Before starting installation, download the product manual from www.abb.com/solar. Choose the country, string inverters, three phase, and read and follow all safety and installation instructions to avoid disabling any safety features or making the warranty invalid.

The inverter must be installed by a qualified technician. The inverter must be installed in an appropriate, safe location, and at an installation site and position that will ensure it is accessible for maintenance. It must be installed in such a way as to prevent overheating. Do not install it in closed spaces where it will be exposed to any kind of condensation. Do not install it near any flammable substances or other flammable substances. Do not install it in locations where the equipment may be exposed to direct sunlight. Do not install it in locations where the equipment may be exposed to excessive temperatures. Do not install it in locations where the equipment may be exposed to excessive humidity. Do not install it in locations where the equipment may be exposed to excessive dust. Do not install it in locations where the equipment may be exposed to excessive vibrations. Do not install it in locations where the equipment may be exposed to excessive shocks. 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The PV array equipment ground wires must be connected to the equipment ground terminal block (marked "EARTH") in the DC wiring box. 

1) model, DC wiring box 

In this model of DC wiring box the PV array is connected to the inverter through the DC input terminal block by inserting the cable into the DC input opening. 

Confirm the DC cables are KATHON-09AWG, upper or aluminum. 

- Remove the plug in the bottom of the DC wiring box. 
- Run the DC cable through the conduit opening. 
- Connect PV array to the DC input terminal block on in and out. 
- Disconnect the interests, make sure that the correct polarity for each wire. 
- Give each wire a pull test to confirm the connection is secure. 
- Conduct must be attached using liquid tight fittings to maintain Type 4 enclosure integrity.

Fuses are sized for single-wiring currents only. Strings may not be parallelized in the PV array. 

- Remove the DC cables are AWG 12 A.K.A. 
- Remove the plug in the bottom of the DC wiring box. 
- Run the DC cable through the conduit opening. 
- Connect PV array to the DC input terminal block on in and out. 
- Disconnect the interests, make sure that the correct polarity for each wire. 
- Give each wire a pull test to confirm the connection is secure. 
- Conduct must be attached using liquid tight fittings to maintain Type 4 enclosure integrity.

2) model, DC wiring box

1) Make sure have fuse holders for each individual string conductor. 2) 160 and 165 model are available.

The following table shows the main components and connections available on the communication and control board. Each connection cable reaches the communication board through signal port opening (FIG. 10). 

Be sure that you have the factory reference manual available on the control board for troubleshooting suggestions. Refer to the product manual for details on the connections and functions available on the communication and control board.