CD600 PLUS
Quick Installation Guide

This appendix is a summary for the user to install the CD600 Plus. It assumes that the user has a previous knowledge about it.

This appendix informs:

• Which tools and equipments are necessary to install it;

• How to install it (electrically and mechanically);

Tools and Equipments necessary for the Installation

The items necessary for the installation are:

• Screwdriver;

• Cables for power supply;

• Cables for I/O signals;

• Cables for communication;

• ICS 2.0P interface for serial communication or ENET-710 for Ethernet.

Procedures

Check the content of the CD600 PLUS packing (See section 9 – Installation, in the CD600 Plus Manual)
Check:

• The model that matches the ordering code;

• The equipment did not have any damage during transportation;

• The CD600 Plus manual, CD with configuration software and fixing clip to attach the controller to the panel is inside the packing box according to the ordering code.

If some item of the code is not included, contact Smar Equipamentos Industriais Ltda.
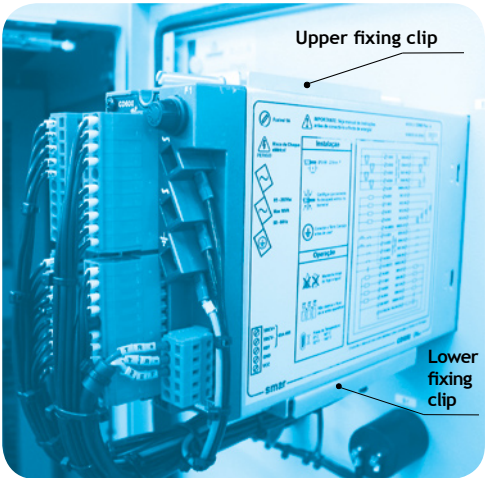
Mechanical Installation of the Controller

The figure 1 shows the CD600 Plus inserted in the panel cut-out (front view of the panel).

Figure 2 shows the screwdriver and the fixing clip bolt of the CD600 Plus (back view of the panel)

Upper fixing clip

Lower fixing clip

The figure 3 shows the lower and upper fixing clip inserted in the opening of the CD600 housing to attach it to the panel.
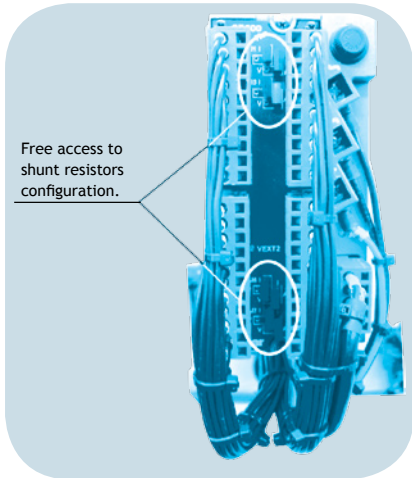

Free access to shunt resistors configuration.

Figure 4 shows the correct way to tie the cables on the CD600 Plus back part, so that access to the shunt resistors is not obstructed.

Electrical Installation of the controller

Figure 5 and 6 show the labels attached to the CD600 Plus side, AC and DC model, respectively. See through theirs legend the terminals meanings.
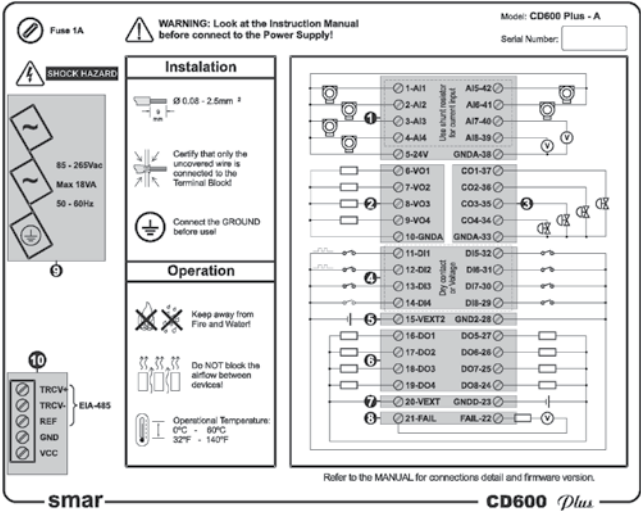

LEGEND	
❶ – Analog Input.	❻ – Digital output.
❷ – Voltage analog output.	❼ – External power supply for digital output.
❸ – Current analog output.	❽ – Fail.
❹ – Digital input.	❾ – Power supply terminals.
❺ – External power supply for digital input.	❿ – EIA – 485 – Communication.

Figure 5 – Side label with the terminal block diagram for the CD600 Plus AC model.

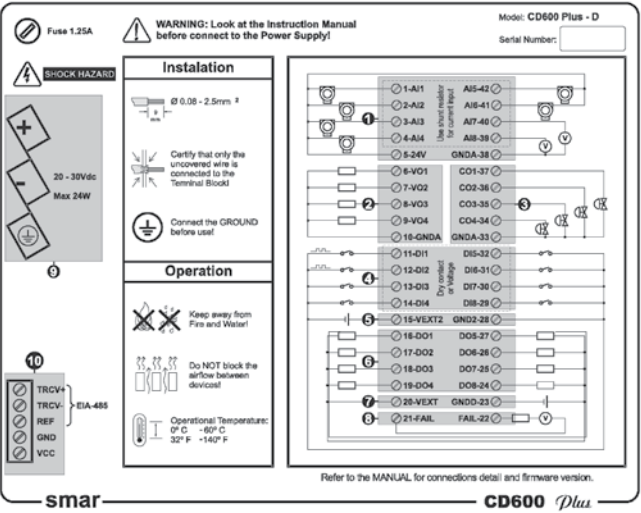| LEGEND	
❶ – Analog Input.	❻ – Digital output.
❷ – Voltage analog output.	❼ – External power supply for digital output.
❸ – Current analog output.	❽ – Fail.
❹ – Digital input.	❾ – Power supply terminals.
❺ – External power supply for digital input.	❿ – EIA – 485 – Communication.

Figure 6 – Side label with the terminal block diagram for the CD600 Plus DC model.

To insert the connection wire for Input/Output and terminal block communication, follow the steps below:

1. Insert the screwdriver in the rectangular cavity of the terminal blocks. (Do not force the screwdriver in the block side, because it can damage it).
2. Rotate the screwdriver at a 90° angle. The cavity for the wire insertion will open.
3. Insert the uncovered part of the wire in the cavity and rotate the screwdriver again in the opposite direction to press the wire in the cavity.

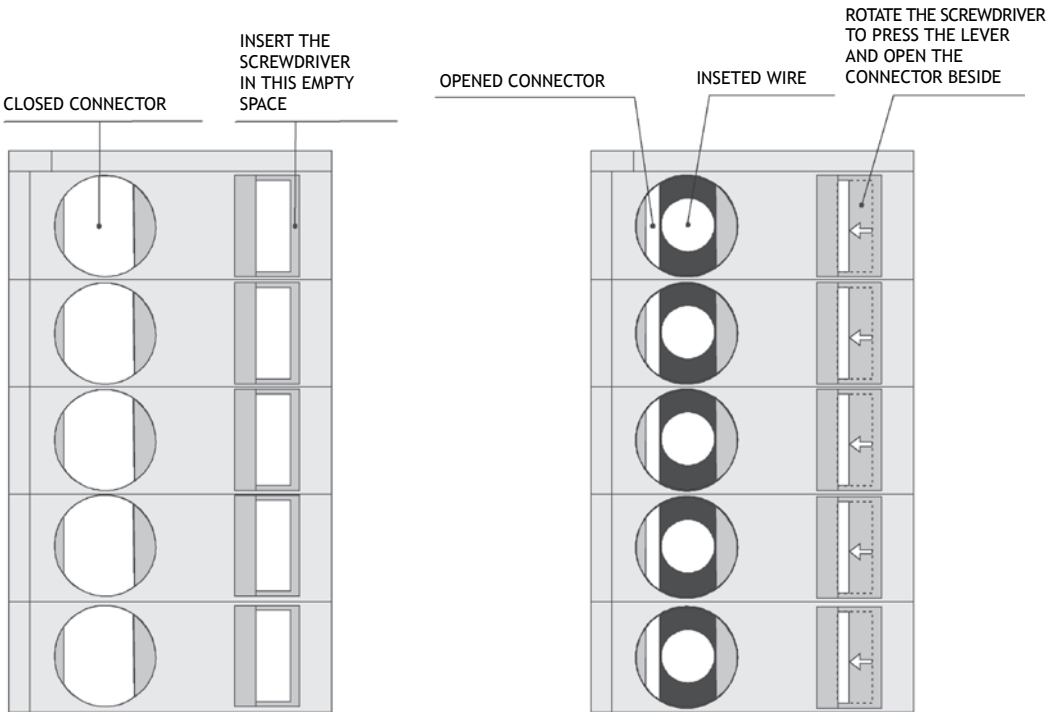| NOTE |
| --- |
| To guarantee the electrical contact insert only the uncovered wire in the cavity. |

Figure 7 – CD600 Plus terminal block with its closed and open terminals.

ATTENTION
Connect the housing ground before supplying the equipment.

Control strategy configuration

Consult the CONF600 in the users manual for installing the configuration software.

NOTE
CD600 Plus is factory-configured to work with 4 loops. See in the CD600 Plus manual for more information about this subject.

Establishing the communication between the controller and the computer

1. Using the computer serial gate

Connect the ICS 2.0P interface in the identified terminal in the label of the CD600 Plus with the specific cable. (See the ICS 2.0P manual for more details).

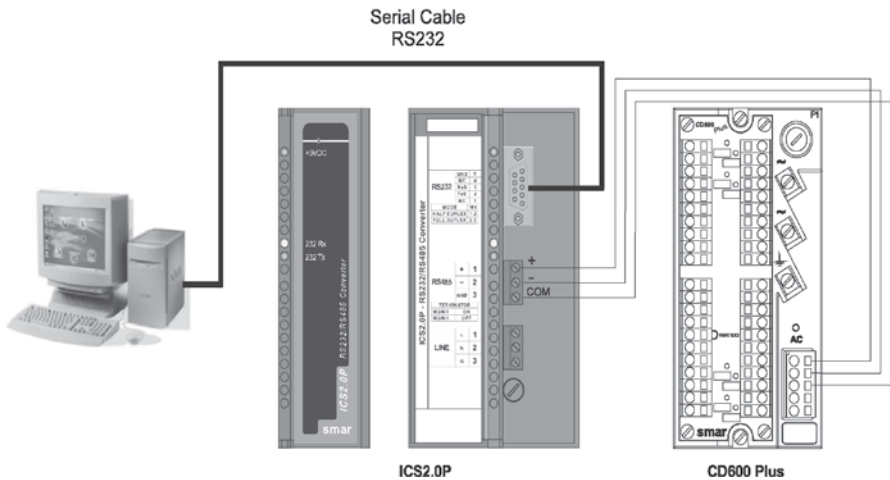Figure 8 shows the connections of the cable with the equipments:

Figure 8 – CD600 PLUS Wiring diagram with ICS2.0 interface.

2. Using Ethernet connection

To establish an Ethernet connection, connect the ENET-710 interface in the RS485 terminal of the CD600 Plus. See figure 9. Refers to the ENET-710 manual for more details.
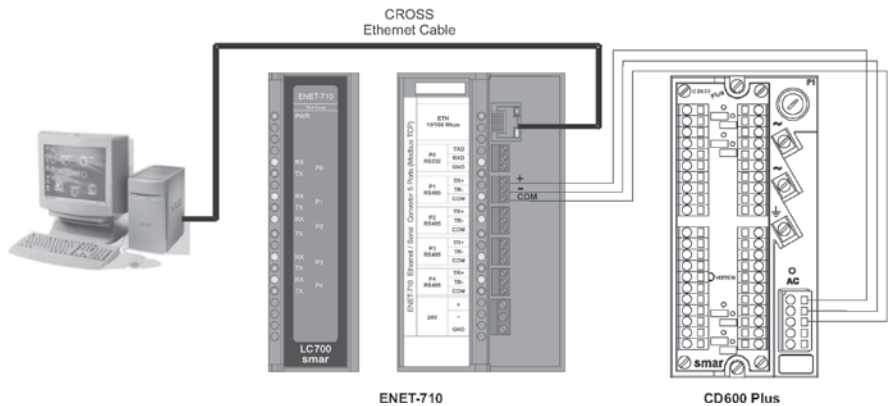

Figure 9 - CD600 PLUS wiring diagram with an ENET-710 interface

Refers to the communication section of the CD600 Plus user manual for more details about the communication blocks configuration.

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