

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