

DO810

Compact Product Suite hardware selector



This module has 16 digital outputs. The output voltage range is 10 to 30 volt and the maximum continuous output current is 0.5 A. The outputs are protected against short circuits, over voltage and over temperature. The outputs are divided into two individually isolated groups with eight output channels and one voltage supervision input in each group. Each output channel consists of a short circuit and over temperature protected high side driver, EMC protection components, inductive load suppression, output state indication LED and optical isolation barrier.

The process voltage supervision input give channel error signals if the voltage disappears. The error signal can be read through the ModuleBus. The outputs are current limited and protected against over temperature. If the outputs are overloaded the output current will be limited.

Features and benefits

- 16 channels for 24 V d.c. current sourcing outputs
- 2 isolated groups of 8 channels with process voltage supervision
- Output status indicators
- OSP sets outputs to predetermined state upon error detection
- Short-circuit protection to ground and 30 V
- Over-voltage and over-temperature protection

| General info | |
|----------------------|------------------------------------|
| Article number | 3BSE008510R1 |
| Type | Digital Output |
| Signal specification | 24V d.c. (12 - 32 V d.c.), 0.5 A |
| Number of channels | 16 |
| Signal type | Current sourcing, current limiting |
| HART | No |
| SOE | No |
| Redundancy | No |
| High integrity | No |
| Intrinsic safety | No |
| Mechanics | S800 |

| Detailed data | |
|------------------------------------|--|
| Isolation | Groupwise isolated from ground |
| Output load | < 0.4 Ω |
| Current limiting | Short circuit proof current limited output |
| Maximum field cable length | 600 meters (656 yards) |
| Rated insulation voltage | 50 V |
| Dielectric test voltage | 500 V a.c. |
| Power dissipation | Typ. 2.1 W |
| Current consumption +5 V Modulebus | 80 mA |

| Diagnostics | |
|----------------------------------|---|
| Front LED's | F(ault), R(un), W(arning), O(SP), Channel 1-16 Status |
| Supervision | Process voltage, 1 per group |
| 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 | C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2 |
| 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 in compact MTU 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 |

| Compatibility | |
|---------------|----------------------------|
| Use with MTU | TU810, TU812, TU814, TU830 |
| Keying code | AA |

| Dimensions | |
|------------|--|
| Width | 45 mm (1.77") |
| Depth | 102 mm (4.01"), 111 mm (4.37") including connector |
| Height | 119 mm (4.7") |
| Weight | 0.18 kg (0.4 lbs.) |

Related products



TU810V1



TU812V1



TU814V1



TU830V1



TU833

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