

# ADP-TF620-01-1

## 50 Pins ABB –"TF620" Migration adapter

### Description :

The **ADP-TF620-01-1** migration adapter allows to connect an existing female ABB S600 "TF620" connector to a new distributed Control System (DCS), or a Programmable Logic Controller (PLC).

It is particularly suitable for the migration of existing ABB S600 I/O cards.

The main advantages of the **ADP-TF620-01-1** for migration of the ABB S600 I/Os are as follow:

- The "TF620" female connector is simply disconnected from the existing ABB S600 I/O card and reconnected to the front connector of the **ADP-TF620-01-1** without any modification of the wiring (same labels and same electrical characteristics).
- Since the wiring is not affected, the I/O testing times are reduced.

The **ADP-TF620-01-1** migration adapter can be connected to the suitable new I/O card of a DCS or a PLC using four pluggable male connectors located at the back of the **ADP-TF620-01-1**.

The connection is done using a shielded cable, with a 12-socket female connector at one end, and labeled flying wires or suitable connector(s) matching with the new system I/O card used at the other end.

The shield of the cable is individually connected to a dedicated four position connector located at the back of the **ADP-TF620-01-1** (at the bottom).

### Product options :

Option -1 : ADP-TF620-01-1 Standard version

### Technical specifications :

#### Dimensions :

Height : 274.50mm

Width : 40.00mm

Depth : 96.50mm

#### Weight :

450 g

#### Temperature range :

Operating : 0°C to 50°C

Storage : -10°C to 60°C

#### Humidity :

Up to 90% (no condensation)

#### Connection to the DCS or to the PLC :

Using the FIRELEC dedicated cables plugged into the four female connectors located at the rear of the product secured by two screws per connector.

#### Existing ABB S600 compatible I/O cards :

Analog Input Cards : AI620(4W – 4-20mA) / AI625(2W – 4-20mA)

Analog Output Cards : AO610 (0-20mA) / AO650 (4-20mA)

Discrete Input Cards : DI651 (48Vdc)

Discrete Output Cards : DO620 (24Vdc / 48Vdc – 500mA) \*

\* Remark : with a max current of **2A** per group of 8 outputs (track of the return common signal located on pins 11, 23, 35 and 47)

#### Nominal voltage :

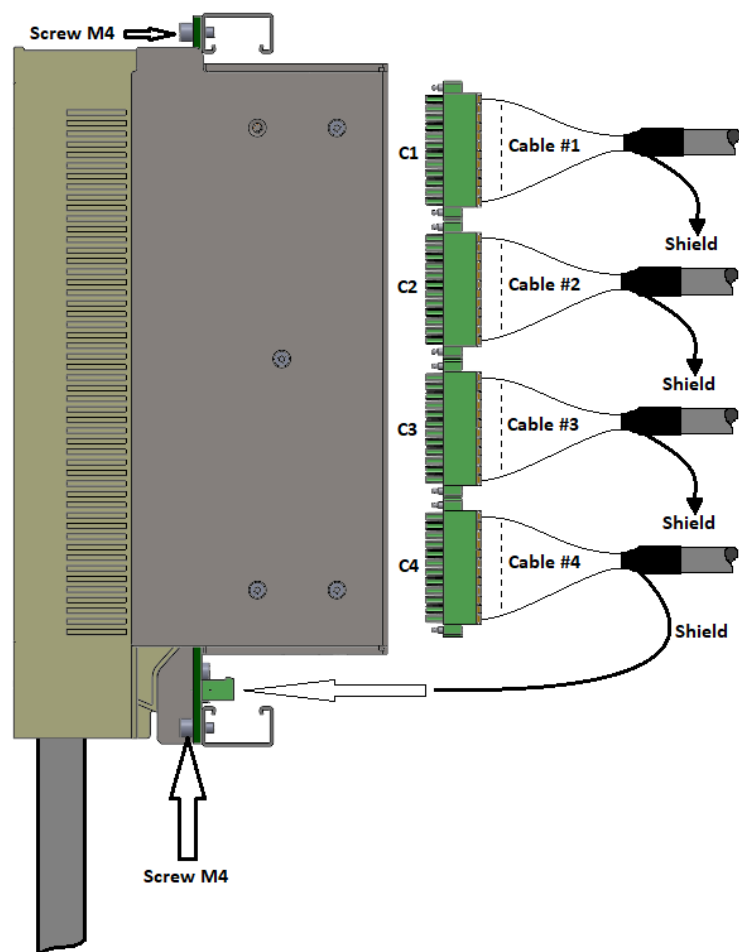
0 to 250Vac between each pin of the rear connector (Cat. II/2)

#### Mounting :

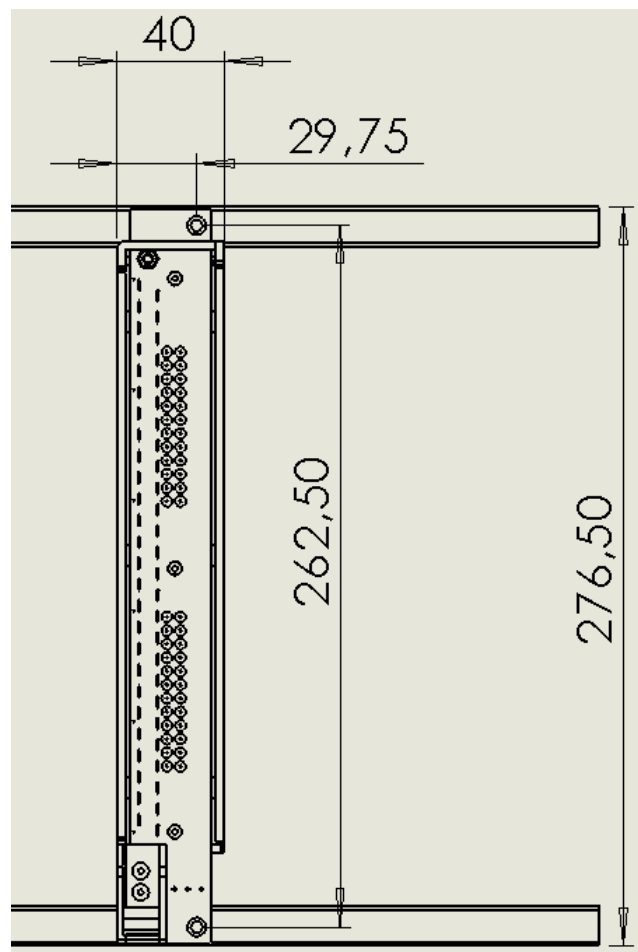
Using two M4 screws by holes located at the top and the bottom of the ADP-TF620-01-1 (axis spacing = 262.5mm)



### Wiring description :



### Mechanical description :



### Pin assignment :

Connector TF620 (Front)	Pins	1	2	3	4	5	6	7	8	9	10	11	12
Connector C1 (Rear)	Pins	1	2	3	4	5	6	7	8	9	10	11	12

Connector TF620 (Front)	Pins	13	14	15	16	17	18	19	20	21	22	23	24
Connector C2 (Rear)	Pins	1	2	3	4	5	6	7	8	9	10	11	12

Connector TF620 (Front)	Pins	25	26	27	28	29	30	31	32	33	34	35	36
Connector C3 (Rear)	Pins	1	2	3	4	5	6	7	8	9	10	11	12

Connector TF620 (Front)	Pins	37	38	39	40	41	42	43	44	45	46	47	48
Connector C4 (Rear)	Pins	1	2	3	4	5	6	7	8	9	10	11	12

**Remark :** Pin EM of the front connector linked with the "shield connector at the rear bottom of the adapter"

