

DATA SHEET

D0801 System 800xA hardware selector



The DO801 is a 16 channel 24 V digital output module for the S800 I/O. 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 in one isolated 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.

Features and benefits

- 16 channels for 24 V d.c. current sourcing outputs
- 1 isolated groups of 16 channels
- Output status indicators
- OSP sets outputs to predetermined state upon communication error
- Short-circuit protection to ground and 30 V
- Over-voltage and overtemperature protection
- Process and power connection via detachable connectors

| General info | |
|----------------------|------------------------------------|
| Article number | 3BSE020510R1 |
| Туре | 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 | S800L |

| 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 | Тур. 2.1 W |
| Current consumption +5 V Modulebus | 80 mA |
| Current consumption +24 V Modulebus | 0 |
| Current consumption +24 V external | 0 |
| Supported wire size | Solid: 0.05-2.5 mm², 30-12 AWG Stranded: 0.05-1.5 mm², 30-12 AWG Recommended torque: 0.5-0.6 Nm Stripping length 6-7.5mm, 0.24-0.30 inch |

| Diagnostics | |
|----------------------------------|---|
| Front LED's | S(tatus), Channel 1-16 Status |
| Status indication of supervision | Module Error, Module Warning, Channel Error |

| Environment and certification | |
|---------------------------------|---|
| CE mark | Yes |
| Electrical safety | IEC 61131-2, UL 61010-1, UL 61010-2-201 |
| Hazardous Location | C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2 |
| Marine certification | ABS, BV, DNV-GL, LR |
| Protection rating | IP20 according to IEC 60529 |
| Corrosive atmosphere ISA-S71.04 | G3 |
| Climatic operating conditions | 0 to +55 °C (Storage -40 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2 |
| Pollution degree | Degree 2, IEC 60664-1 |
| Mechanical operating conditions | IEC/EN 61131-2 |
| EMC | EN 61000-6-4, EN 61000-6-2 |
| Overvoltage categories | IEC/EN 606641, EN 50178 |
| Equipment class | Class I according to IEC 61140; (earth protected) |
| Max ambient temperature | Horizontal 55 ° (131 °F), Vertical 40° (104 °F) |
| 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.) |



solutions.abb/800xA

solutions.abb/controlsystems

800xA is a registered or pending trademark of ABB. All rights to other trademarks reside with their respective owners.

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document. We reserve all rights to this document and the items and images it contains. The reproduction, disclosure to third parties or the use of the content of this document – including parts thereof – are prohibited without ABB's prior written permission.

Copyright© 2022 ABB All rights reserved