The installer must read this document in its entirety before installing or commissioning this equipment!

The labels on the UNO inverter carry the markings, main technical data and identification of the equipment and manufacturer. The technical data shown in this quick installation guide does not replace that shown on the labels attached to the equipment.

In addition to what is explained in this guide, the safety and installation information provided in the technical manual must be read and followed. The technical documentation and the interface and management software are provided at the website of the available at the website.

### 1. IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS - KEEP IN SAFE PLACE!

The inverter must be installed by trained personnel.

- It is recommended to install the inverter in a well-ventilated area with proper air circulation and protection from direct sunlight.
- Ensure that the installation location is safe and stable to prevent any accidents or damage to the inverter.

### 2. List of Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting Kit, XAK.V0E10</td>
<td>1</td>
</tr>
<tr>
<td>3 pin connector for configurable relay, 500908330G</td>
<td>1</td>
</tr>
<tr>
<td>Grounding screw</td>
<td>2</td>
</tr>
<tr>
<td>6 pin connector for communication and control signals, 500908389G</td>
<td>1</td>
</tr>
<tr>
<td>Mounting Ring, XAR.V0E10</td>
<td>1</td>
</tr>
<tr>
<td>1 bracket for wall mounting</td>
<td>5</td>
</tr>
<tr>
<td>5 anchors and screws</td>
<td>2</td>
</tr>
<tr>
<td>2 locking screws for securing wiring box to bracket</td>
<td>1</td>
</tr>
</tbody>
</table>

### 3. Wiring Diagram

The wiring diagram provides a visual representation of the connectivity and signal flow within the inverter. It is essential to follow the diagram accurately to ensure proper installation and operation.

### 4. Equipment Warning

- The inverter cover is equipped with fixed hinges and is not intended to be removed from the chassis.
- The wiring box cover must be removed before opening the inverter cover.

### 5. Using the Instructions

- The technical data shown in this quick installation guide does not replace that shown on the labels attached to the equipment.
- The labels on the UNO inverter carry the markings, main technical data and identification of the equipment and manufacturer.

### 6. Mounting Location

- Choose the installation location and position to comply with the following:
  - No obstacles should obstruct the airflow around the inverter.
  - The inverter should be installed in a well-ventilated area.

### 7. Components shipped with models

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting Kit, XAK.V0E10</td>
<td>1</td>
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<td>1</td>
</tr>
</tbody>
</table>

### 8. System Grounding

- The inverter includes an earth ground terminal 28 for each wiring system (DC input and AC output circuit), and a protective earth (PE) terminal 26 for the external protective conductor, identified by the symbols on the terminals as shown below.

- The PE terminal 26 is positioned inside the switch box and connected as shown in the illustration at left.

- To prevent electrical hazards, all the connections must be carried out with the disconnect switch downstream of the inverter (grid side) open and locked out.

- The earth (ground) connection terminal 25 is positioned inside the switch box and connected as shown in the illustration at left.

- To prevent electrical hazards, all the connections must be carried out with the disconnect switch downstream of the inverter (grid side) open and locked out.

### 9. Certification

- The inverter has been tested and found to comply with the RoHS directives and the standards of the following bodies:
  - CE (European Union)
  - UL (United States)
  - cETLus (Canada)

- The inverter complies with all safety regulations and standards applicable to inverters for grid-connected PV systems.

- The inverter is suitable for use in residential and commercial applications.

- The inverter is designed for outdoor installation.

- The inverter is suitable for use in environments with temperatures ranging from -40°C to +70°C.

- The inverter is designed to comply with the grid code requirements of the respective countries.

- The inverter is suitable for use in environments with relative humidity ranging from 85% to 95%.

- The inverter is suitable for use in environments with vibration levels of up to 2 g.

- The inverter is suitable for use in environments with shock levels of up to 10 g.

- The inverter is suitable for use in environments with dust and dirt levels of up to 2."
Grounding of inputs is negative configuration by default.

Grounding code A is located on the inverter on the main board. It is grounded in position 0 and negative grounding of the inputs as indicated below.

To change the grounding of the inputs, move the jumper installed in position 0 to position 1 (negative) to position 0 (positive). In addition to moving the connector, it is also necessary to review the internal DC connection cable positions 4 and 6, found on the DC terminal block, within the switchbox as show below right.

**DC input connection depends on the grounding configuration.**

DC input connections are made after connecting an acceptable connection to the chassis, pulling the conductors through the raceway or the DC cable opening 18, and connecting them to the DC terminal block 14.

In the switchbox, connect the DC input cables from the PV source to the DC input terminal block 14. The following shows:

Confirm DC voltage in the switchbox has corrected polarity and is within the operational range (section 16) prior to terminating.

- **Positive Grounding**
- **Negative Grounding**

**Ac switch** is OFF. Disconnect PV array current from the inverter when switch is in the OFF position. It DOES NOT disconnect AC from the grid.

Connect the AC source on the inverter AC terminal block (positions 1, 2, 3) based on the utility voltage configuration provided with the switchbox.

*Refer to full technical manual on the website for Error and Warning Codes.*

Operating parameters of the equipment are displayed on the LCD B1. LEDs B2 indicate operation status. Refer to the switchboard's technical data section B13 and access data logged internally.

LEDs B2 (powering key) and KEYPAD B3 can be used for display menu selections. Keypad B3 displays select menu items. Description of symbols and display fields on the LCD B1 are found at right and illustrated below.

- **Input Power**
- **Grid Status**
- **Grid wiring termination type**
- **Input**
- **Communication wiring**

**Address values** are assigned manually using any value in the range 2 to 63.

- **RS-485 communications**
- **Address values**
- **Grid wiring termination type**
- **Input**
- **Communication wiring**

In order to connect the communication wiring to the inverter it is necessary to replace the signal plug screw 20 with a 1/2" box connector (thread 14 NPSM) that matches the wiring method chosen (e.g., conduit, flexible conduit, etc.)

- **Input Power**
- **Grid Status**
- **Grid wiring termination type**
- **Input**
- **Communication wiring**

The XRT (X-200) terminals are not isolated and can have hazardous voltages present. These terminals shall not be used for any purpose (for use with wind models only).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-485 data transmission</td>
<td>-T/R, +T/R</td>
</tr>
<tr>
<td>RS-485 power</td>
<td>33V ±10%</td>
</tr>
<tr>
<td>Voltage</td>
<td>33V</td>
</tr>
<tr>
<td>Communication wiring</td>
<td>Belden 3106A</td>
</tr>
<tr>
<td>Terminals</td>
<td>12 (RS-485)</td>
</tr>
<tr>
<td>RS-485 (A)</td>
<td>+IN 1, -IN 2</td>
</tr>
<tr>
<td>RS-485 (B)</td>
<td>+RTN 3, -RTN 4</td>
</tr>
</tbody>
</table>

**Wiring instruction**

- **Connect the AC wires on the inverter AC terminal block (positions 1, 2, 3)**
- **Connect the DC input voltage**
- **Connect the AC wiring**
- **Connect the communication wiring**
- **Connect the RS-485 wiring**

**Contact technical support with part number and serial number of the inverter to change standard after settings have been fixed for 24 hours.**

Settings become fixed after 24 hours of operation (the inverter does not need to be connected to the grid to perform this setting). Before turning the rotary switches the inverter is switched OFF.

Set the grid/output standard using the two rotary switches found on the main board in the inverter prior to connecting the inverter to the main distribution grid. Before turning the rotary switches the inverter is switched OFF.

**Refer to selections below for the appropriate choice of grid parameters.**

**Default setting 0 (DC)** means no grid standard is selected and display language is English ("Set Country" message will appear on the inverter display).

- **Position of each inverter**
- **Address values**
- **Grid wiring termination type**
- **Input**
- **Communication wiring”

**Settings created by the inverter manufacturer.**

Time remaining can be seen in the menu, and a notice appears on the display if time has expired.

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*Refer to full technical manual on the website for Error and Warning Codes.*