

Features

- **Embedded High Resolution Supply Monitor**
 - 12-Channel, 12VDC Supply Distribution & Monitoring
 - Active open circuit and short circuit protection for each channel
 - Triple LED diagnostic indication for each channel - OK, Open Circuit and Short Circuit.
- **Operates -10°C to +85°C**
 - All industrial components
- **Heavy Duty Enclosure**
 - Anodised Aluminium Base
 - Stainless Steel Facia
 - Snap Fit DIN Rail Mounting
 - Rugged Construction

Description

The L0Q1 I.S. Supply Diagnostic Module is designed to assist technical personnel identify power supply faults on various intrinsically safe devices.

This module works to redistribute an auxiliary 12VDC supply over 12 channels and will monitor each load independently and identify its relative state in real time. This permits the technician the capability to immediately ascertain the source of a field device fault by monitoring its relative load.



Obelix

I.S. Diagnostic Module

Type L0Q1



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Typical Applications

- Continuous Bolter/Miners
- Continuous Haulage
- Long Wall Shearers
- Mobile Bolters
- Mobile Roof Supports
- Remote Control Scoops
- Remote Control Loaders
- Any intrinsically safe application – regulations permitting.

Ordering Information

Part Number	Description
L0Q10101	Intrinsically Safe Supply Diagnostic Module

Interface Description

The Type L0Q1 Intrinsically Safe Supply Diagnostic module utilizes industrial connectors that are unique via type, gender or keying physically preventing improper installation.

Wiring Assignments

Connector 1 Weidmuller Female 2 Way		
PIN	Description	Signal
1	Supply Input	12VIS Supply
2	Supply Input	0VIS Return

Connector 2 Weidmuller Female 12 Way		
PIN	Description	Signal
1	I.S. Supply Channel #1	12VIS (100mA MAX)
2	I.S. Supply Channel #2	12VIS (100mA MAX)
3	I.S. Supply Channel #3	12VIS (100mA MAX)
4	I.S. Supply Channel #4	12VIS (100mA MAX)
5	I.S. Supply Channel #5	12VIS (100mA MAX)
6	I.S. Supply Channel #6	12VIS (100mA MAX)
7	I.S. Supply Channel #7	12VIS (100mA MAX)
8	I.S. Supply Channel #8	12VIS (100mA MAX)
9	I.S. Supply Channel #9	12VIS (100mA MAX)
10	I.S. Supply Channel #10	12VIS (100mA MAX)
11	I.S. Supply Channel #11	12VIS (100mA MAX)
12	I.S. Supply Channel #12	12VIS (100mA MAX)



Electrical Characteristics

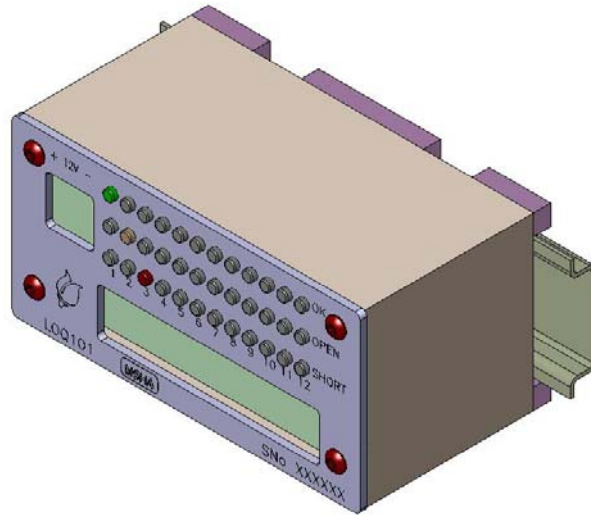
Supply	
Voltage	12VDC NOMINAL
Wattage	14.4W MAXIMUM
3P Application	3.96W

Channels	
Number	12
Maximum Voltage	12.5VDC IS EXTERNALLY REFERENCED
Maximum Current	100mA per channel
Open Circuit Condition	< 5mA
Short Circuit Condition	> 100mA
Nominal Condition	> 5mA and < 100mA

Environmental	
Operating Temperature	Minus 10°C to +85°C
Humidity	T.B.A.
MTBF	T.B.A.



Mechanical Characteristics



Dimension	Measurement	Description
A	100	Width
B	50	Height
C	55	Depth

Notes

- All dimensions are in millimetres

Material

- Enclosure is Anodised Aluminium
- Stainless steel facia
- Stainless steel mounting brackets (snap fit)

Fasteners

- M3 x 10mm x 4

Mass

- 750g (1.65lb)