

DATA SHEET

DI803 Compact Product Suite hardware selector



The DI803 is an 8 channel 230 V a.c./d.c. digital input module for the S800 I/O. This module has 8 digital inputs. The a.c. input voltage range is 164 - 264 volt and the input current is 7.6 mA at 230 V a.c. The d.c. input range is 175 - 275 V and the input current is 1.6 mA at 220 V. The inputs are individually isolated. Every input channel consists of current limiting components, EMC protection components, input state indication LED and optical isolation barrier.

Features and benefits

- 8 channels for 230 V a.c./d.c. inputs with current sinking
- Individually isolated channels
- Voltage supervision of field input power
- Input status indicators
- Signal filtering
- Process connection via detachable connectors

General info		
Article number	3BSE022362R1	
Туре	Digital Input	
Signal specification	230 V a.c., 220 V d.c.	
Number of channels	8	
Signal type	Current sinking	
HART	No	
SOE	No	
Redundancy	No	
High integrity	No	
Intrinsic safety	No	
Mechanics	\$800L	

Detailed data		
Input voltage range, "0"	050 V a.c., 040 V d.c.	
Input voltage range, "1"	164264 V a.c., 175275 V d.c.	
Input impedance	30 kΩ (a.c.) 134 kΩ (d.c.)	
Isolation	Individually isolated channels	
Filter times (digital, selectable)	2, 4, 8, 16 ms	
Input frequencey range	4763 Hz	
Analog filter On/Off delay	5 / 28 ms	
Maximum field cable length	200 meters (219 yards) 100 pF/m for a.c., 600 meters for d.c.	
Rated insulation voltage	250 V	
Dielectric test voltage	2000 V a.c.	
Power dissipation	Тур. 2.8 W	
Current consumption +5 V Modulebus	50 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) (run or fault), Channel 1-16 ("0" or "1")	
Supervision	Process voltage supervision on channel 8	
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 and EN 61000-6-2	
Overvoltage categories	Class I according to IEC 61140; (earth protected)	
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/compactproductsuite solutions.abb/controlsystems

_

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© 2024 ABB All rights reserved