

# 防逆流控制器快速安装指导

Anti-Reverse Power Controller Quick Installation Guide



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### Anti-Reverse Power Controller Quick Installation Guide

#### 设备需求

##### Equipment Required

- 防逆流控制器  
Anti-Reverse Power Controller, ARPC is abbreviation of the Anti-Reverse Power Controller as follows.
- 电流互感器，精度要求 $\leq 1\%$ 。  
Current sensor, CT is abbreviation of the current sensor as follows. Appropriate CT's with rated with 1% accuracy or less.
- 电压采样线缆，线缆规格：AWG 12~18。  
Voltage sampling cable, cable section: AWG 20~22.
- 电流互感器信号延长线缆，线缆规格：AWG 20~22。  
CT sampling extension cable, cable section: AWG 20~22.
- 限载信号线缆，推荐使用网线或 AWG 20~22。  
Loading limit cable, we recommend using network cable or AWG 20~22.

#### 设备安装

##### Installation

步骤一：选择合适的墙面，对准防逆流控制器的安装孔位钻两个孔，并将膨胀管敲进孔内；

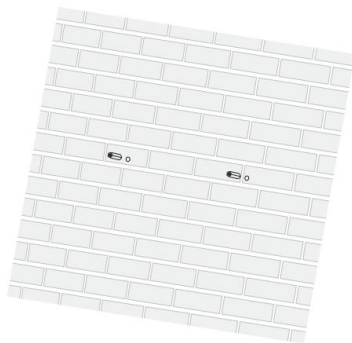
Step1: Choose the position for drilling holes, and then mark the holes position by using a marker, use the hammer drill to drill hole on the wall. Then put the rear panel on the wall.

步骤二：用自攻螺丝固定防逆流控制器。

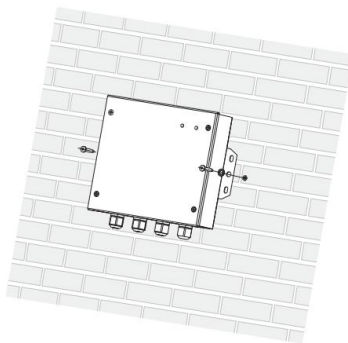
Step2: Put the ARPC on the wall, and use the screw to fix the ARPC.

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Step1



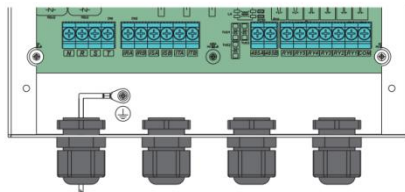
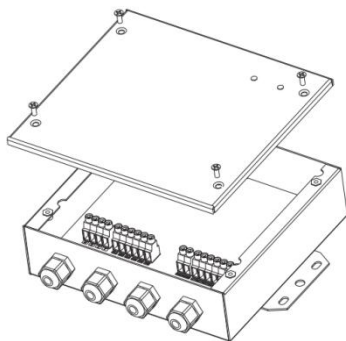
Step2

### 电气连接

#### Wiring

1. 打开上盖，安装地线

Open the cover, connect the PE wire using OT terminal.



2. 连接电压采样信号线（80-270Vrms）

Connect Voltage References

- 连接 N 线。

Connect Neutral to Inputs Grid N.

- 连接相线 R, S, T。

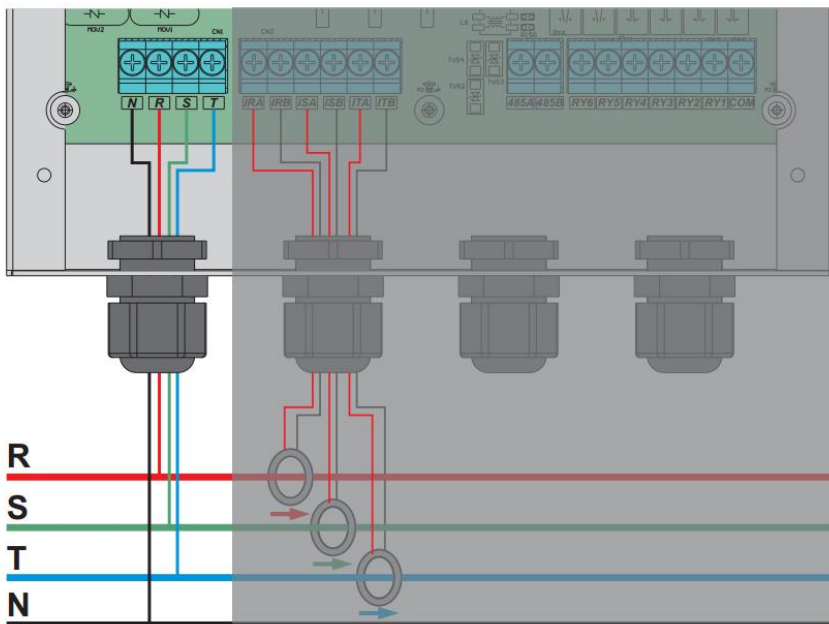
Connect Voltage References to Inputs Grid R, S, T.

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✧ 提示 1: 不能将火线和零线接反。

NOTE1: Don't reverse the R phase line (or L line) to Grid N.



### 3. 连接电流互感器

Connect CT Sensors Grid (Inputs Grid PHA, PHB,PHC)

- CT 方向由电网到负载。

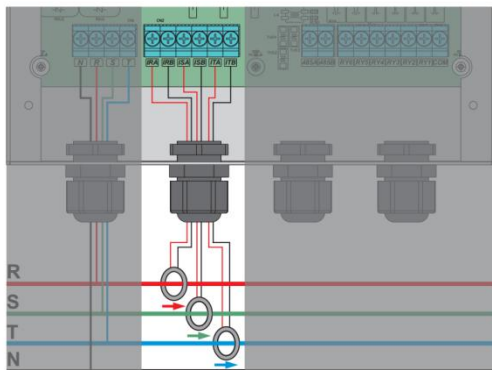
Make sure the CT is installed in the right direction: The arrow on the CT must be form grid to load.

- CT 采样线按照图示方式延长，必须保证 R 相的 CT 接 IR，S 相的 CT 接 IS，T 相的 CT 接 IT。

Wiring the signal wires of the CT as below picture , make sure that the CT which place the R phase line , the single wire of this CT must be connected to IRA/IRB of the ARPC . Don't be in ISA/ISB or ITA/ITB .

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- CT 延长线压接方式  
CT Sampling extension cable.

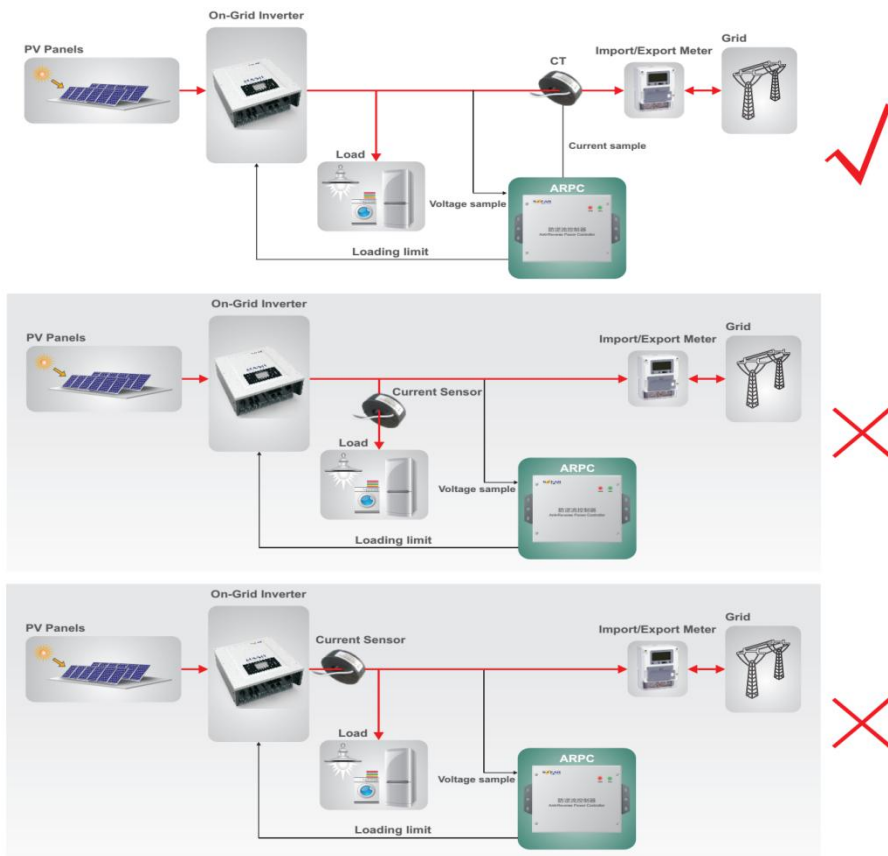


- ◇ 提示 2: 正确的 CT 位置放置如下图。

NOTE2: The correct CT position is placed as the following.

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- ✧ 提示 3: CT 不能放到 N 线和地线上。

NOTE3: Don't place the sensor on the N wire or the earth wire.

- ✧ 提示 4: CT 不能同时穿过 L 线和 N 线。

NOTE4: Don't place the sensor on the N and L wire simultaneously.

- ✧ 提示 5: CT 延长线不能超过 100 米。

NOTE5: The length of CT's cable cannot over 100m.

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#### 4. 连接限载信号线

Connect the loading limit signal wires

- 连接 ARPC COM 到逆变器能量管理模块的 GND。  
Connect ARPC's COM to the GND pin of the Inverter Power Control Module.
- 连接 ARPC RY1 到逆变器能量管理模块的 IN1。  
Connect ARPC's RY1 to the IN1 of the Inverter Power Control Module.
- 连接 ARPC RY2 到逆变器能量管理模块的 IN2。  
Connect ARPC's RY2 to the IN2 of the Inverter Power Control Module.
- 连接 ARPC RY3 到逆变器能量管理模块的 IN3。  
Connect ARPC's RY3 to the IN3 of the Inverter Power Control Module.
- 连接 ARPC RY4 到逆变器能量管理模块的 IN4。  
Connect ARPC's RY4 to the IN4 of the Inverter Power Control Module.

逆变器限载信号线连接说明

Description of connection of load limit signal wires of inverter.

步骤一：打开下盖，限载信号线穿过防水接头并锁好端子。

Step1: Open the bottom cover, the wire through the waterproof joint and locks the terminal.

步骤二：插入端子并锁好螺丝。

Step2: Insert the terminal and lock the screw.

✧ 提示 6：不同型号机器限载信号线接法和接线顺序不同

NOTE6: The order of the signal wire is different in different models.

下图为三种型号机器信号限载线连接示意图，请根据实际机型及丝印选择正确的接线方式。

The following diagram shows the connection diagram of the limited load line of three types of machine signals. Please choose the correct connection mode according to the actual type and screen printing.

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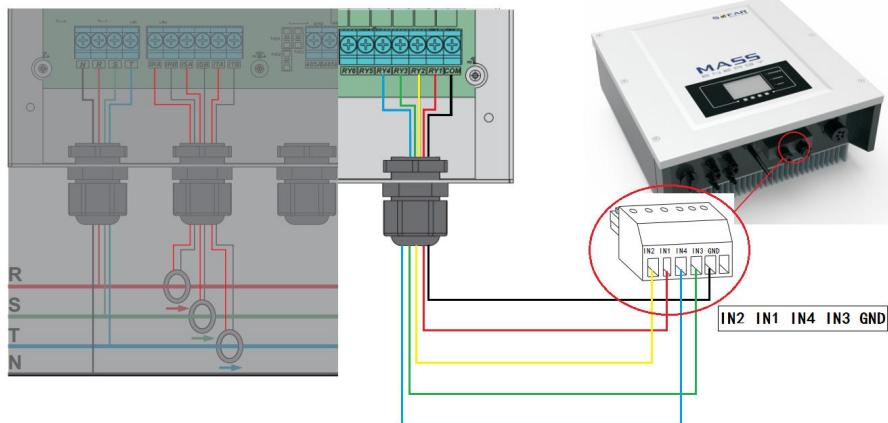


图 a (1) 4K-12KTL-X / 10K-15KTL-G2

Fig a (1) 4K-12KTL-X / 10K-15KTL-G2

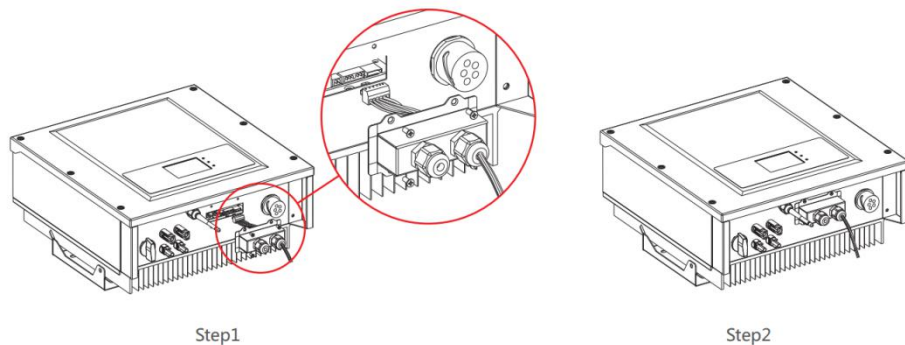


图 a (2) 4K-12KTL-X / 10K-15KTL-G2

Fig a (2) 4K-12KTL-X / 10K-15KTL-G2



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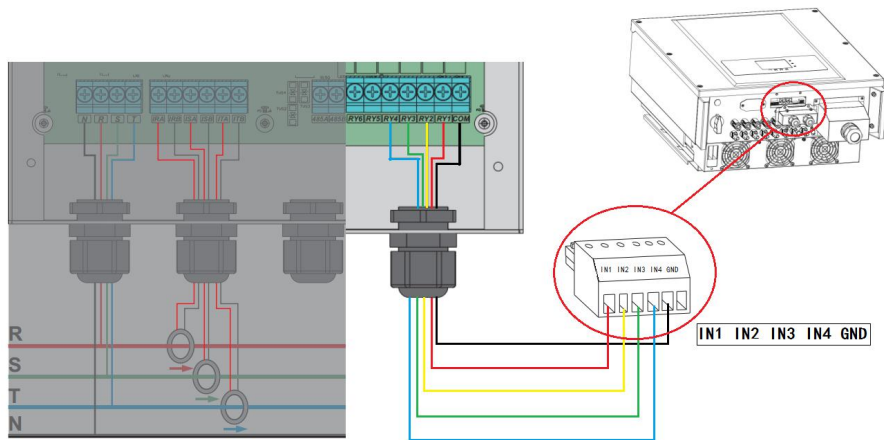


图 b (1) 20K-33KTL-G2

Fig b (1) 20K-33KTL-G2

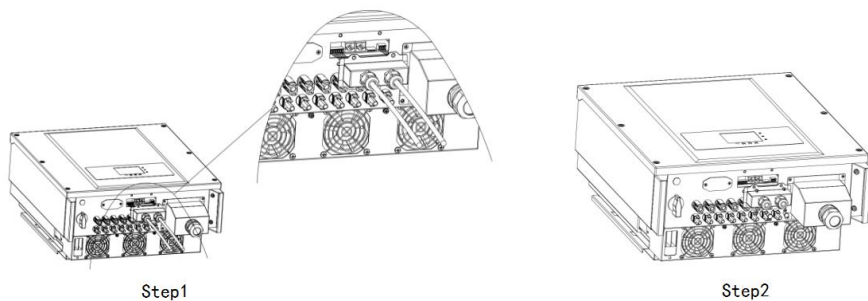


图 b (2) 20K-33KTL-G2

Fig b (2) 20K-33KTL-G2

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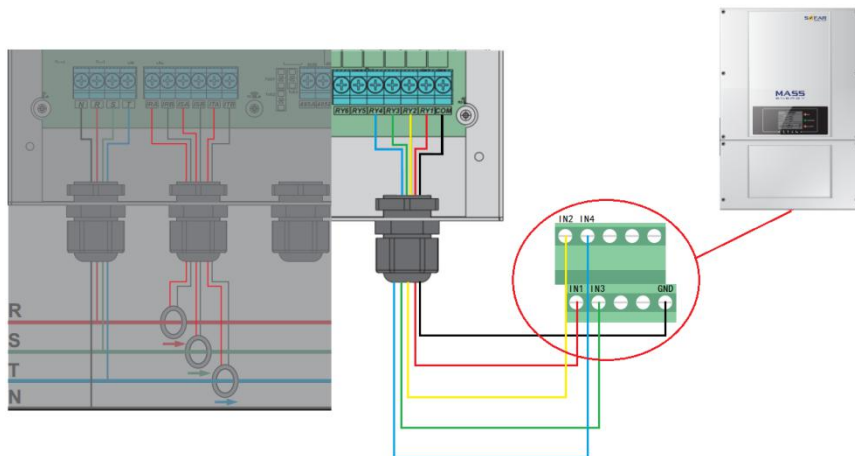
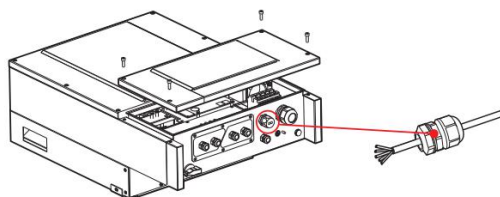
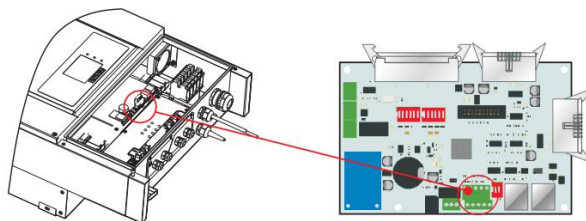


图 c (1) 10K-20KTL / 30K-40KTL / 50K-70KTL

Fig c (1) 10K-20KTL / 30K-40KTL / 50K-70KTL



Step1



Step2

图 c (2) 10K-20KTL / 30K-40KTL / 50K-70KTL

Fig c (2) 10K-20KTL / 30K-40KTL / 50K-70KTL

## 防逆流控制器快速安装指导

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#### 5. 多台逆变器并网

##### Multiple inverters in parallel

- 电压采样信号线的接法参考本手册上述说明 2。

The connection of voltage sampling cable refers to the instruction 2 above in this manual.

- 电流互感器的接法参考本手册上述说明 3。

The connection of CT refers to the instruction 3 above in this manual.

- 限载信号线根据下图连接。

The loading limit signal wires is connected according to the figure below.

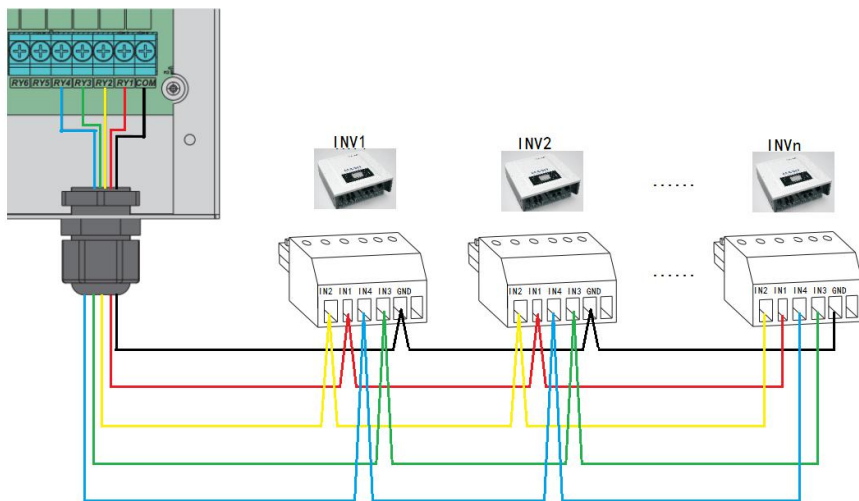


图 a (3) 4K-12KTL-X / 10K-15KTL-G2

Fig a (3) 4K-12KTL-X / 10K-15KTL-G2

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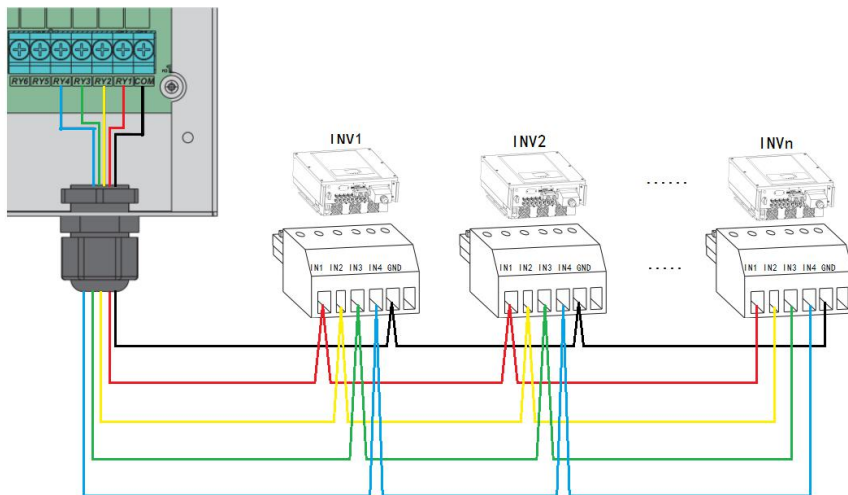


图 b (3) 20K-33KTL-G2

Fig b (3) 20K-33KTL-G2

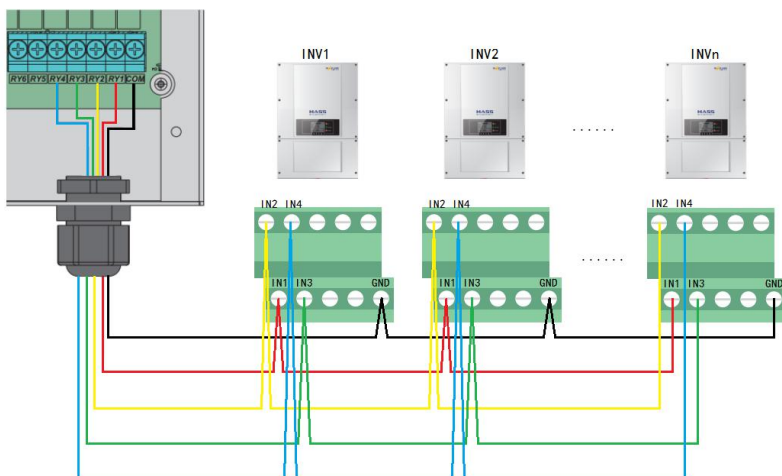


图 c (3) 10K-20KTL / 30K-40KTL / 50K-70KTL

Fig c (3) 10K-20KTL / 30K-40KTL / 50K-70KTL

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### 显示灯说明

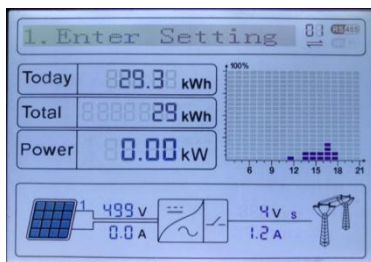
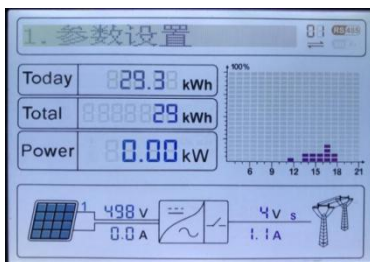
#### Operation Indicators

绿灯常亮 Green LED On	控制器上电 Power to ARPC
红灯闪烁 Red LED Flicker	系统降载 Generation Available
红灯常亮 Red LED On	电网电压采样与互感器采样相位不对应 The phase of grid voltage sampling is not corresponding to the CT sampling

### 使能防逆流功能

#### Enable Reflux function

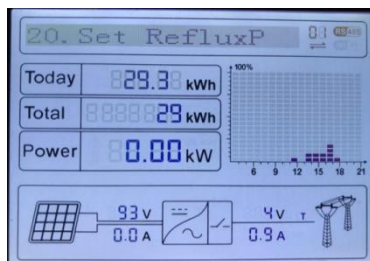
- 选择“1.参数设置”。  
Select “1.Enter Setting”.



- 选择“20.设置防逆流”。  
Select “20.Set RefluxP”.

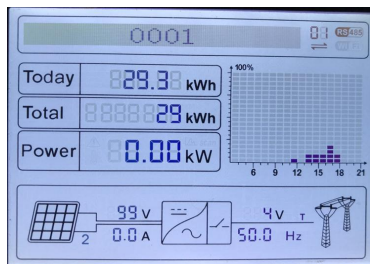
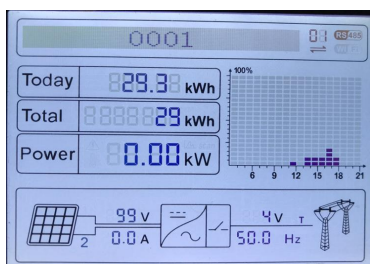
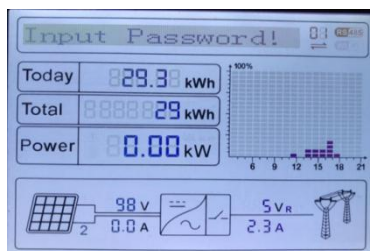
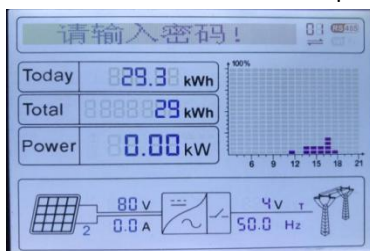
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- 按“Enter”键输入密码“0001”。

Press button “Enter” to input password “0001”.



- 选择“使能防逆流功能”。

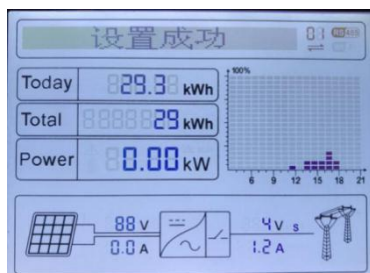
Press button “Enter” to select “Reflux Enable”.

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- 设置成功  
Success





**产品名称：防逆流控制器**

Product Name : Anti-Reverse Power Controller

**公司名称：深圳市首航新能源有限公司**

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