

ELM V2 - EARTH LEAKAGE RELAY

Relay designed with AS/NZS 2081 Section 6 guidance

Applications

The Ampcontrol ELM V2 Earth Leakage Relay has been designed and approved for use on earth fault limited systems providing earth leakage protection (earth fault protection). The relay is also suitable for other applications where equipment or system earth leakage protection is required.

Features

- Fail safe / Non-Fail Safe operation
- Continual monitoring of the toroid
- Adjustable trip level and time delay settings
- Bar graph to monitor leakage
- 4-20 mA output for remote indication
- Maximum leakage since last power up/reset stored in memory
- AC or DC supply operation
- Functions normally for two (2) seconds during extreme power dip or power loss



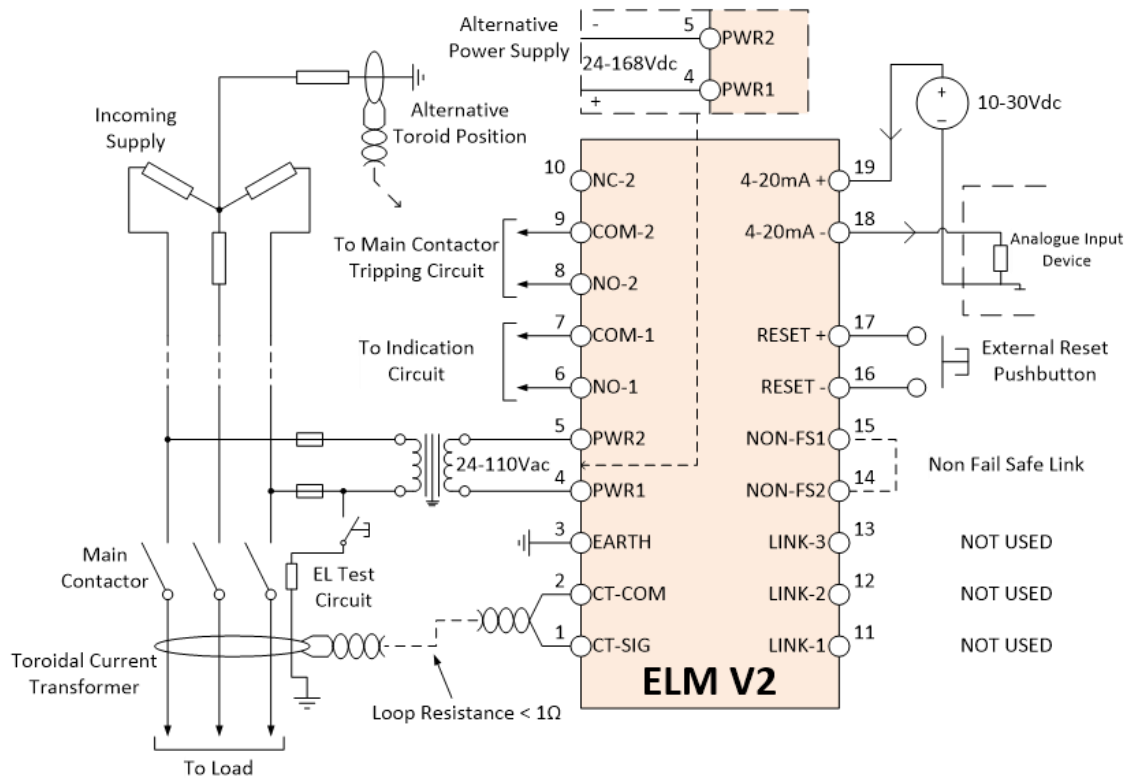
* Dial colour may vary

Product description

The ELM V2 Earth Leakage Relay utilises a microprocessor design, providing a definite time operating characteristic with adjustable trip sensitivity and time delay. The relay latches when tripped and provides normally open and change-over relay contacts. The relay supports an external reset switch, and a 4-20 mA interface allows external monitoring.

The ELM V2 Earth Leakage Relay is housed in a stainless-steel case and can be either 'DIN Rail' or 'Panel' mounted through a 69 x 39 mm cut out. When panel mounted the front of the ELM V2 relay is designed to provide IP56 ingress protection. An attachment to prevent unauthorised adjustment of the trip settings is available separately

Diagram



SPECIFICATIONS	
Supply Voltage	
<i>Voltage</i>	24-110 VAC +/- 20 %, 50 Hz 24-168 VDC +/- 10 %
<i>Power Consumption</i>	< 3 W
<i>Operating Temperature</i>	0 °C to 60 °C
<i>Humidity</i>	Between 10 % relative humidity and the dew point, non-condensing
Operating Frequency	
<i>Frequency</i>	50 Hz
<i>Accuracy</i>	10 % @ 50 Hz
Compliance	
N/A	Relay designed with AS/NZS 2081 Section 6 guidance
Relay Contacts	
<i>Contacts</i>	1 x NO / 1 x CO
<i>Ratings</i>	250 V, 1.6 A, 400 VA
<i>Relay to Toroid</i>	< 1 Ω
4-20 mA Output	
<i>4-20 mA Output</i>	4 mA => 0 % leakage, 20 mA => 120 % leakage (100 % = 17.33 mA)
<i>Loop Supply Voltage</i>	10 – 30 VDC
<i>Max. Loop Resistance</i>	700 Ω at 24 VDC loop supply
<i>Accuracy</i>	+/- 2 % of full scale

SPECIFICATIONS Cont'd

Mechanical

<i>Dimensions</i>	77 w x 47 h x 116 d (mm)
<i>Cut-Out Dimensions</i>	69 w x 39 h (mm)
<i>Weight</i>	500 g
<i>IP Rating</i>	IP56 (when panel mounted)

Trip and Time Delay Settings

<i>Switch Position</i>	<i>Trip Level (mA) ±10 %</i>	<i>Time Delay (ms) +0 ms, -20 ms</i>
0	100	50
1	150	100
2	200	150
3	250	200
4	300	250
5	350	300
6	400	350
7	450	400
8	500	450
9	750	500
A	1000	750
B	1250	1000
C	1500	1500
D	1750	2000
E	2000	2500
F	2500	3000

Item Numbers

179723	ELM V2 Earth Leakage Relay
179513	ELD, ELV, ELM Service Kit
101399	DIN Rail Mounting Kit (Suit ELD, ELV & ELM)
120255	ELC/F Adapter Kit (Suit ELM / ELD / ELV)
164672	Lockable Cover (Suit ELD, ELV & ELM)
175279	Adaptor BRAMCO to ELD/ELV/ELM
121023	Clip ELD Panel Mount Retaining (1x)
174378	Clip ELD DIN Rail Mount Retaining (1x)
115438	Toroid – 25 mm ID (DIN Rail Mounted)
115439	Toroid – 60 mm ID
115440	Toroid – 85 mm ID
115441	Toroid – 112 mm ID

The toroids specified for the more advanced ELD V3 and ELV relay products meet the performance required by the ELM V2 and can be used as alternative toroid options. For further information on these toroids see appropriate relay documentation.

Find Out More

For more information on this product, contact Ampcontrol Customer Service on +61 1300 267 373 or customerservice@ampcontrolgroup.com or visit the Ampcontrol website: www.ampcontrolgroup.com

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