Y3'** or '**Y4'** depending on the required range in line (series) with the load. Apply power and the green '**supply on'** LED should illuminate. If the current is below the set level, the relay will be deenergised (red 'relay' LED extinguished) if the switch is in the '**N**' (normal) position or energised (red LED illuminated) in the '**I'** position. If this does not occur check the wiring to the unit. Set the required '**%** level', '**%** hysteresis', 'fault delay' and 'on delay' using the front mounted adjustments. If the latching facility is required, connect a link or normally closed push button across terminals '**Y1'** and '**M**'

### <u>CONNECTION DIAGRAM</u>



### Current RELV Current Current

### **TECHNICAL SPECIFICATION**

Supply Voltage Un:	24V, 110V, 230V AC 48 - 63Hz (Galvanic isolation by transformer)
Supply Variation:	85 - 115% of Un
Isolation: Power	Overvoltage cat. III (IEC 664)
Consumption:	3VA maximum
Monitored Current:	Y2: 5 – 100mA AC/DC (± 10%) 1.5A continuous O/L, 5A for 1 sec Y3: 0.05 – 1A AC/DC (± 10%)
	6A continuous O/L, 17A for 1 sec
	Y4: 0.5 – 10A AC/DC (± 10%)
	15A continuous O/L, 55A for 1 sec
Hysteresis:	5 to 50%
Time Delay (t): (from fault)	0.1 to 3 seconds (± 20%)
On Delay (ton)	0.1 to 10 seconds (± 20%)
(@ power on)	
Reset Time	≈ 200mS
Temperature	
Range:	-20 to +60°C
Relative Humidity:	+95%
Contact Rating:	SPDT
	AC I 250V AC 10A (2500VA)
	AC 15 250V AC 6A
	DC I 25V DC 10A (250W)
Electrical Life:	Minimum 150,000 ops at rated load
Housing:	Orange flame retardant UL94 VO
Weight:	25 lg approx.
Mounting Option:	Onto 35mm symmetric DIN rail
	to BS5584:1978
	(ENSO 002, DIN 46277-3)
Terminal	
Conductor Size:	Max $2 \times 1.5$ mm <sup>2</sup> stranded (terminated) Max $2 \times 2.5$ mm <sup>2</sup> solid
Approvals:	Conforms to: UL, CUL, CSA, IEC. <b>(€</b> Compliant

# MOUNTING DETAILS



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