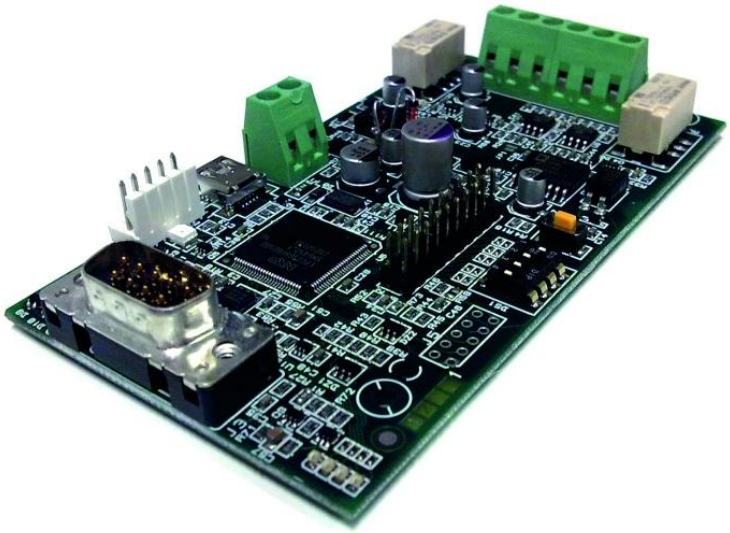
ONERING



INSTALLATION MANUAL
TELEDATAONE & ONEMINI

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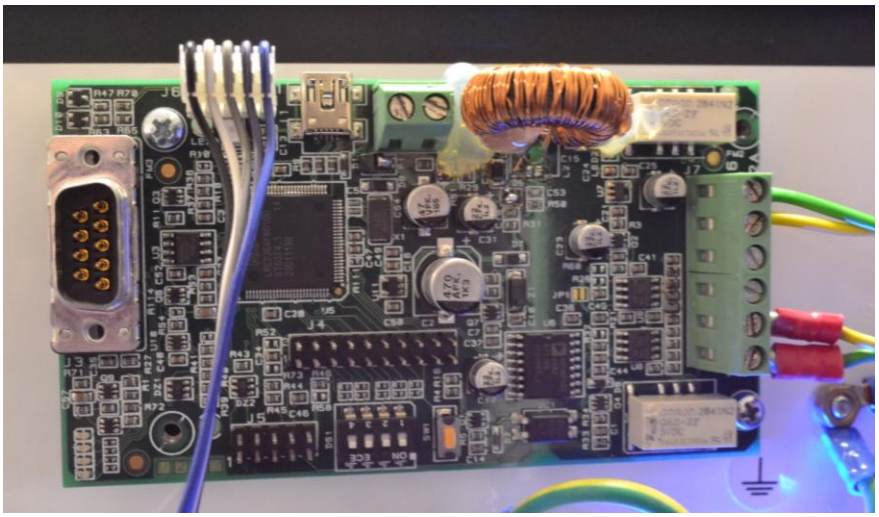
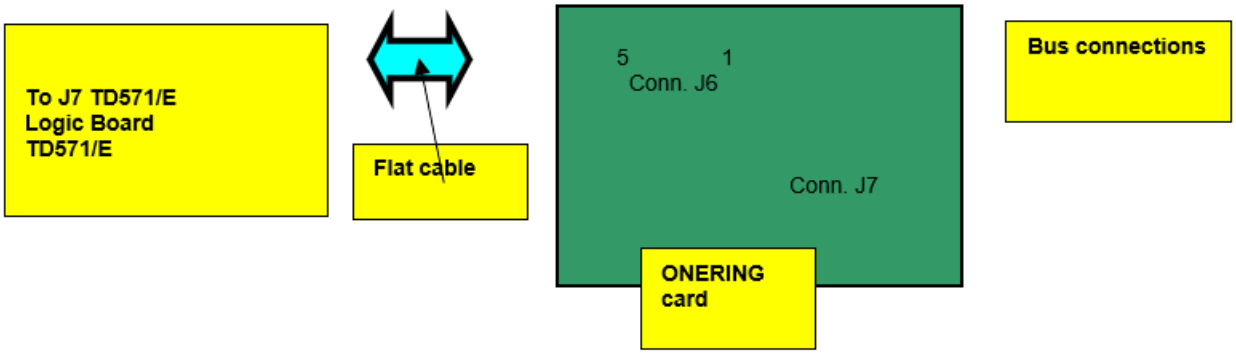
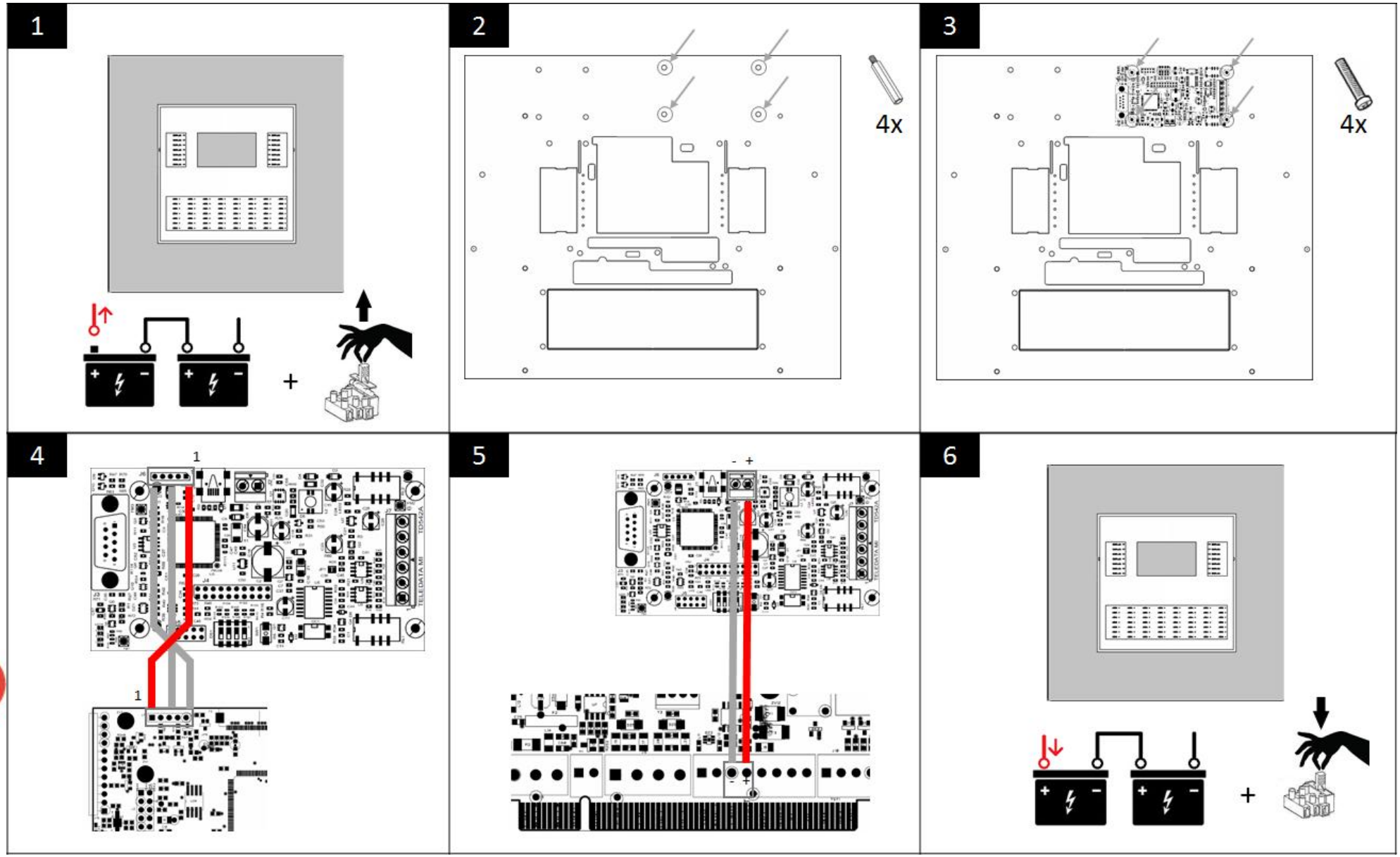
1. ONERING for TeledataOne



The ONERING expansion card allows to connect up to 32 TeledataOne panels. The purpose is to share information between panels, allowing also to do cross outputs activations.

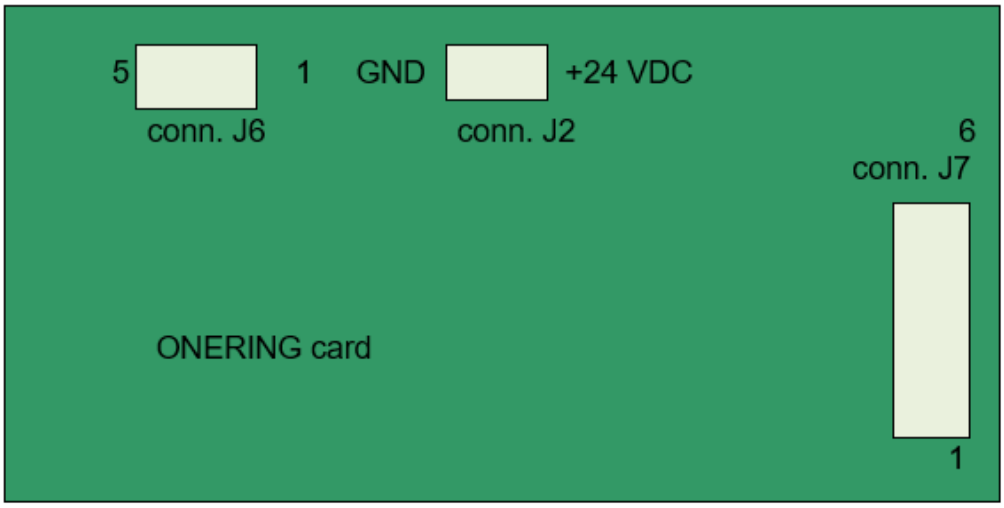
The ONERING card, is supplied with a flat cable and must be connected to the main board on connection J7 as shown below:




1
2
4x
3
4x
4
1
1
5
- +
6
+

ONERING (TD542D) expansion card installation is described below:

1. Turn off the panel, disconnecting the battery and removing the fuse.
2. Insert four 5mm M/F standoffs.
3. Assemble the ONERING (TD542D) card and fix it with four 3x6mm screws.
4. Connect the data flat cable in J7 connector of TeledataOne panel.
5. Connect the power cable to PSOUT+ and GND terminals of J4 connector of TeledataOne panel.
6. Turn on the panel, connecting the battery and inserting the fuse.

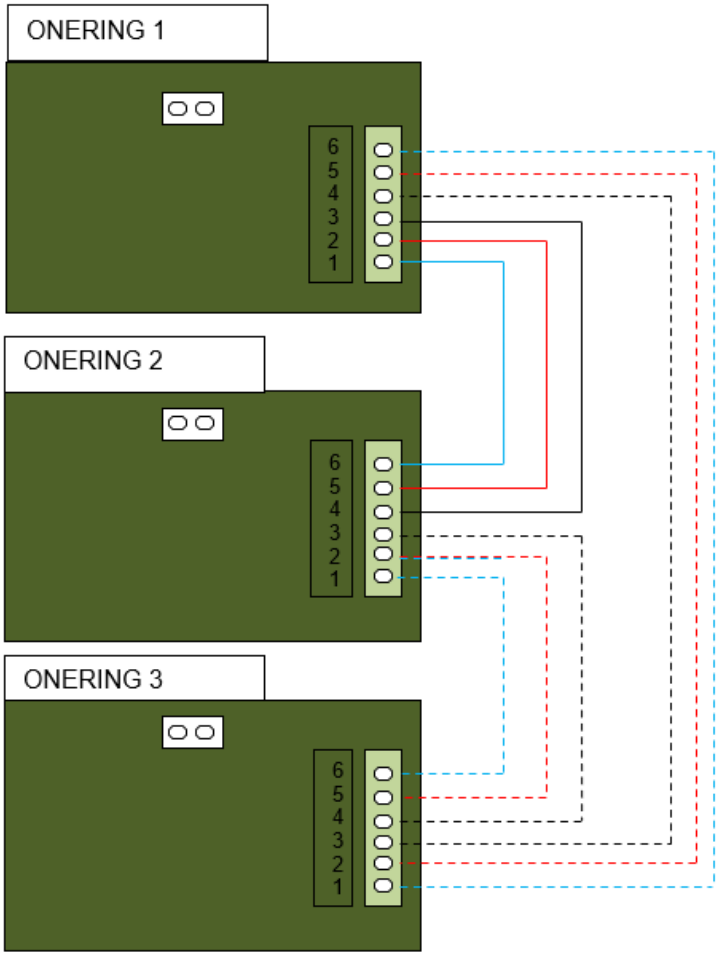


J7 Connector on TD542D ONERING card

N. PIN	NAME	FUNCTIONALITY
1	CL side a	Bus L side A
2	CH side a	Bus H side A
3	Gnd/bus	Gnd bus ref.
4	Gnd/bus	Gnd bus ref.
5	CH side b	Bus H side B
6	CL side b	Bus L side B

J2 Connector on TD542D ONERING card

N. PIN	NAME	FUNCTIONALITY
1	24 VDC	+ Power supply
2	GND	- Power supply



ONERING cards must be connected between each other as described below:

- CL A side of ONERING 1 to CL B side of ONERING 2
- CL A side of ONERING 2 to CL B side of ONERING 3, and so on until the closed back to ONERING 1
- CH A side of ONERING 1 to CH B side of ONERING 2;
- CH A side of ONERING 2 to CH B side of ONERING 3, and so on until the ring is closed back to ONERING 1.
- Connect also the ground bus (GND) between two consecutive OLYNET cards

ONERING ring network is developed to ensure functionality also in case of a bus cut or short.

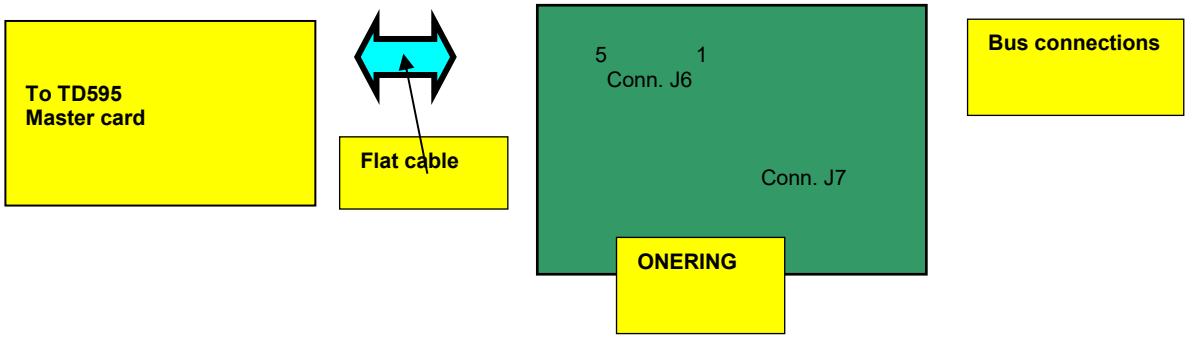
The system can keep the data transfer between the panels in degraded mode, in case of power failure of one or more ONERING cards.

Check the bus connections before starting the system.

2. Scheda ONERING su OneMini

The ONERING expansion card permits to connect up to 32 ONEMINI model panels. The purpose is to share information between panels, allowing also to do cross outputs activations.

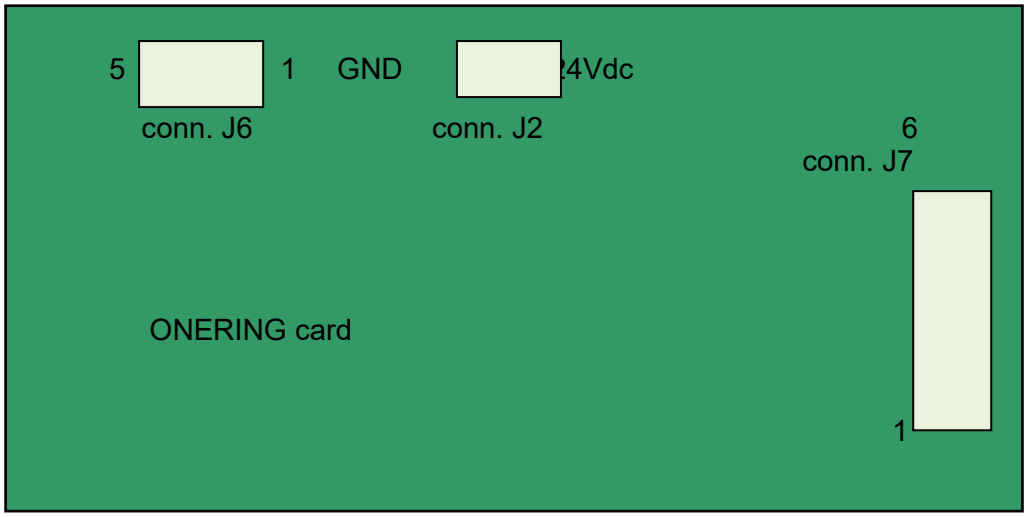
The ONERING card, is supplied with a flat cable and must be connected to the main board on connection J7 as shown below:



ONERING expansion card installation is described below:

7. Turn off the panel, disconnecting the battery and removing the fuse.
8. Insert four 5mm M/F standoffs.
9. Assemble the ONERING card and fix it with four 3x6mm screws.
10. Connect the data flat cable in J7 connector of ONEMINI panel.

11. Connect the power cable to PSOUT+ and GND terminals of J4 connector of ONEMINI panel.
12. Turn on the panel, connecting the battery and inserting the fuse.



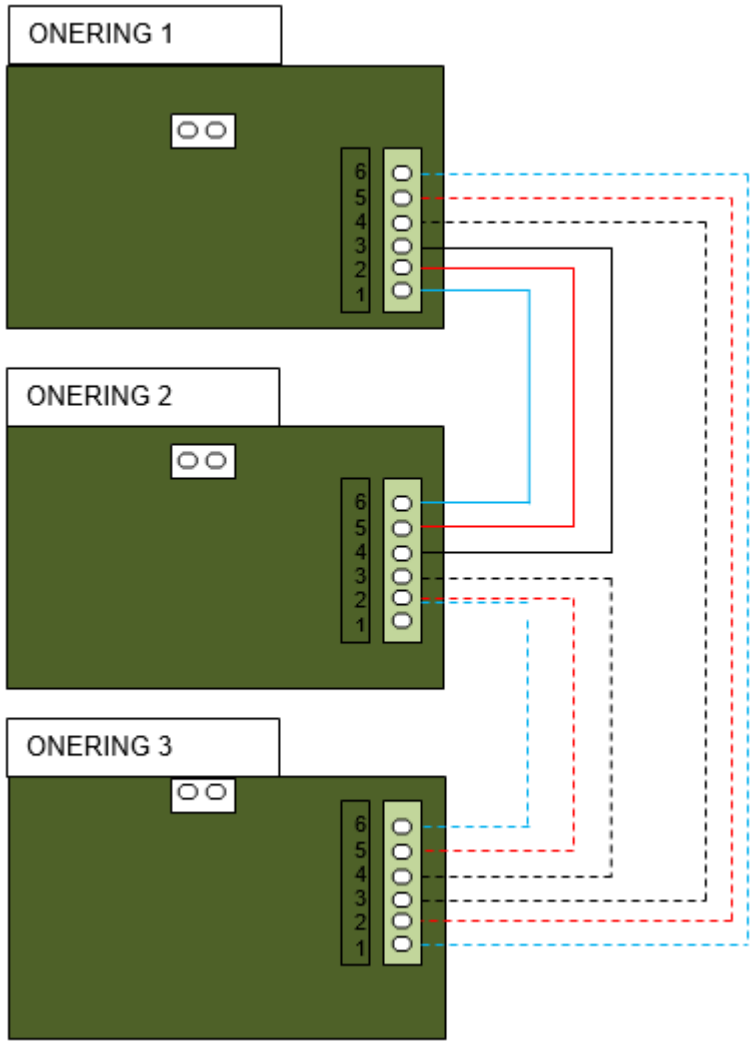
J7 Connector on TD542/C ONERING card

N. PIN	NAME	FUNCTIONALITY
1	CL side a	Bus L side A
2	CH side a	Bus H side A
3	Gnd/bus	Gnd bus ref.
4	Gnd/bus	Gnd bus ref.
5	CH side b	Bus H side B
6	CL side b	Bus L side B

J2 Connector on TD542/C ONERING card

N. PIN	NAME	FUNCTIONALITY
1	24Vdc	+ Power supply
2	GND	- Power supply

ONERING cards must be connected between each other as described below:



- CL A side of ONERING 1 to CL B side of ONERING 2
- CL A side of ONERING 2 to CL B side of ONERING 3, and so on until the ring is closed back to ONERING 1
- CH A side of ONERING 1 to CH B side of ONERING 2;
- CH A side of ONERING T 2 to CH B side of ONERING 3, and so on until the ring is closed back to ONERING 1.
- Connect also the ground bus (GND) between two consecutive ONERING cards

ONERING ring network is developed to ensure functionality also in case of a bus cut or short.

The system is able to keep the data transfer between the panels in degraded mode, in case of power failure of one or more ONERING cards.

Check the bus connections before starting the system.

3. Cabling specs

The control panel should be connected with cables with the following technical specifications:

- Use CAN bus cable with granted impedance 120Ω.
- Max distance at 50 kbit/s : 1000m

Network cable characteristics

LENGTH	TYPE OF CABLE
Up to 40mt	0.25-0.34mm^2
Up to 300mt	0.34-0.6mm^2
Up to 600mt	0.5-0.6mm^2
Up to 1000mt	0.75-0.8mm^2

With shielded and twisted 1mm^2 fire cable, maximum distance at 50Kbit/s speed is 400m.