

# DO802

## Compact Product Suite hardware selector



The DO802 is an 8 channel 110 V d.c./250 V a.c. relay (NO) output module for the S800 I/O. The maximum voltage range is 250 V and the maximum continuous output current is 2 A. All outputs are individually isolated. Each output channel consists of optical isolation barrier, output state indication LED, relay driver, relay and EMC protection components.

The relay supply voltage supervision, derived from the 24 V distributed on the ModuleBus, gives a channel signal error and a module warning signal if the voltage disappears. The error signal and warning signal can be read through the ModuleBus. This supervision can be enabled/disabled with a parameter.

### Features and benefits

- 8 channels for 110 V d.c. / 250 V a.c. relay Normally Open (NO) outputs
- 8 isolated channels
- Process connection via detachable connectors

| General info         |  |
|----------------------|--|
| Article number       | 3BSE022364R1                           |
| Type                 | Digital Output                         |
| Signal specification | 24...110 V d.c. / 250 V a.c. (max 2 A) |
| Number of channels   | 8                                      |
| Signal type          | Relay (NO)                             |
| HART                 | No                                     |
| SOE                  | No                                     |
| Redundancy           | No                                     |
| High integrity       | No                                     |
| Intrinsic safety     | No                                     |
| Mechanics            | S800L                                  |

## Detailed data

|                                     |   |
|-------------------------------------|---|
| Isolation                           | Individually isolated, channel-to-channel and to circuit common   |
| Maximum field cable length          | 600 meters (600 yards)  |
| Rated insulation voltage            | 250 V   |
| Dielectric test voltage             | 2000 V a.c.   |
| Power dissipation                   | Typ. 2.2 W  |
| Current consumption +5 V Modulebus  | 70 mA   |
| Current consumption +24 V Modulebus | 80 mA   |
| Current consumption +24 V external  | 0   |
| Supported wire size                 | Solid: 0.05-2.5 mm <sup>2</sup> , 30-12 AWG<br>Stranded: 0.05-1.5 mm <sup>2</sup> , 30-12 AWG<br>Recommended torque: 0.5-0.6 Nm<br>Stripping length 6-7.5mm, 0.24-0.30 inch |

## Diagnostics

|                                  |   |
|----------------------------------|---|
| Front LED's                      | S(tatus), Channel 1-8 Status                |
| Supervision                      | 24 / 12 V Relay power converter monitor     |
| Status indication of supervision | Module Error, Module Warning, Channel Error |

## Environment and certification

|                                 |   |
|---------------------------------|---|
| CE mark                         | Yes   |
| Electrical safety               | EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201              |
| Hazardous Location              | -   |
| Marine certification            | ABS, BV, DNV, LR  |
| Temperature, Operating          | 0 to +55 °C (+32 to +131 °F), approvals are issued for +5 to +55 °C |
| Temperature, Storage            | -40 to +70 °C (-40 to +158 °F)                                      |
| Pollution degree                | Degree 2, IEC 60664-1   |
| Corrosion protection            | ISA-S71.04: G3  |
| Relative humidity               | 5 to 95 %, non-condensing   |
| Max ambient temperature         | 55 °C (131 °F), for vertical mounting 40 °C (104 °F)                |
| Protection class                | IP20 according to IEC 60529   |
| Mechanical operating conditions | IEC/EN 61131-2  |
| EMC                             | EN 61000-6-4, EN 61000-6-2  |
| Overvoltage categories          | IEC/EN 60664-1, EN 50178  |
| Equipment class                 | Class I according to IEC 61140; (earth protected)                   |
| RoHS compliance                 | DIRECTIVE/2011/65/EU (EN 50581:2012)                                |
| WEEE compliance                 | DIRECTIVE/2012/19/EU  |

## Dimensions

|        |                     |
|--------|---------------------|
| Width  | 86.1 mm (3.4")      |
| Depth  | 58.5 mm (2.3")      |
| Height | 110 mm (4.33")      |
| Weight | 0.24 kg (0.53 lbs.) |

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