

# DI803

## System 800xA 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	
Type	Digital Input
Signal specification	230 V a.c., 220 V d.c.
Article number	3BSE022362R1
Number of channels	8
Signal type	Current sinking
HART	No
SOE	No
Redundancy	No
High integrity	No
Intrinsic safety	No
Mechanics	S800L

<b>Detailed data</b>	
Input voltage range, "0"	0..50 V a.c., 0..40 V d.c.
Input voltage range, "1"	164..264 V a.c., 175..275 V d.c.
Input impedance	30 k $\Omega$ (a.c.) 134 k $\Omega$ (d.c.)
Isolation	Individually isolated channels
Filter times (digital, selectable)	2, 4, 8, 16 ms
Input frequency range	47..63 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	Typ. 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 mm <sup>2</sup> , 30-12 AWG Stranded: 0.05-1.5 mm <sup>2</sup> , 30-12 AWG Recommended torque: 0.5-0.6 Nm Stripping length 6-7.5mm, 0.240.30 inch

<b>Diagnostics</b>	
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

<b>Environment and certification</b>	
CE mark	Yes
Electrical safety	IEC 61131-2, UL 508
Hazardous Location	-
Marine certification	ABS, BV, DNV-GL, LR, RS, CCS
Protection rating	IP20 according to IEC60529
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	Class I according to IEC 61140; (earth protected)
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	EN 50581:2012

### Compatibility

### Intrinsic Safety parameters

<b>Dimensions</b>	
Height	110 mm (4.33")
Width	86.1 mm (3.4")
Depth	58.5 mm (2.3")
Weight	0.24 kg (0.53 lbs.)

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