

Features

- SIL 3 / SC 3
- Output to Zone 0
- Installation in Zone 2
- Loop powered for NE loads
- Output short circuit proof
- Two port isolation, Input/Output

1CH I.S. SIL3 Loop-Powered Digital Output Driver

RS Stock No.: 329093



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Zener & Galvanic Barriers



Product Description

This Loop-Powered Digital Output Driver module is suitable for applications requiring SIL 3 level in safety related systems for high-risk industries. It can drive solenoid valves, visual or audible alarms to alert a plant operator, or other process control devices in Hazardous Area from control signals located in Safe Area. They can be used as switchable supplies to power measuring or process control equipments. Two basic output circuits are selectable, with different safety parameters, to interface the majority of devices on the market.

General Specifications

| Input | Loop powered control signal |
|-----------------------|-------------------------------------------------------|
| Voltage range | 24 vdc nom (18 to 30 Vdc), reverse polarity protected |
| Current consumption | 55 mA @ 24 vdc with 40 mA output, typical |
| Power dissipation | 0.85 W @ 24 vdc with 45 mA output, typical |
| Output diagram | Refer to instruction manual |
| Short circuit current | ≥ 45 mA |
| Response time | ≤ 75 ms |

Mechanical Specifications

| Weight | about 110 g |
|------------|----------------------------------------------------------------------------------------------------------|
| Connection | by polarized plug-in disconnect screw terminal blocks to accommodate terminations up to 2.5 mm² (13 AWG) |
| Dimensions | Width 12.5 mm, Depth 123 mm, Height 120 mm |
| Mounting | DIN-Rail 35 mm |

Electrical Specifications

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| Isolation I.S. Out/In 1.5 kV |
|------------------------------|
|------------------------------|

Operation Environment Specifications

| Operating temperature | temperature limits -40 to +70 °C |
|-----------------------|----------------------------------|
| Storage temperature | temperature limits -45 to +80 °C |

Intrinsic Safety Data

| | Associated apparatus and non-sparking electrical equipment. |
|----------------|-------------------------------------------------------------------------|
| | Uo = 25.2 V, Io = 146 mA, Po = 916 mW (terminals 7-8) |
| IS Description | Uo = 25.2 V, Io = 108 mA, Po = 676 mW (terminals 7-9) |
| | Refer to Instruction Manual for more details |
| | Um = 250 Vrms or Vdc, -40 $^{\circ}$ C \leq Ta \leq 70 $^{\circ}$ C |

Approvals

| Declarations | EU Declaration of Conformity |
|------------------------------|------------------------------|
| Hazardous Area Certification | ATEX / IECEx |
| Functional Safety | SIL Manufacturer Declaration |

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