ADP-TSX-DI-06

16 channels - Discrete Inputs adapter - Sourcing Type

Description :

The **ADP-TSX-DI-06** interface adapter allows to connect up to 16 Discrete Inputs to a “sourcing” type Distributed Control System (DCS), or a Programmable Logic Controller (PLC).

It is particularly suitable for migration of existing Télémécanique TSX7™ I/O card with reference as follow :

- TSX-DET 16 12 : 16CH Discrete Input card

The main advantages of the **ADP-TSX-DI-06** for TSX7™ migration are as follow :

- The “BLK” connector is simply disconnected from the TSX7 I/O card and reconnected to the front connector of the **ADP-TSX-DI-06** without modification of the wiring (same labels and same electrical characteristics).
- Since the wiring is not affected, the sync times are reduced.

The **ADP-TSX-DI-06** interface adapter can be connected to a DI card of a DCS or a PLC using one DSUB 37 pin male connector located on the BC-11406 rack.
The connection is done using a shielded cable, with a DSUB 37 socket female connector at one end, and labeled flying wires or a suitable connector matching with the new system DO card used at the other end.

The adapter is compatible with existing signals (dry contact or 2-wire proximity switch) and provides an input / output galvanic isolation.
A yellow LED indicates the command status of each channel through the “BLK” connector.

Product options :

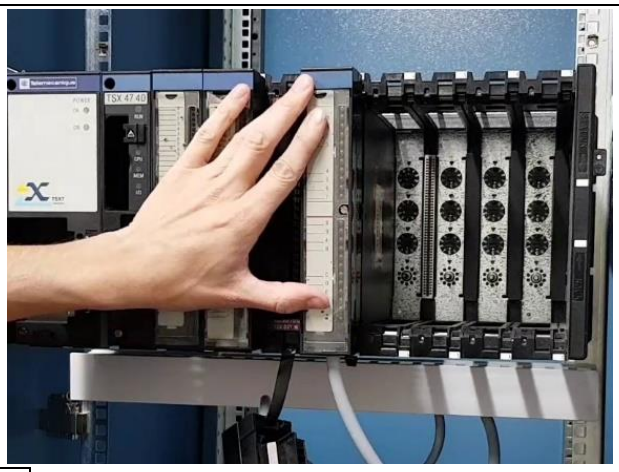
Option **-1** : *ADP-TSX-DI-06-1* Standard version

Technical specifications :

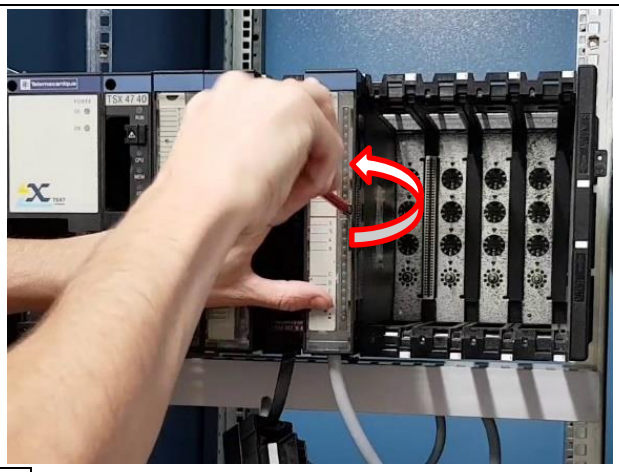
Dimensions :	**Channel characteristics :**
Length : 290 mm	Input voltage and impedance: 20 to 28Vdc / 3.3Kohm
Width : 51 mm	Voltage and min. Current for ON state : 12Vdc / 3.5mA
Height : 176.7 mm	Max current for OFF state : 2mA
Weight :	Max frequency: 1KHz
200 g	**Protection for each channel :**
Temperature range :	By a varistor (39Vdc) and a diode against reverse voltages
Operating : 0°C to 50°C	**Insulation voltage :**
Storage : -20°C to 60°C	1500Vac between input (dry contact or proximity switch) and output (PLC or SNCC)
Humidity :	**Mounting :**
Up to 90% (no condensation)	In a BC-11406-3 or a BC-11406-4 rack

Connection to the DCS or to the PLC :
The BC-11406 rack provides the connection to the DCS or PLC by a DSUB 37 pin male connector with UNC 4-40 female lock

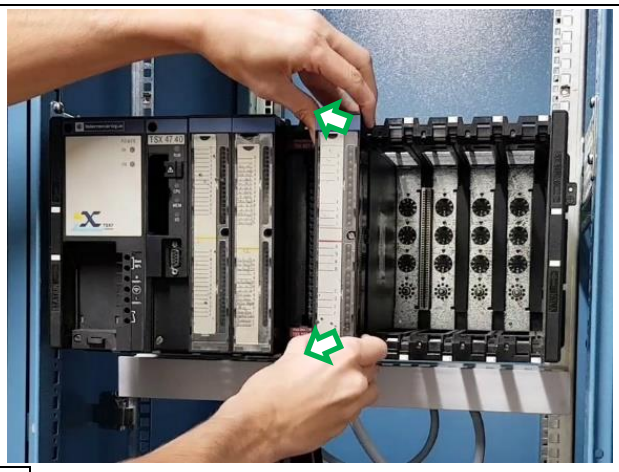
Disconnecting the BLK terminals and removing the TSX rack :



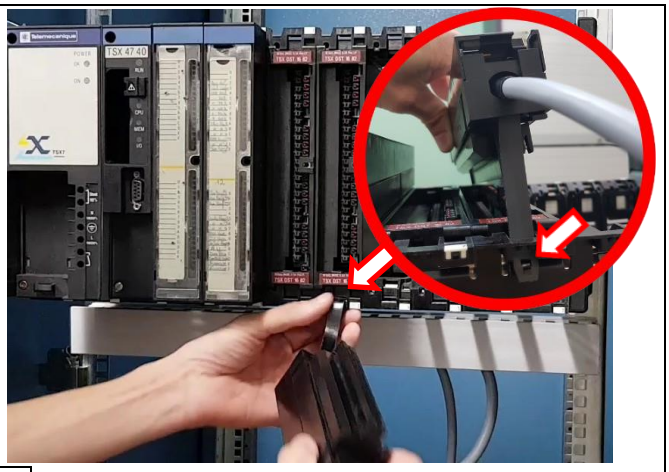
1	Hold the BLK connector to avoid it to wiggle when you unscrew it.



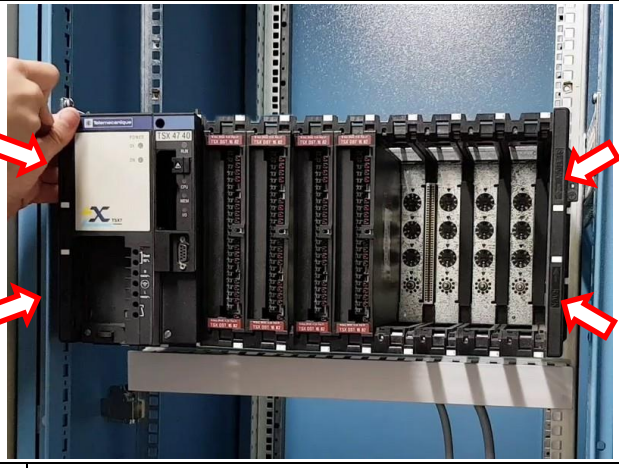
2	While holding the BLK connector to keep it straight, unscrew the fast action screw to unsecure the BLK connector.



3	Once the central screw is completely unscrewed, remove the BLK terminal block by pulling it straight (do not tilt the terminal block out)

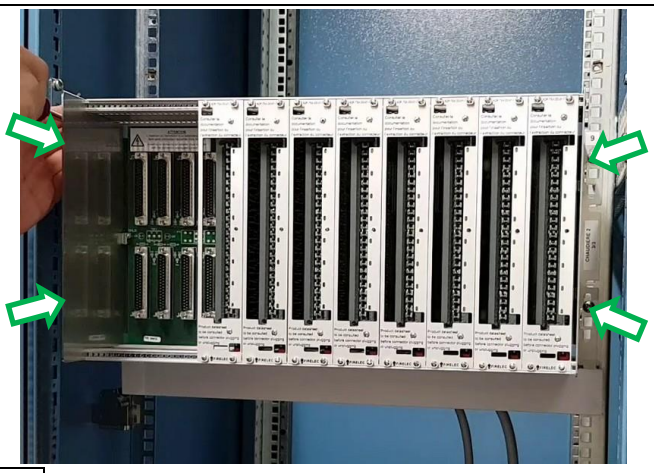


4	Extract the securing tabs by pressing the inner clips to fully disengage the terminal block from the TSX rack.

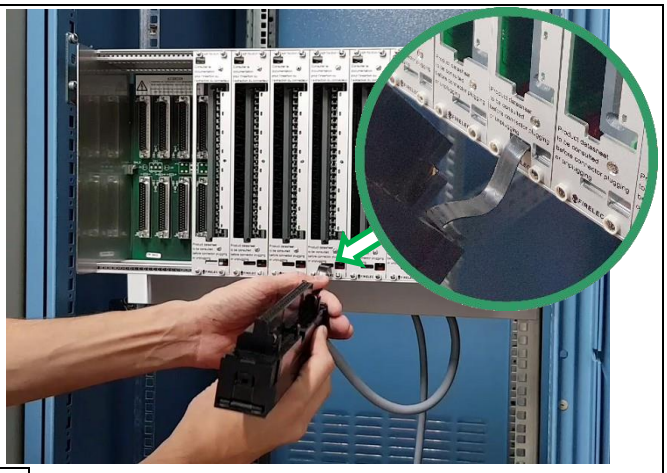


5	When all BLK connectors are removed from the rack, unsecure the rack using the screws and remove it.

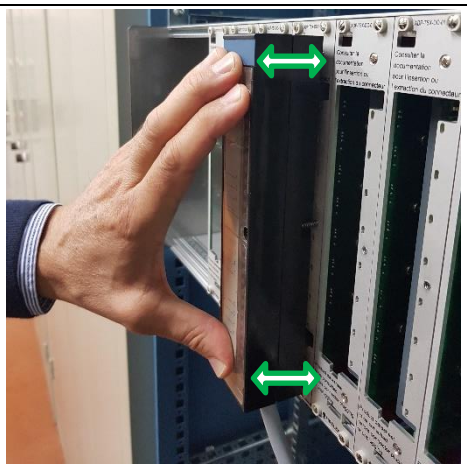
Installation :



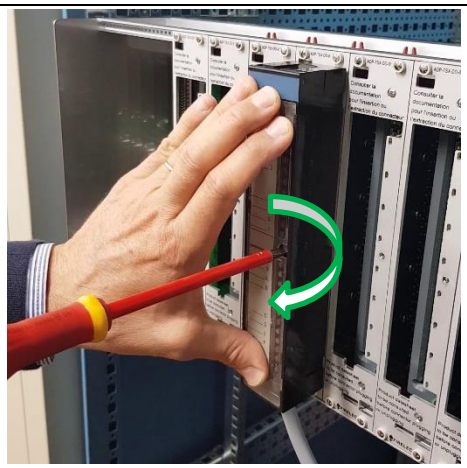
1	Install the FIRELEC BC-11406 in place of the legacy TSX file and secure it with the screws.



2	Insert the securing tabs fir each ADP-TSX into the intended slot.



3	Place the BLK connector and hold it in place with the screw being in contact with the adapter faceplate. Be sure to verify the correct alignment. Don't push it, it will be secured just using the fast action screw.



4	While holding the BLK connector to keep it straight, screw the fast action screw to secure the BLK connector.

5	Once the BLK connectors are secured, connect the BC-11406 to the I/O cards of the new system using FIRELEC cables.