

PROSAFE3

Earth Leakage Earth Continuity Relay

Application:

Leaders in Innovative Protection Systems, Bramco's PROSAFE3 is compliant to latest statutory and industry standards, the PROSAFE3 provides next generation EL protection to latest VVVF drives and remote and/or local pilot control.

The PROSAFE3 Relay provides detection of Earth Fault Currents flowing in a power system and monitoring of the Earth Circuit in a supply cable by grounding the pilot core via a diode, polarised positive to earth.

Earth Leakage Offers:

- 16 bit microprocessor core.
- 50-60Hz /2-200Hz operation.
- 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 Bramco ELT. (1000:1)
- Separate control contacts are provided.
- Analog Output: 4-20mA, 2-10V

Earth Continuity Offers:

- Easily configured latch or non latch and fixed Fail-safe operation.
- Status Leds for -
 - EC healthy.
 - EC latch - indicates the EC relay is latched.
- External latch reset.
- 2x Separate voltage free EC.

Additional Features:

- Diode termination to earth on pilot wire.
- Operational 0-45 Ohms.
- Remote mode for start and stop control via pilot wire.

LED indication:

- Power – power healthy indication.
- OC toroid – toroid connections open circuit.
- Pilot open – pilot resistance above 45 Ohms.
- Pilot short – pilot isolation resistance below 500 Ohms.
- 4-20mA current loop into max 400 Ohms.

Specifications:

Power Supply:

24-48V AC(50-60Hz)/DC 2VA.
110-240V AC(50-60Hz)/DC 2VA.

Earth Leakage:

- Current 30 - 500mA
- Trip Delay Time 30 - 500ms

Earth Continuity:

- Pilot Resistance 0-45 Ohms
- Trip Delay 100mS

Relay Contacts:

- 1 x C/O
- 1 x N/O
- 5Amp 250vAC

Operating Temperature:

- 0-60°C

Dimensions:

- 150mmW x 75mmH x 110mmD

Material:

- High impact resistant polycarbonate

Mounting:

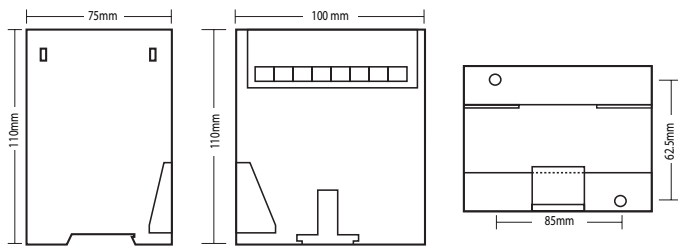
- DINrail or screw mounting



PROSAFE3

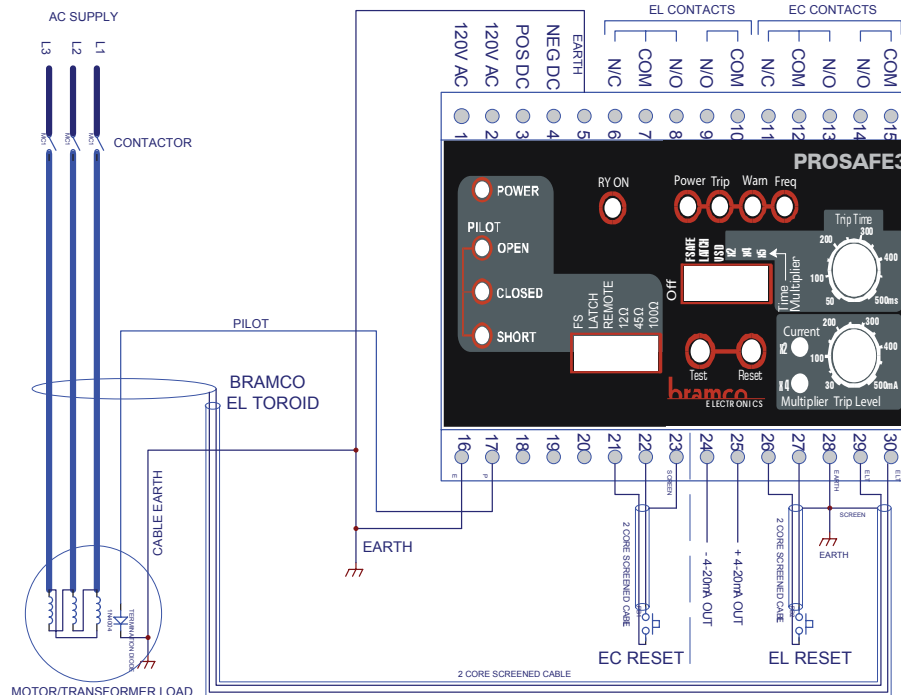
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Outline and Mounting Hole Dimensions:



Connection Details

Recommended Diode Termination IN4004 - 1 amp 400v
Toroid Leads to be SCREENED CABLE. Earth Screened at RELAY END ONLY



Compliance:

Suitable for use in a Queensland Coal Mine.

Complying with relevant Australian Standards, Queensland Department of Mineral Resources guidelines, Coal Mines regulations and Act and the Occupational Health and Safety act.

Key standards considered/complied with include, but are not limited to, relevant parts of the following standards:

AS2380.7 - 1987 - 1991:

- Electrical Equipment for Explosive Atmospheres.

AS2081 - 1988:

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

AS4871 - 2002:

- Electrical Equipment for Coal Mines for Underground use.

AS61508 - 1999-2001:

- Functional Safety of Electrical/Electronic/Programmable Electronic Safety-Related Systems.

The PROSAFE3 comes with a minimum 2 year warranty.

Ordering Information:

A01241 - PROSAFE3 500mA 500ms

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