

■ IOP-DI-02

16 channels - isolated discrete input termination panel powered by 15 to 60Vdc voltage





Description:

The termination panel **IOP-DI-02** allows to connect up to 16 Discrete Inputs to a Distributed Control System (DCS), or a Programmable Logic Controller (PLC).

Each channel can be configured by jumpers as isolated input powered by an external DC power supply (15 to 60Vdc) or as a non isolated input for dry contact powered by the system 24Vdc Power Supply.

Each channel is protected by a removable fuse, and a yellow LED indicates its status.

The termination panel **IOP-DI-02** can be connected either to an 8 or 16 channels DI card using one or two D-SUB 25 male connectors.

It is particularly suitable for migration of existing PROVOX™ I/O panels with reference as follow:

CL6781-1, CL6783-1 CL6784-1: Discrete Input Panel

- When these panels are equipped with CL6751X1-A1 modules, you must configure the channel as "isolated channel" using jumpers (with external power supply).
- When these panels are equipped with CL6751X1-A7 or A8 modules, the channel must be configured as a "non-isolated channel" using jumpers (powered by the system 24Vdc P.S.).

CL6787-1(CE), CL6788-1(CE): Discrete Input Panel

- When these panels are equipped with CL6753X1-A10 modules, you must configure the channel as "isolated channel" using jumpers (with external power supply).
- When these panels are equipped with CL6753X1-A12 or A13 modules, the channel must be configured as a "non-isolated channel" using jumpers (powered by the system 24Vdc P.S.).

The main advantages of using the IOP-DI-02 panel for PROVOX™ migration are as follow:

- Existing wiring is just disconnected and reconnected to the **IOP-DI-02** without any change at the same place (same terminals with same labelling and same electrical features)
- The existing loop drawings are kept without any modification, allowing all maintenance processes and procedures to remain unchanged.

Product options:

Option -1: IOP-DI-02-1 Standard version

Option VSH: Conformal coating (Tropicalization)





Bulletin Rev: 2022_01



Technical specifications:

Dimensions:

Length: 483 mm (19 inches) Width: 131.40 mm (3U)

Height: 40mm

Weight:

1,3 kg

Mounting:

EIA Rail

Temperature range:

Operating: 0°C to 50°C Storage: -10°C to 50°C

Humidity:

Up to 90% (no condensation)

Conductors section:

Screw Terminals: 24 to 12AWG (0.25 to 2.5mm²)

Isolated channel:

Jumper ST1,ST2,ST3 Right side 15 to 60VDC Input Voltage: $12k\Omega$ Input impedance: Max leakage current: 0.9mA Turn ON time: 50µs Turn OFF time: 120µs Max input frequency: 1kHz Max output voltage: 55vdc Max output current: 50mA Input/output insulation: 1500vdc Each channel insulation: 750vdc

Non isolated channel:

Fuse protection

Jumper ST1,ST2,ST3 Left side 250mA Fuse protection

0000000 ∓ CH1 TP (II) Channel congigured as isolated channel (Jumper right side) 0 Channel configured as non isolated channel (jumper left side) CH8 ST3 Ō (1) TΡ \oplus CH9 1 (11) 0000 O TΡ

Connection to the DCS or to the PLC:

To 2 x 8-channel DI cards:

Two D-SUB 25 pin male connector with UNC 4-40 female lock

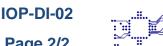
To one 16-channel or one 1/2 x 32-channel DI card :

One D-SUB 25 pin male connector with UNC 4-40 female lock

Screw Terminals for the shield (SHD) connection and Power Supply Common (PSC)

250mA





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