

# 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

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#### General info

Article number	3BSE022362R1
Type	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	S800L

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#### Detailed data

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 kΩ (a.c.) 134 kΩ (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, 0.24-0.30 inch

#### Diagnostics

Front LED's	S(status) (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
Oversupply 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.)

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