



elf3 – Microprocessor Earth Leakage Module

Overview:

M-Tronix is your source for highly innovative electronic control, protection, and monitoring systems for mining and general industry. M-Tronix is your exclusive distributor of the **Bramco** product range.

Leaders in Innovative Protection Systems, M-TRONIX's elf3 is compliant to the latest Australian standards, including AS2081:2011. Utilising microprocessor technology elf3 provides next generation EL protection to VVVF drives.

Application:

Leaders in Innovative Protection Systems, the Bramco M-Tronix 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 information 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 m-Tronix 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/DC (50/60Hz)
- 110-240VAC (50/60Hz)
- 3VA

Voltage Tolerance:

- -25% to +20%

Relay Contacts:

- DPCO 5A 250VAC (General)
- 5A 30VDC (Resistive) (100VA Max)

Operating Temp:

- 0-60° C

Model Variants:

- 30-500mA 50-500ms
- 0.5A-5A 50ms-20s
- 2A-20A 50ms-20s

Monitoring Outputs:

- 4-20mA output into 500 ohm or
- 2-10V output with internal resistor
- RS485 MODBUS RTU/ASCII

Material: Glass filled Noryl L94V1

Fascia Mounting:

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

Panel opening: 90 x 90mm

Weight: 500g

Compliance:

AS/NZS 2081 - 2011

Electrical Equipment for Coal and Shale Mines - Electrical Protection Devices

The elf3 comes with a 2-year warranty

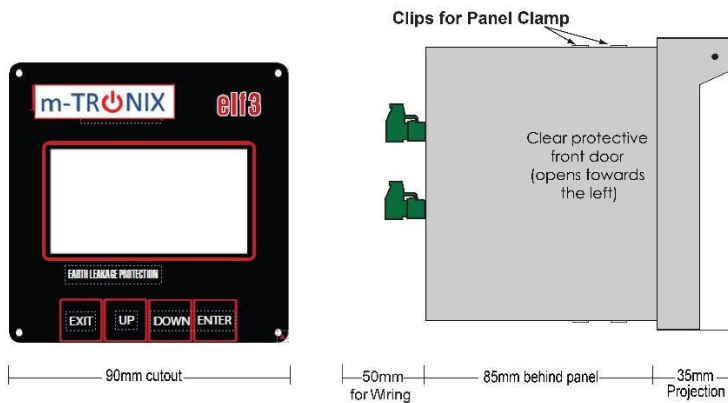


Ordering Information:

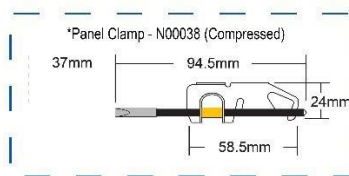
| | |
|--------------------------------|----------|
| A01324 elf3 Compliant 30-500mA | 50-500ms |
| A01325 elf3 Low Range 0.5A-5A | 50ms-20s |
| A01326 elf3 High Range 2A-20A | 50ms-20s |

Toroid Ordering Information:

| |
|-----------------------------|
| A01334 Toroid (1000T) 40mm |
| A01335 Toroid (1000T) 72mm |
| A01336 Toroid (1000T) 130mm |



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



Typical displays coloured to match operating status:

| | |
|---------------------|---|
| Green = Healthy |  |
| Red = Fault |  |
| Yellow = Warning |  |

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 www.m-tronix.com.au

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