

DO802

ABB Ability™ System 800xA® hardware selector



The DO802 is an 8 channel 110 V d.c./250 V a.c. relay (NO) output module for the S800 I/O. The maximum voltage range is 250 V and the maximum continuous output current is 2 A. All outputs are individually isolated. Each output channel consists of optical isolation barrier, output state indication LED, relay driver, relay and EMC protection components.

The relay supply voltage supervision, derived from the 24 V distributed on the ModuleBus, gives a channel signal error and a module warning signal if the voltage disappears. The error signal and warning signal can be read through the ModuleBus. This supervision can be enabled/disabled with a parameter.

Features and benefits

- 8 channels for 110 V d.c. / 250 V a.c. relay Normally Open (NO) outputs
- 8 isolated channels
- Process connection via detachable connectors

General info	
Article number	3BSE022364R1
Type	Digital Output
Signal specification	24...110 V d.c. / 250 V a.c. (max 2 A)
Number of channels	8
Signal type	Relay (NO)
HART	No
SOE	No
Redundancy	No
High integrity	No
Intrinsic safety	No
Mechanics	S800L

Detailed data

Isolation	Individually isolated, channel-to-channel and to circuit common
Maximum field cable length	600 meters (600 yards)
Rated insulation voltage	250 V
Dielectric test voltage	2000 V a.c.
Power dissipation	Typ. 2.2 W
Current consumption +5 V Modulebus	70 mA
Current consumption +24 V Modulebus	80 mA
Current consumption +24 V external	0
Supported wire size	Solid: 0.05-2.5 mm ² , 30-12 AWG Stranded: 0.05-1.5 mm ² , 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 1-8 Status
Supervision	24 / 12 V Relay power converter monitor
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 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

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 and Symphony Plus is a registered 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© 2025 ABB All rights reserved