ABB solar inverters
Quick installation guide TRIO-60.0-TL-OUTD-480

1. Choice of installation location

- DC wiring box
- Process Yellow C
- Inverter or wiring box serial number
- DC surge protection device
- Communication and control board

2. Installation site and position

- Consult technical data to confirm the environmental specifications will be met.
- Installation of the unit in a location exposed to direct sunlight is acceptable.
- Do not install in closed spaces where air does not freely circulate.
- Always ensure that the flow of air around the inverter is not blocked, so as to prevent overheating.
- Do not install the equipment near air conditioning units (minimum distance 3m).
- Insulation of the installation location must be done in accordance with local regulations.
- Do not install in inhabited rooms or where the prolonged presence of people or animals is expected due to the inverter's noise during operation.
- The sounds level is greatly influenced by its location (for example, the distance from the inverter and the environment) and by wind conditions.
- Always ensure that the flow of air around the inverter is not blocked, so as to prevent overheating.
- Component available for -SX DC wiring box models

3. Transport and handling

- The inverter must be handled with care, it is the installer’s responsibility to choose an appropriate location.
- Mounting on a vertical wall
- Installing the two cage nuts in the drilling template.
- Do not block access to the external AC and DC disconnects.

4. Lift

- The means used for lifting must be suitable for the weight of the equipment.
- Do not pick up the inverter by the cover.

5. Unpacking and checking

- The components of the packaging must be disposed of in compliance with the laws and regulations applicable in the country where the equipment is being installed.
- Carefully unpack the equipment.
- Check that the equipment is not damaged and note any damage for insurance purposes.
- If possible, install at a location so that the LEDs can be easily seen.
- Install the inverter and ensure that the equipment is vertical considering its size and weight.

6. Mounting on a vertical wall

- The equipment must be used in accordance with this manual and all other ABB solar inverters.
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- Traverse the two cage nuts in the drilling points.
- Position the two-holed gasket for PG 21 signal cable glands.
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Based on the grid connection configuration: choose Run the cable of suitable cross-section through the cable gland(s). AC conductors (25 to 31mm diameter, cross-section of up to 95 mm², copper or aluminum, before connecting the inverter to the distribution grid, set the country standard using the two switches. This way, the wiring boxes get mounted to the power module.

- In the two lower rear attachment pins in the mounting points couple a connector cap of the power module (in green in FIG. 6). Each connector cap has the number of wires inside, which needs to be inserted.

- Confirm that the GREEN LED corresponding to each negative fuse activates. The string is reverse polarity if the green LED is off or, in case of a 0/0 fault, the LED is not lit. Proceed as follows:

  - Switch for setting the termination resistance of the RS485 (2) line.
  - RS485 communication board slot (2).

- The use of non-matching counterparts for the quick fit connectors installed on the inverter may seriously damage the inverter and voids the warranty.

- Use of non-insulating conductors for the power leads connected to the inverter may seriously damage the inverter and voids the warranty.

- Do not use metallic locking fork when releasing the connectors.

- The firmware versions of the various equipment devices need to be aligned and are being updated. Wait for the complete update to be finished.

- Before connecting the inverter to the distribution grid, set the country standard using the two wire rotate switches. The table shows the grid standards provided in the table is valid as of the publication date of this product's QIG and product manual.

- When the inverter is turned on, the grid settings can be modified only within the first 24 hours of operation. DC voltage is required.

- After the inverter is turned on, the grid settings can be modified only within the first 24 hours of operation. DC voltage is required.

- The inverter can also be installed horizontally using the horizontal installation bracket. Horizontal installation instructions are available in the product manual available at www.abb.com/solarinverters (select appropriate country location on website).

- The firmware update process is completed the LEDs will quickly blink three times.

- The table shows the values of the protection devices included in the product. The values are calculated in normal power conditions, using the inverter's rated apparent power and its maximum power factor (0.95).

- The HVDC side of the transformer is provided in the data sheet.