

EN

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User Manual

EPS BOX-TP

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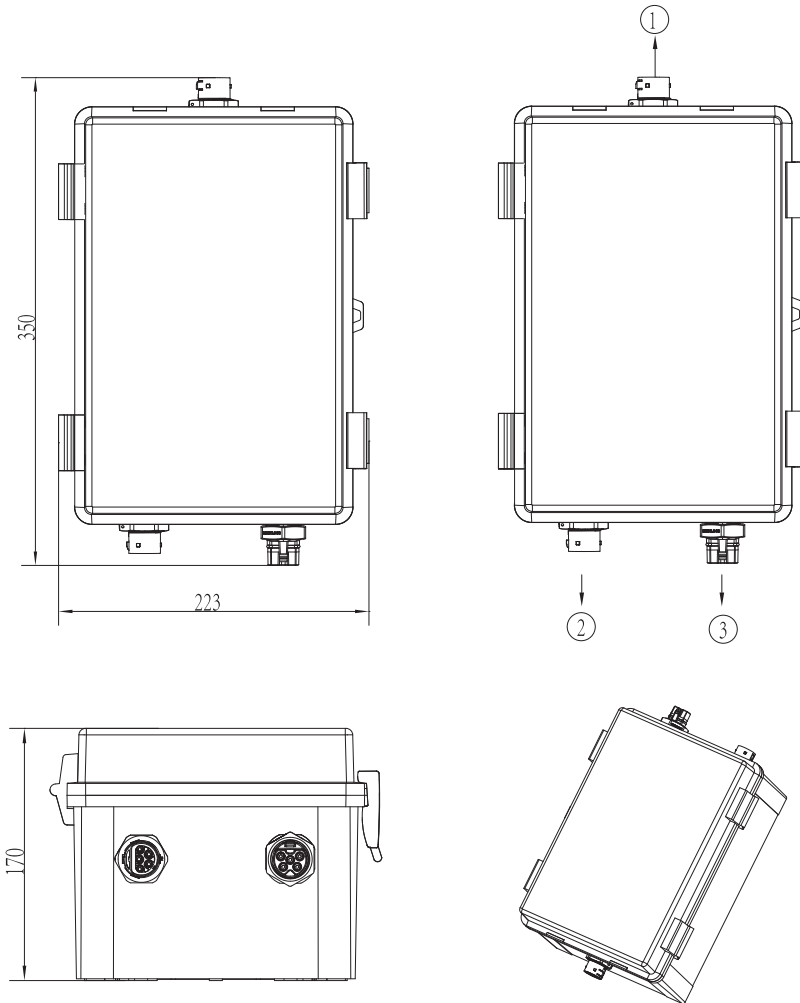
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1. Introduction

EPS Box-TP integrates two contactors which provides simple connection for users. It is compatible with equipment with back-up function. Configured with EPS Box, customers just need to connect 3 wires between inverter and EPS Box. It can simplify the operation and improve security.

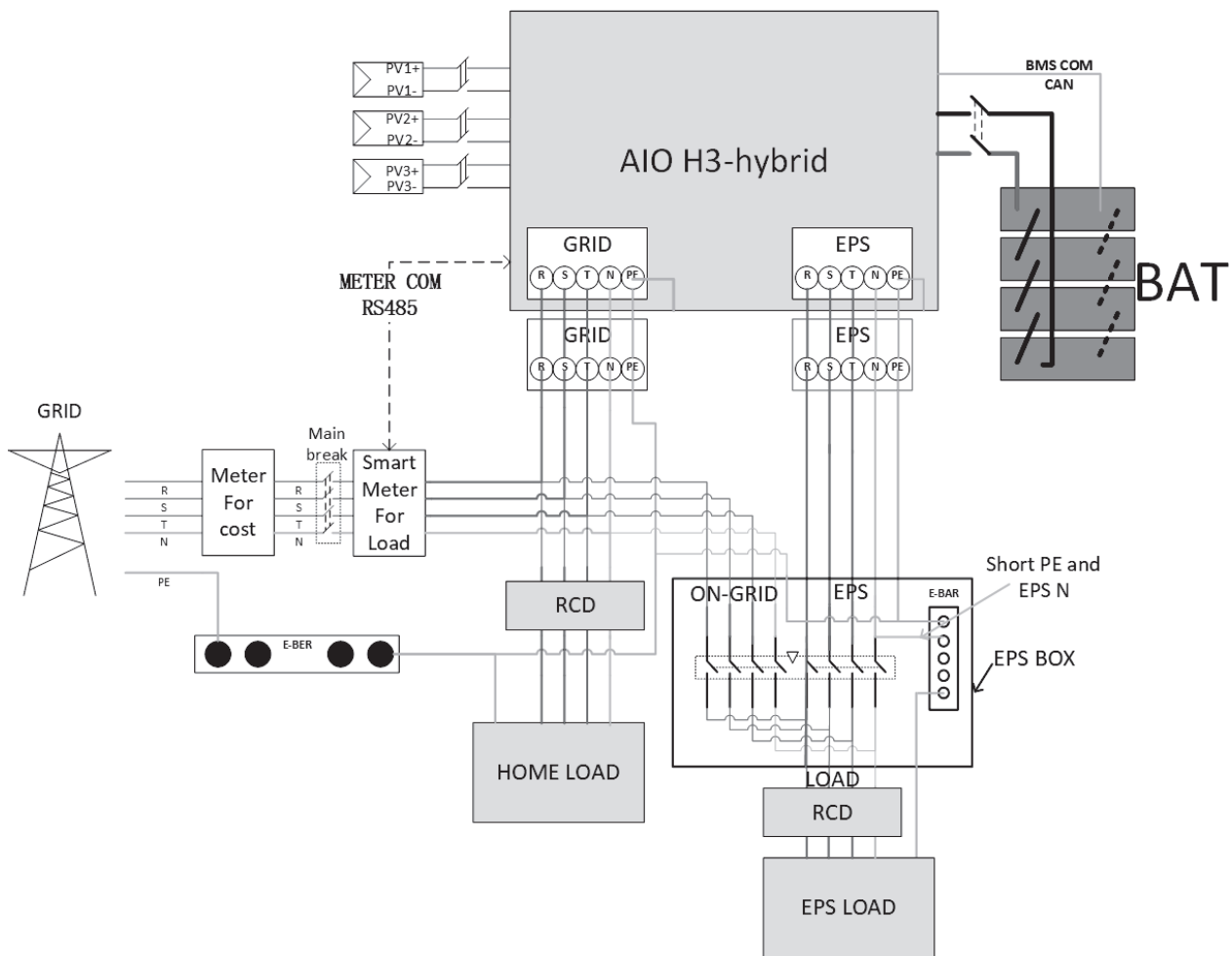
Overview :



| Object | Description |
|--------|-------------|
| 1 | LOAD |
| 2 | EPS |
| 3 | ON-GRID |

This diagram is an example for an application in which neutral is separated from the PE in the distribution box.

For countries such as China, Germany, the Czech Republic, Italy, etc, please follow local wiring regulations. Need internal or external eps box, connect PE and the off-grid N line.



2. Preparation

2.1 Package Contents

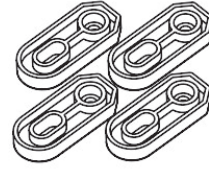
Before installation, make sure that nothing inside the package is damaged. The following items should be inside the package.



A



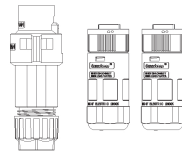
B



C



D



E

| Number | Items | Quantity |
|--------|---------------------|----------|
| A | Expansion Screws | 4 |
| B | Expansion Tubes | 4 |
| C | Cushion Blocks | 4 |
| D | Self-Tapping Screws | 4 |
| E | AC Connectors | 3 |

2.2 Tools

Before you start, get the following tools ready.



Diagonal Plier



Screwdriver



Rubber Hammer



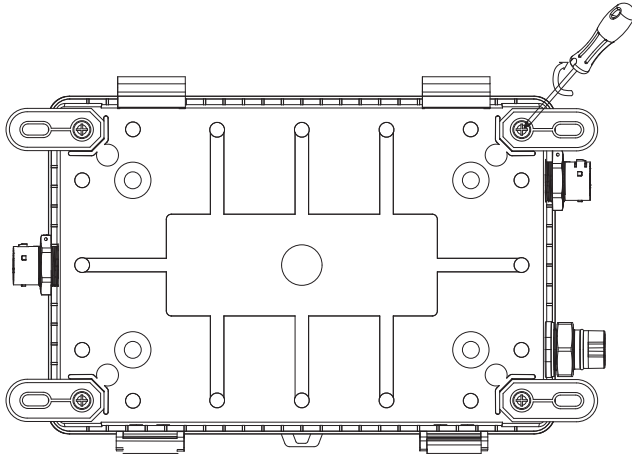
Φ6 Driller



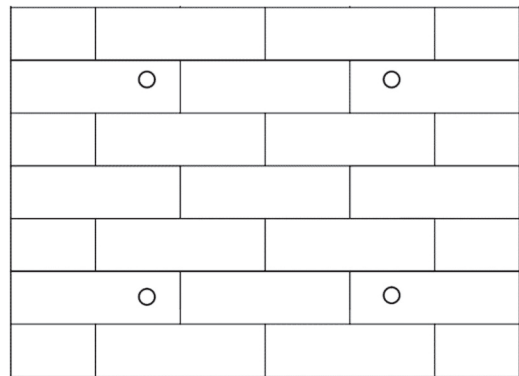
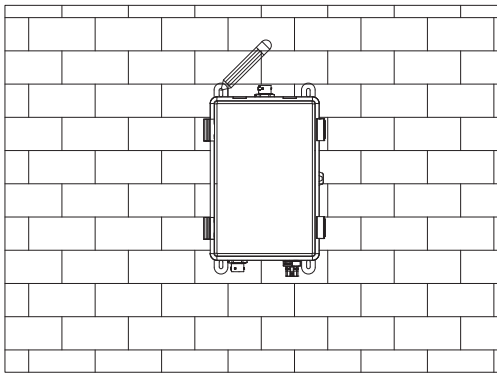
Marker Pen

3. Mounting

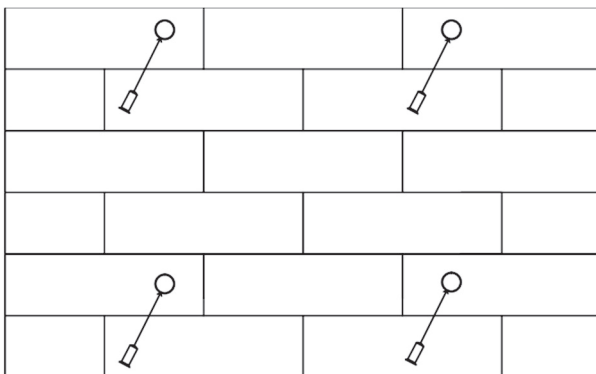
Step 1: Install the four cushion blocks on EPS Box-TP with self-tapping screws.



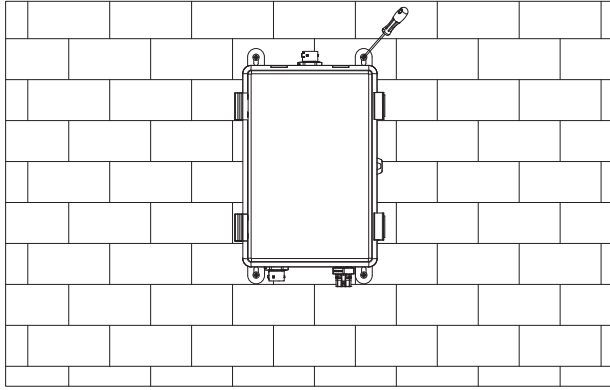
Step 2: Use EPS Box-TP with cushion blocks as a template to mark the four holes' position on the wall with marker pen.



Step 3: Drill holes with $\phi 6$ driller carefully, make sure the holes are deep enough for installing. Install the expansion tubes through cushion blocks into the holes and tighten them.



Step 4: Install the expansion screws with screwdriver to fix the EPS Box-TP.



4. Wiring Connection

Step 1: Grid String Connection

EPS Box-TP is designed for three-phase grid. Per voltage range is 220/230/240V; frequency is 50/60Hz. Other technical requests should comply with the requirement of the local public grid.

| Model(kw) | 5.0 | 6.0 | 8.0 | 10.0 | 12.0 |
|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Cable (ON-GRID) | 6.0mm ² | 6.0mm ² | 6.0mm ² | 6.0mm ² | 6.0mm ² |
| Cable (EPS) | 4.0mm ² | 4.0mm ² | 4.0mm ² | 4.0mm ² | 4.0mm ² |
| Micro-Breaker | 32A | 32A | 32A | 32A | 32A |

Step 2: Grid Wiring

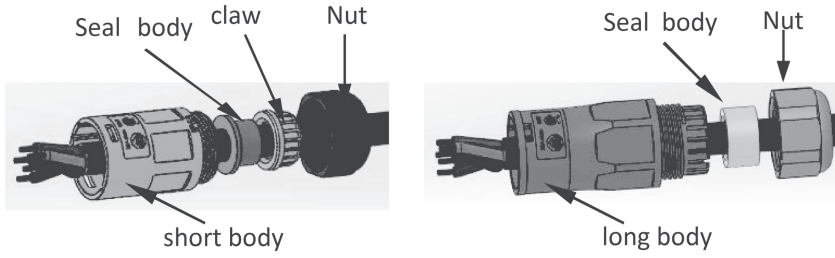
- Check the grid voltage and compare with the permitted voltage range (refer to technical data).
- Disconnect the circuit-breaker from all the phases and secure against re-connection.
- Trim the wires:
 - Trim all the wires to 52.5mm and the PE wire to 55mm.
 - Use the crimping pliers to trim 12mm of insulation from all wire ends as below.



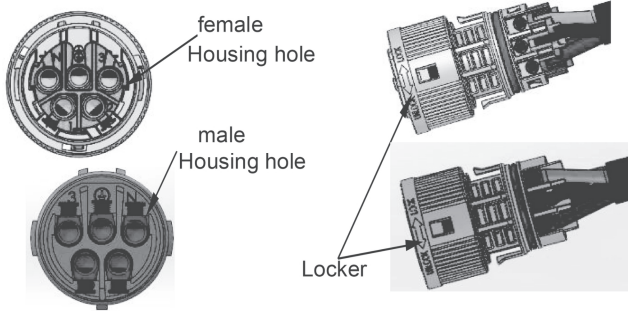
Note: Please refer to local cable type and color for actual installation.

A. EPS Wiring

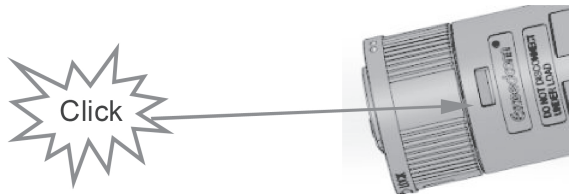
- Set the parts on the cable.



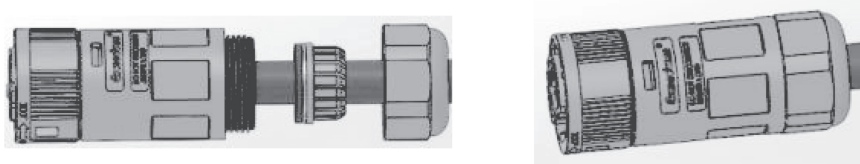
- Crimp wires, screw twisting torque $0.8 \pm 0.1 \text{ N}\cdot\text{m}$.



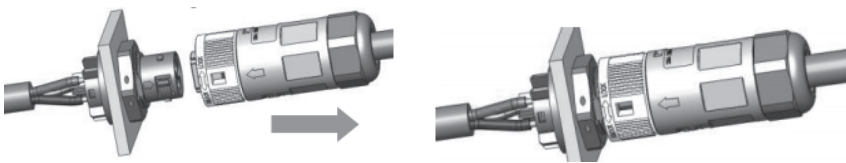
- Push Housing into Body.



- Put the sealing body and yarn trapper into the main body, screw the lock nut into the main body, and the torque is $(2.5 \pm 0.5) \text{ N}\cdot\text{m}$.

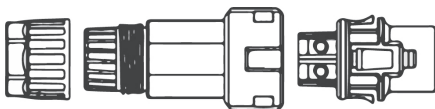


- Insert the male end into the female end. For the rotation direction of the lock, please refer to the LOCK mark on the assembly.

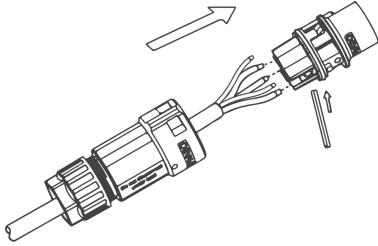


B. ON-GRID/LOAD Wiring

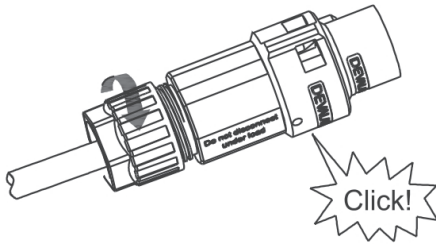
- Separate the ON-GRID plug into three parts as below.
 - Hold middle part of the female insert, rotate the back shell to loosen it, detach it from female insert.
 - Remove the cable nut (with rubber insert) from the back shell.



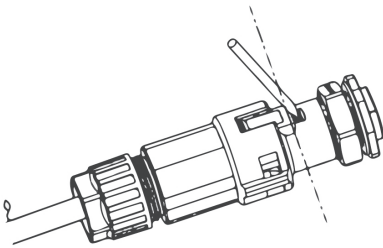
- Slide the cable nut and then Install the back shell onto the cable.



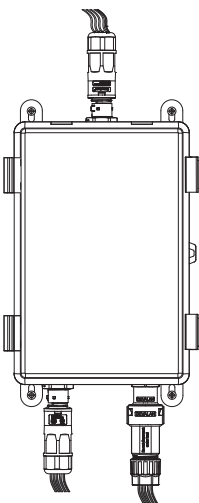
- Push the threaded sleeve into the socket, tighten up the cap on the terminal.



- Remove the ON-GRID connector: Press the bayonet out of the slot with a small screwdriver or the unlock tool and pull it out, or unscrew the threaded sleeve, then pull it out.



4.1 Overview of EPS Box-TP



5. Technical Parameters

| Model | EPS Box -TP |
|----------------------------|----------------------------------|
| Grid | |
| Max. AC Input Current (A) | 32 |
| Rated AC Voltage (V) | 220/380, 230/400, 3L/N/PE |
| Rated AC Frequency (Hz) | 50/60 |
| EPS | |
| Max. EPS Input Current (A) | 25 |
| Rated EPS Voltage (V) | 220/380, 230/400, 3L/N/PE |
| Rated EPS Frequency (Hz) | 50/60 |

| Load | |
|--|----------------------------------|
| Rated Output Current (A), On Grid Mode | 32 |
| Rated Output Current (A), EPS Mode | 32 |
| Rated Grid Voltage (V) | 220/380, 230/400, 3L/N/PE |
| Rated Grid Frequency (Hz) | 50/60 |
| General Data | |
| Cooling Concept | Natural |
| Operating Temperature Range (°C) | - 25 ~ +50 |
| Demensions (W*H*D)(mm) | 340*223*170 |
| Net Weight (Kg) | 2.8 |
| Ingress Protection | IP65 |



FOXESS CO., LTD.

**Add: No.939, Jinhai Third Road, New Airport Industry Area,
Longwan District, Wenzhou, Zhejiang, China
Tel: 0510- 68092998**

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材质：封面-铜版纸100g 内页-双胶纸100g

尺寸：装订A5 142*210mm*(8+4)P

颜色：黑白

装订：骑马钉