



Earth Leakage Relay

'ELF 2'

Application

The Bramco ELF2 has been designed to detect earth current faults flowing in a power system and to provide visual indication of Earth Leakage conditions. This relay is specifically designed to protect systems supplying VF Drives and provides very high immunity to converter noise

Features

- High noise immunity from VSD loads
- Adjustable trip current and delay time
- Easily configured latch/non-latch and fail safe/non-fail safe operation
- Toroid open fault indication
- LCD display of actual leakage current - as percentage of trip value graphically
- Protection settings and status visible on the LCD screen at all times
- Setup parameters, measurement tripping information and clearing time available via RS485 MODBUS
- Summary of relay trip settings available through a momentary pressing of ELF's front button
- Multiple supply input voltage
- Front panel/relay latch reset button with rear panel disabling ability
- Provision for a remote reset button
- Clear hinge cover offers protection to IP66
- Current loop or voltage output 4-20mA or 2-10V
- Use with range of Bramco Earth Leakage toroids
- Last fault duration reading

Bramco Contacts

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Specifications

Supply

- 120vAC and 240vAC 50/60Hz switch selectable
- 24 - 48VDC

Voltage Tolerance: ± 20%

Contacts: 2pole changeover 5A-240v

Ranges include:

- | | |
|---------|---------|
| ■ 500mA | ■ 500mS |
| ■ 1A | ■ 1s |
| ■ 2A | ■ 2s |
| ■ 5A | ■ 5s |
| ■ 10A | ■ 10s |
| ■ 20A | ■ 20s |

Trip Current

- A00842: 50 - 500mA
A00976: 10% - fullscale for 500mA, 1A, 2A and 5A ranges
A01019: 10% - fullscale for 2A, 5A, 10A, 20A ranges

Time Delay

- A00842: 30 - 500ms
A00976: 30ms - full-range for 500ms, 1s, 2s and 5s ranges
A01019: 30mS - fullrange for 2s, 5s, 10s, 20s

Monitoring Outputs

- 4 - 20mA output into 250 Ω
- 2 - 10V output into 5k Ω
- RS485 MODBUS ASCII

Material/Housing

- Glass filled Noryl UL94V1

Fascia Mounting

- Fascia Mount Din dimension 96 x 96 with clear opening door bezel IP66 rated.
- Panel opening 90mm x 90mm.
- Pheonix plugs provided.

Weight

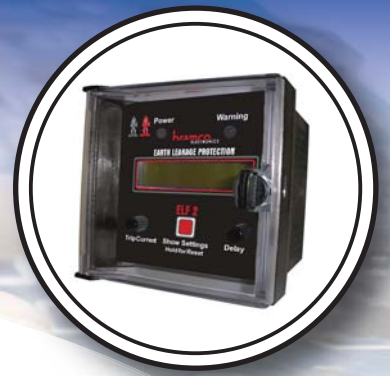
- 750gms

Ordering Information

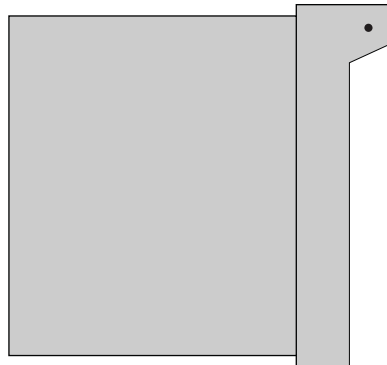
Order Codes

- A00842: 500mA/500mSec (MDA)
A00976: Multi-range. Indicate required current range with order (500MA, 1A, 2A, 5A)
A01019: Extended - range. Indicate required current range with order: (2A, 5A, 10A, 20A)

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Enclosure Dimensions

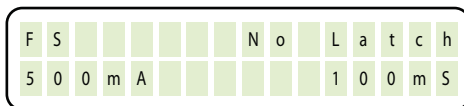


Clear protective front door (opens towards the left)

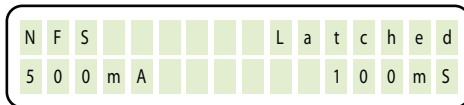


Note: 96mm total distance including enclosure.

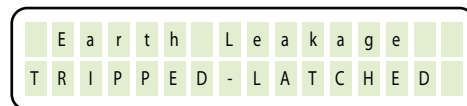
Typical Displays



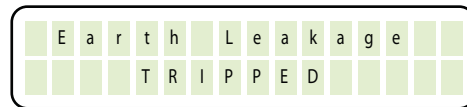
Show settings (either turn knob or momentary push of button)
Unit set as Failsafe and not latched, for 500mA trip current and 100mS delay



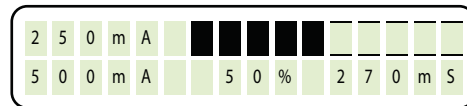
Show settings (either turn knob or momentary push of button)
Unit set as Non Failsafe and not latched, for 500mA trip current and 100mS delay



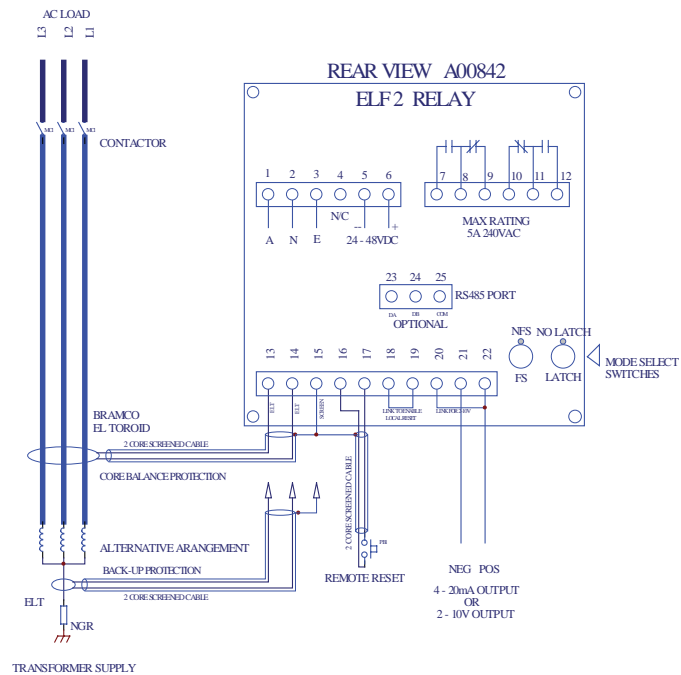
After trip with latch enabled



After trip with latch disabled



Connection Details



BRAMCO ELECTRONICS Product Sheet

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