

## Application:

Leader's in Innovative Protection Systems, Bramco's elf3 detects earth fault currents flowing in a power system and provides visual indication of earth leakage conditions. The elf3 is specifically designed to protect systems supplying VF drives and provides very high immunity to converter noise.

**Compliant** to latest Australian standards, the elf3 is the next generation in earth leakage protection, offering improved features over ELF2.

## Features:

- 32-bit microprocessor core
- 50-60Hz (VSD Mode Off)
- 5-100Hz (VSD Mode On)
- Backlit Graphic LCD display
- Settings adjustable through menu
- Optional password protection for settings
- CT/Toroid open fault indication
- Failsafe / non failsafe and latch/non-latch operation, configured via the menu
- Red LCD backlight to clearly indicate a trip condition, yellow backlight for warning and green for healthy
- Protection settings and status clearly visible at all times
- Diagnostics screen to view all current conditions and settings
- Wide voltage supply range
- Local reset functionality configurable through the menu
- Provision for a remote reset button
- Clear opening door protection to IP66
- Instrumentation output - 4-20mA  
Current loop or 2-10V voltage output
- Use with range of Bramco Earth Leakage Toroids
- Last fault duration reading
- Logging of previous trip details
- Current settings, measurement information and status available via RS485 MODBUS ASCII/RTU
- Communications settings such as baud rate configurable via menu
- Backward compatible with ELF2 when installed with new 1000T EL Toroid.

## Specifications:

### Supply

- 24 - 48V AC (50/60Hz) /DC
- 110-240VAC (50/60Hz)
- 3VA
- Voltage Tolerance: -25% to +20%
- DPCO 5A 250VAC (General)
- 5A 30VDC (Resistive) (100VA Max)
- 0-60° C
- 30-500mA            50-500ms
- 0.5A-5A            50ms-20s
- 2A-20A            50ms-20s

### Relay Contacts:

### Operating Temp:

### Model Variants:

### Monitoring

### Outputs:

- 4-20mA output into 500 ohm or 2-10V output with internal resistors
- RS485 MODBUS RTU/ASCII
- Glass filled Noryl L94V1

### Material:

### Fascia

### Mounting:

- Fascia Mount din dimensions 96 x 96mm with clear opening door bezel IP66 rated
- Panel opening 90 x 90mm
- Phoenix plugs provided

### Weight:

- 500g



## Bramco Contacts:

Bramco International  
16 Templar Place  
Bennetts Green 2290  
[www.bramco.com.au](http://www.bramco.com.au)

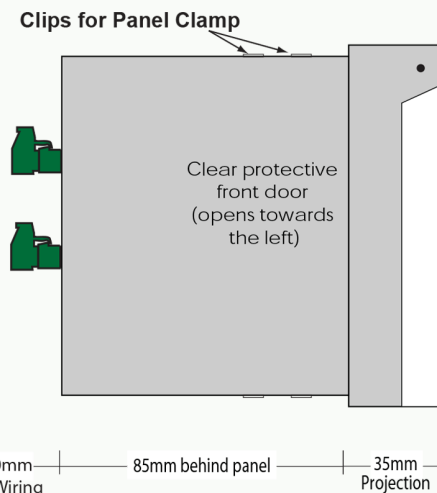
Telephone (02) 49544721  
Email [info@bramco.com.au](mailto:info@bramco.com.au)



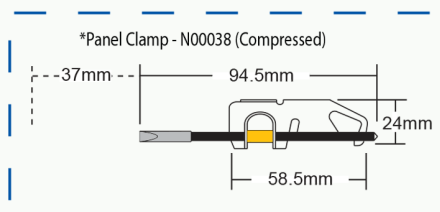
**= Complies to latest Standards**



## Enclosure Dimensions:



\*Supplied with 1 x Sealing Gasket and 2 x Panel Clamps



## Compliance:

### AS/NZS 2081 - 2011

- Electrical Equipment for Coal and Shale Mines
- Electrical Protection Devices

The elf3 comes with a 2 year warranty.

## Ordering Information:

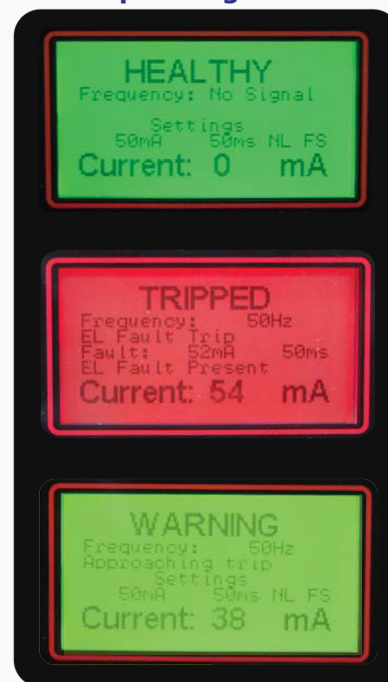
A01324	elf3 Compliant	30-500mA 50-500ms
A01325	elf3 Low Range	0.5A-5A 50ms-20s
A01326	elf3 High Range	2A-20A 50ms-20s

## Toroid Ordering Information:

A01334	Toroid (1000T)	40mm
A01335	Toroid (1000T)	72mm
A01336	Toroid (1000T)	130mm
A01337	Toroid (1000T)	200mm
A01338	Toroid (1000T)	300mm

Typical displays coloured to match operating status:

Green = Healthy



Red = Fault

Yellow = Warning