

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 | |
|----------------------|------------------------|
| 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 |

| 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 ² , 30-12 AWG Stranded: 0.05-1.5 mm ² , 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 | 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

| 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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