

TECHNICAL DATA SHEET

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

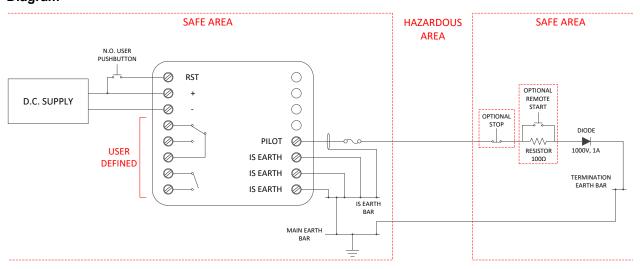
- AS/NZS 2081: 2011 Compliant
- SIL2 Capable
- 24VDC or 48VDC Supply (model dependent)
- 5 x diagnostic LEDs
- Trip time settings 50ms, 100ms, 200ms, 300ms, 400ms, 500ms
- Trip resistance settings 10Ω , 15Ω , 20Ω , 25Ω , 35Ω , 45Ω
- Selectable remote start
- Selectable trip latching
- Diode termination



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: 3, Date 13.03.2020

	Specifications		
_	Certification / appro		
Туре	[Ex ia] I - for use in non-hazardous area only		
Certificate Number	IECEx TSA 13.0004X		
	_	Jm = 132Vrms	
	Im	1 = 5.25A for 1s	
		Uo = 28V	
I/O Parameters	lo = 184mA		
		Po = 1.28W	
		Co = 2.0uF Lo = 10.0mH	
Ambient Temperature			
Ambient Temperature	-20°C to +65°C		
Variant	Models	FOD 40V/DO 10	
Variant	ECD 24VDC IS	ECD 48VDC IS	
Valtaria	Power Supply Inp		
Voltage	18 – 28.8Vd.c.	36 – 57.6Vd.c.	
Current	<250mA	<125mA	
Dalas Cantasta	Outputs	1/4 ·· NO / 0 ·· COM	
Relay Contacts	2 x NO / 1 x NC / 2 x COM		
Limits	1A @ 110Va.c 1A @ 30Vd.c (Resistive)		
W. L. L.	Mechanical	500	
Weight	503gms		
IP rating Dimensions	IP20		
Dimensions Front panel			
		O O S EARTH O S EARTH	
		0 0 0 0 0 0 0	
		5 1 1	
		STATUS & 2 2 2	
CD -		AMPCONTROL"	
ampcontract Ampcontract		AS/NZS 2081.2011	
		(
		TRIP D	
		(ISECD	
		REMOTE START LATCHING	
		HEALTHY	
		SHORT CIRCUIT	
		OPEN CIRCUIT	
		START TIMED OUT	
15		12 + 1 5 5 5 8 8	
<u> </u>			
		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
		128 4 . ON ON DO DO DO	

Ordering		
Part Number	Description	
163554	ECD 24VDC IS	
163555	ECD 48VDC IS	
Accessories		
141479	P/SUPPLY 24V 1A DIN MOUNT	
115119	MODULE PTB PILOT TERMINATION FOR ECB/D/M	
169732	RES 100R 5W 1%	
NA	Normally Open Reset Button - Contact Ampcontrol	

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