



## EARTH LEAKAGE AND EARTH CONTINUITY RELAY

### Overview:

Leaders in Innovative Protection Systems, M-TRONIX's ELEC2 is compliant to the latest Australian standards. Utilising microprocessor technology ELEC2 provides next generation EL protection to VVVF drives.

### EL Features:

- 16-bit microprocessor core
- 50-60Hz. (VSD Mode off)
- 5-100Hz. (VSD Mode on)
- Failsafe/Non-Failsafe operation
- Latch/No Latch operation
- EL Toroid open monitoring
- Adjustable Trip Current
- Adjustable Trip Delay Time

### Status LEDs for -

- Trip, Warning, Frequency
- Power/Open circuit toroid
- Local/External EL latch reset
- May be used on limited/unlimited neutral systems with matching M-TRONIX ELT3 (1000T)
- Separate control contacts are provided
- Analog Output: 4-20mA, 2-10V

### EC Features:

- Operational 45 ohms max.
- Excellent tolerance to pilot cable capacitance and inductance allowing longer cable runs.
- Pilot to Earth termination using 1A diode and/or operates transparently with a M-TRONIX's Smart Pilot Node.
- EC Relay is closed when pilot circuit is healthy.
- Local/Remote Start pilot operation switch selectable. Remote Start/Stop using a 100R start resistor.
- Status LEDs for -
  - Power
  - Pilot Open
  - Pilot Closed
  - Pilot Short
  - Ready
- 2 sets C/O contacts are provided.

### Specifications:

Supply:	MODEL	MIN	TYP	MAX	UNIT
	MT01601	100	110	250	V AC
	MT01600	20	24	50	V AC/DC

Power: 2VA +/-20%

Operating Temp: 0 – 60° C

### EL:

Earth Leakage Current: 30mA - 20A

Trip Delay Time: 50ms – 500ms

### EC:

#### Pilot to Earth Resistance:

EC Mode: 45 ohms (max)

Remote Start Mode: 145 ohms (max)

Start Resistance: 100 ohms

**Shunt Resistance for Trip:** Less than 1Kohms

**Trip Delay:** 500mS

### Relay Contacts:

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

### Enclosure

Dimensions: 96mmW x 48mmH x 109.5mmD

### Material:

- PPE+PS (SE1 GFN1) BLACK
- IP40 Rating

Mounting: Panel mount, rear screw in clamps.

Terminals: Plug in terminal blocks 3.81mm pitch.

Weight: 235gms

This product is designed and manufactured in accordance with ISO9001:2000 certified company.



## Ordering Information:

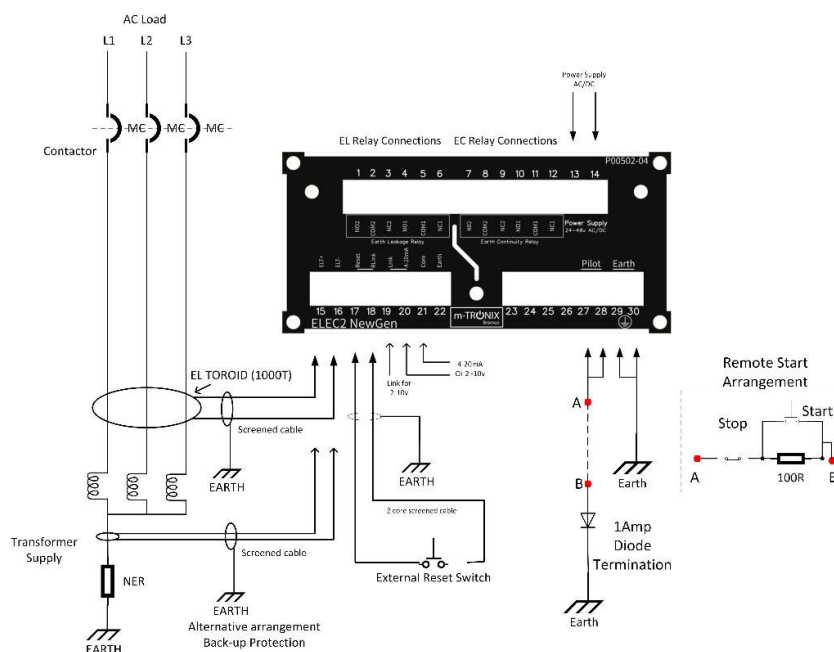
MT01601 – ELEC2 Relay – 110VAC – 240VAC

MT01600 – ELEC2 Relay - 24-48VAC/DC

MT01334 – Toroid (1000T) 40mm

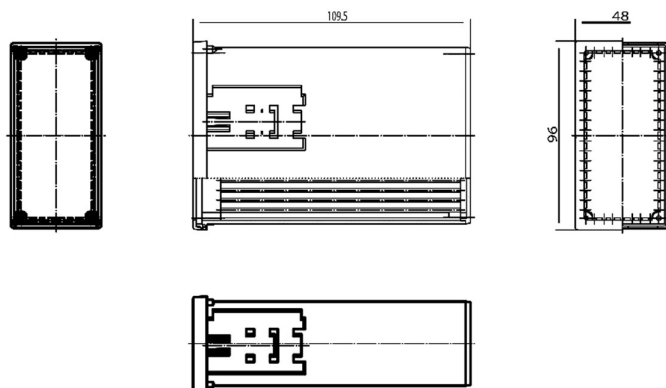
MT01335 – Toroid (1000T) 72mm

MT01336 – Toroid (1000T) 130mm



## Enclosure Dimensions

96mm x 48mm x 109.5mm



## M-TRONIX Contacts

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## Compliance:

AS/NZS 2081:2011

The ELEC2 comes with  
a 2 year warranty.