

DATA SHEET

## **DI802**

## Compact Product Suite hardware selector



The DI802 is an 8 channel 120 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 77 - 130 volt and the input current is 10 mA at 120 V a.c. The d.c. input range is 75 - 145 V and the input current is 2.8 mA at 110 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 120 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	3BSE022360R1	
Туре	Digital Input	
Signal specification	120 V a.c., 110 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	

Detailed data	
Input voltage range, "0"	030 V a.c., 020 V d.c.
Input voltage range, "1"	77130 V a.c., 75145 V d.c.
Input impedance	12 kΩ (a.c.) 39 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 / 18 ms
Maximum field cable length	200 meters (219 yards) 100 pF/m for a.c., 600 meters (656 yards) 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
	Solid: 0.05-2.5 mm², 30-12 AWG
Supported wire size	Stranded: 0.05-1.5 mm², 30-12 AWG
Supported Wile Size	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	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.)	



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