

DO818

ABB Ability™ System 800xA® hardware selector



The DO818 is a 32 channel 24 V digital output module for the S800 I/O. This module has 16 digital outputs. The output voltage range is 12 to 32 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 16 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.

Features and benefits

- 32 channels for 24 V d.c.
- 2 isolated groups (RIV50V) with 16 channels and one process voltage supervision input in each group
- The process voltage range is 12-32V dc (nominally 24V dc) and the maximum continuous output current is 0.5A per channel

| General info | |
|----------------------|------------------------------------|
| Article number | 3BSE069053R1 |
| Type | Digital Output |
| Signal specification | 24 V d.c. (12 - 32 V d.c.), 0.5 A |
| Number of channels | 32 |
| 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 | < 0.32 Ω |
| Maximum field cable length | 600 meters (656 yards) |
| Rated insulation voltage | 50 V |
| Dielectric test voltage | 500 V a.c. |
| Power dissipation | Typ 2.8 W |
| Current consumption +5 V Modulebus | Typ 70 mA |
| Current consumption +24 V Modulebus | 0 |
| Current consumption +24 V external | 40 mA |

| Diagnostics | |
|----------------------------------|---|
| Front LED's | F(ault), R(un), O(SP), Channel 1-32 Status |
| Supervision | 2 channels (1 per group) Activated when process power drops below 12 V |
| 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 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/EN (EN 50581:2012) |
| WEEE compliance | DIRECTIVE/2012/19/EU |

| Compatibility | |
|---------------|---------------------|
| Use with MTU | TU818, TU819, TU830 |
| Keying code | EA |

| 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



TU818



TU819



TU830V1



TU833

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