

DATA SHEFT

### DO821

# System 800xA hardware selector



The DO821 is an 8 channel 230 V a.c./d.c. relay (NC) output module for the S800 I/O. The maximum output voltage is 250 V a.c. and the maximum continuous output current is 3 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 an error signal if the voltage disappears, and the Warning LED turns on. The error signal can be read via the ModuleBus. This supervision can be enabled/disabled with a parameter.

### **Features and benefits**

- 8 channels for 230 V a.c./d.c. relay Normal Closed (NC) outputs
- 8 isolated channels
- Output status indicators
- OSP sets outputs to predetermined state upon error detection

General info		
Article number	3BSE013250R1	
Туре	Digital Output	
Signal specification	230 V a.c./d.c. (5-250 V a.c./d.c.), 3 A	
Number of channels	8	
Signal type	Relay (NC)	
HART	No	
SOE	No	
Redundancy	No	
High integrity	No	
Intrinsic safety	No	
Mechanics	\$800	

Detailed data		
Isolation	Individually isolated, channel-to-channel and to circuit common	
Current limiting	Can be current limited by the MTU	
Maximum field cable length	600 meters (656 yards)	
Rated insulation voltage	250 V	
Dielectric test voltage	2000 V a.c.	
Power dissipation	Typ. 2.9 W	
Current consumption +5 V Modulebus	60 mA	
Current consumption +24 V Modulebus	140 mA	
Current consumption +24 V external	0	

Diagnostics		
Front LED's	F(ault), R(un), W(arning), O(SP), 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	IEC 61131-2, UL 508	
Hazardous Location	-	
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	55 °C (131 °F), for vertical mounting in compact MTU 40 °C (104 °F)	
RoHS compliance	DIRECTIVE/2011/65/EN (EN 50581:2012)	
WEEE compliance	DIRECTIVE/2012/19/EU	

Compability	
Use with MTU	TU811, TU813, TU831, TU836, TU837, TU851
Keying code	CA

Dimensions	
Width	45 mm (1.77")
Depth	102 mm (4.01"), 111 mm (4.37") including connector
Height	119 mm (4.7")
Weight	0.23 kg (0.5 lbs.)

# **Related products**





#### TU811V1



TU813



TU831V1



TU836V1



TU837V1





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

