

DATA SHEET

AO801 System 800xA hardware selector



The AO801 Analog Output Module has 8 unipolar analog output channels. The module performs selfdiagnostic cyclically. A low internal power supply sets the module in INIT state (no signal from the module).

Features and benefits

- 8 channels of 0...20 mA, 4...20 mA outputs
- OSP sets outputs to predetermined state upon error detection
- Analog Output is to be short circuit secured to ZP or +24 V
- Process and power connection via detachable connectors

| General info | |
|----------------------|-----------------------|
| Article number | 3BSE020514R1 |
| Туре | Analog Output |
| Signal specification | 0 20 mA, 420 mA |
| Number of channels | 8 |
| Signal type | Unipolar single ended |
| HART | No |
| SOE | No |
| Redundancy | No |
| High integrity | No |
| Intrinsic safety | No |
| Mechanics | \$800L |

| Detailed data | | |
|------------------------------------|---|--|
| Resolution | 12 bit | |
| Isolation | Groupwise isolated from ground | |
| Under/over range | -/ +15% | |
| Output load | Max 850 Ω | |
| Error | 0,1 % | |
| Temperature drift | Typ 30 ppm/°C, Max 50 ppm/°C | |
| Rise Time | 10 µs | |
| Update cycle time | 1 ms | |
| 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 | 3.8 W | |
| Current consumption +5 V Modulebus | 70 mA | |
| Current consumption +24V Modulebus | - | |
| Current consumption +24V external | 200 mA | |
| 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) (run or fault) | |
| 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 and EN 61000-6-2 | |
| Overvoltage categories | IEC/EN 60664-1, EN 50178 | |
| Equipment class | Class I according to IEC 61140; (earth protected) | |
| Max ambient temperature | 55 °C (131 °F), for vertical mounting 40 °C (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