

## ECD EARTH CONTINUITY RELAY – TYPE D

### Electrical Protection

#### Applications

Substation or DCB Earth Continuity Protection  
 [Ex ia] I IECEx TSA 13.0004X (Intrinsically safe)  
 AS2081: 2011 – Section 5 (Earth Continuity)

#### Features

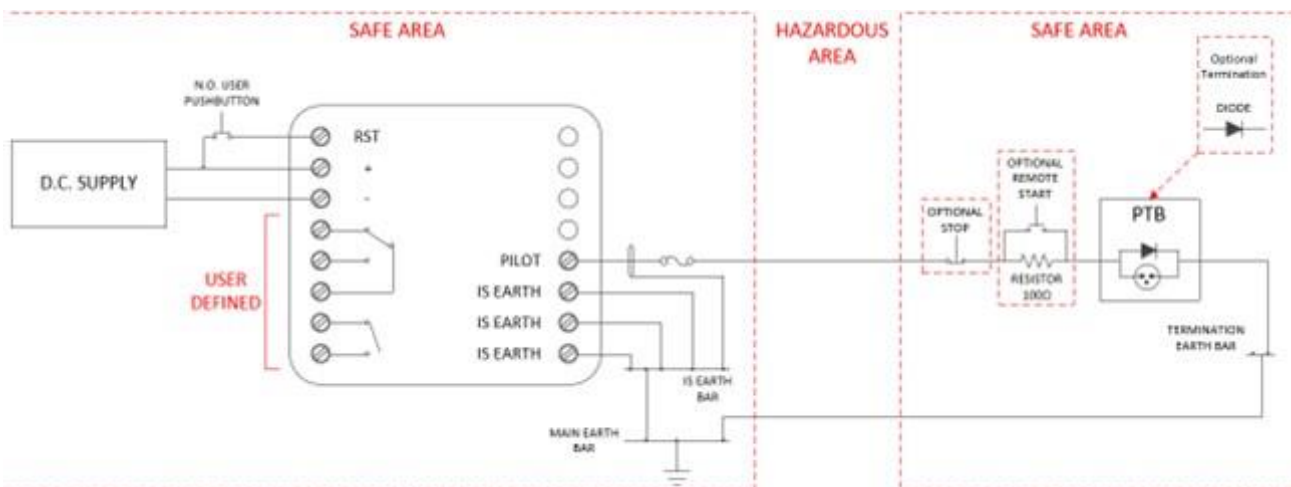
- AS/NZS 2081: 2011 Compliant
- SIL2 Capable
- 24 VDC or 48 VDC Supply (model dependent)
- 5x diagnostic LEDs
- Trip time settings – 50 ms, 100 ms, 200 ms, 300 ms, 400 ms, 500 ms
- Trip resistance settings – 10 Ω, 15 Ω, 20 Ω, 25 Ω, 35 Ω, 45 Ω
- Selectable remote start
- Selectable trip latching
- Diode termination



#### Product description


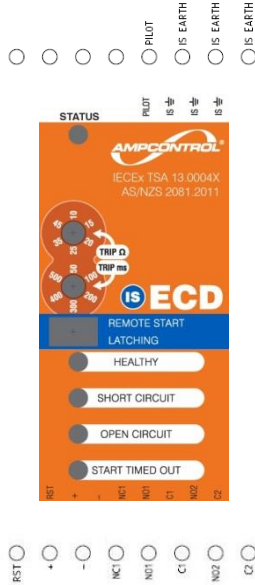
The ECD is an electrical protection relay designed for operation in underground coal mining applications. It provides earth continuity protection functions that ensure the electrical distribution system in the mine operates safely. It continually monitors the earth continuity of a mining trailing or reeling cable.

#### Diagram



**ECDB004 ECD IS RELAY TECHNICAL DATASHEET**  
Version: 4, Date 11/09/2023

<b>SPECIFICATIONS</b>		
<b>Certification / approvals</b>		
<b>Type</b>	[Ex ia] I - for use in non-hazardous area only	
<b>Certificate Number</b>	IECEX TSA 13.0004X	
<b>I/O Parameters</b>	Um = 132 Vrms Im = 5.25 A for 1s Uo = 28 V Io = 184 mA Po = 1.28 W Co = 2.0 uF Lo = 10.0 mH	
<b>Ambient Temperature</b>	-20 °C to +65 °C	
<b>Models</b>		
<b>Variant</b>	ECD 24 VDC IS	ECD 48 VDC IS
<b>Power Supply Inputs</b>		
<b>Voltage</b>	18 – 28.8 VDC	36 – 57.6 VDC
<b>Current</b>	< 250 mA	< 125 mA
<b>Outputs</b>		
<b>Relay Contacts</b>	2 x NO / 1 x NC / 2 x COM	
<b>Limits</b>	1 A @ 110 VAC. – 1 A @ 30 VDC (Resistive)	
<b>MECHANICAL</b>		
<b>Weight</b>	503 gms	
<b>IP rating</b>	IP20	

Dimensions	Front panel
	

<b>ORDERING</b>	
Part Number	Description
163554	ECD 24VDC IS
163555	ECD 48VDC IS
<b>Accessories</b>	
141479	P/SUPPLY 24V 1A DIN MOUNT
115119	MODULE PTB DIODE PILOT TERMINATION
169732	RES 100R 5W 1%

**DISCLAIMER**

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