



M-TRONIX
B R A M C O
SAFETY INNOVATORS



iD Pilot Protection Relay

PRODUCT OVERVIEW

The iD Earth Continuity Relay forms part of the **legacy-generation Bramco product range**, originally developed through the late 1990s by **Gil Leishman and his engineering team**, and now supported exclusively by m-tronix.

m-tronix remains the **authorised and exclusive custodian and distributor** of these Bramco technologies, continuing more than four decades of design evolution, innovation, and field-proven reliability.

The iD relay provides robust earth-continuity monitoring using diode-terminated pilot circuits and supports remote start/stop functionality for mining and industrial supply cables.

APPLICATION

Leaders in innovative protection systems, the Bramco/m-tronix iD is compliant with relevant statutory and industry standards.

The iD relay has been engineered to:

- Monitor continuity of the earth circuit in a supply cable
- Detect faults via pilot-core grounding through a polarised diode (positive to earth)
- Enable **remote start/stop** via momentary shorting of a $100\ \Omega$ resistor in the pilot circuit (start)
- Open the pilot circuit via stop-button operation (stop)

Typical applications:

- Mining starters (pump, conveyor, crusher, longwall systems)
- Underground and surface electrical distribution
- OEM switchboard integration
- Any installation requiring diode-terminated pilot wire earth monitoring

FEATURES

- Remote start/stop operation via pilot wire
- Detection of **pilot wire shorted to earth**
- LED indication of **power on**
- LED **healthy** indication when earth continuity resistance is **below 45 Ω**
- Higher (non-approved) maximum resistance ranges available by special order
- Legacy Bramco engineering — still fully supported by m-tronix

SPECIFICATIONS

Supply:

- 110 V AC 50/60 Hz standard
- 240 V AC 50/60 Hz optional
- 24 V AC or DC 50/60 Hz optional
- 48 V DC 50/60 Hz optional

Power: 3 VA ±20%

Operating Temp: 0–60°C

Pilot to Earth Resistance:

0–145 Ω. 100 Ω start resistance drop.

Pilot Wire:

Diode termination to earth at remote end of cable and 100 Ω for Start/Stop circuit.

Relay Contacts:

2 × Changeover contacts
5 A – 240 V AC

ORDERING INFORMATION

Part Number	Description
A0251	iD Earth Continuity Relay

Enclosure

Dimensions: 75 mm (W) × 55 mm (H) × 110 mm (D)

Material:

- High-impact resistant polycarbonate construction
- IP20 rating

Mounting: DIN rail

Terminals: Cage screw terminals

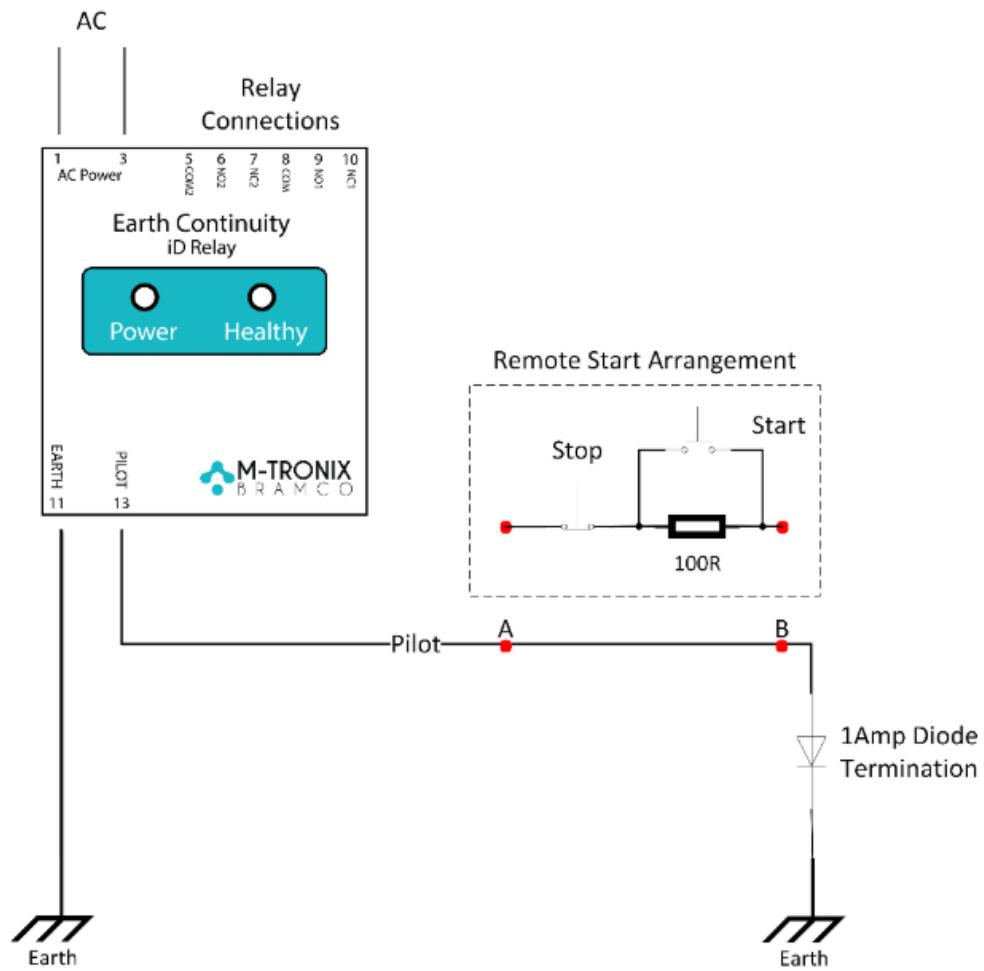
Weight: 216 g

Certification

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

It is compliant with AS2081:2011.

Wiring Diagram



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