



GARO GNM3T-LP RS485 N as DLM meter

DLM = Dynamic Loadbalancing Meter

Installation and Programming Manual (EN)



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INFORMATION

All information in this guide is valid for GNM3T-LP RS485 N (GARO art nr 109385)

Warnings

-  Make sure the electrical power is off before start of installation process.
-  All electrical installation must be performed by an authorized electrician.

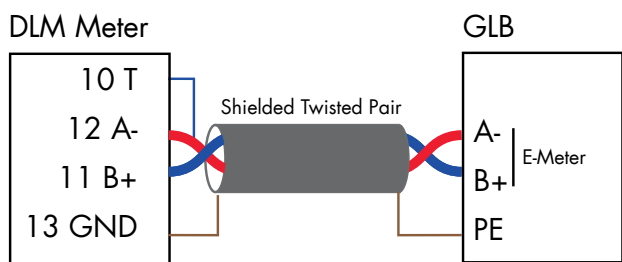
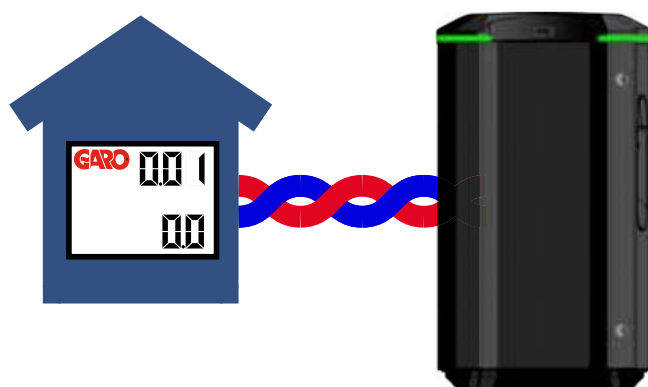
MODBUS CONNECTION

Install the DLM meter in the mains cabinet you want to monitor.

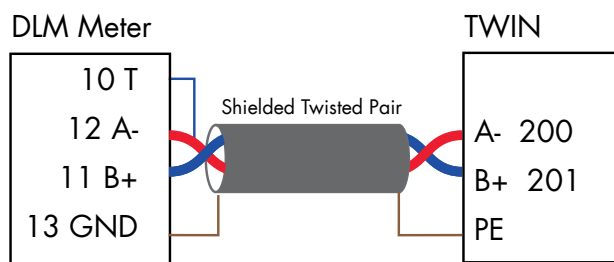
Use shielded twisted pair cable between the DLM meter and the wallbox

Suitable cables:

CAT5 FTP, CAT5e FTP, CAT6 FTP, ELAKY-S, ELAQBY-S or similar.

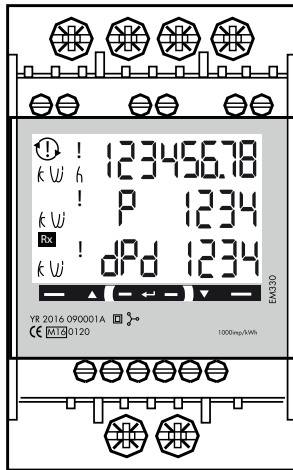


NOTE! JUMPER 10-12

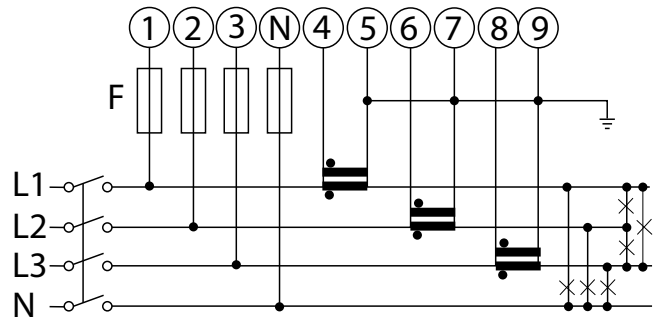


NOTE! JUMPER 10-12

ELECTRICAL CONNECTION POWER CABLES

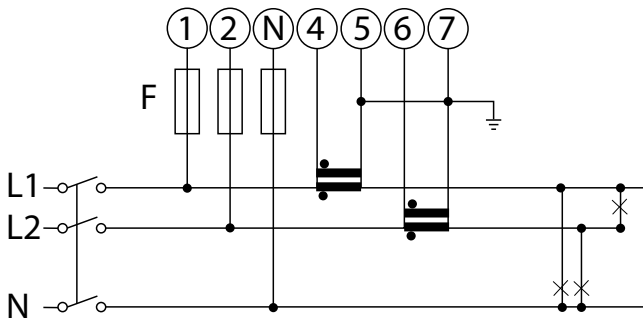


3Pn

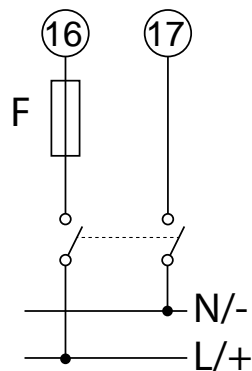
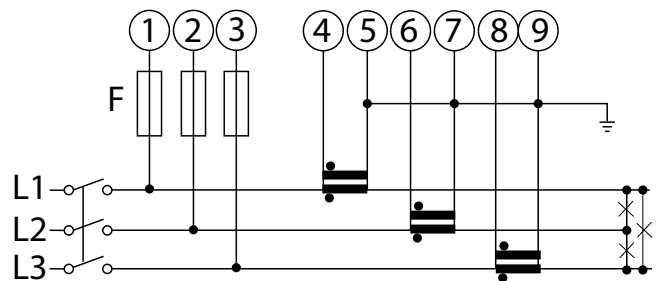


N, 1, 2, 3: section 4 mm², torque 0.6 Nm
 4-17: section 1.5 mm², torque 0.4 Nm

2P

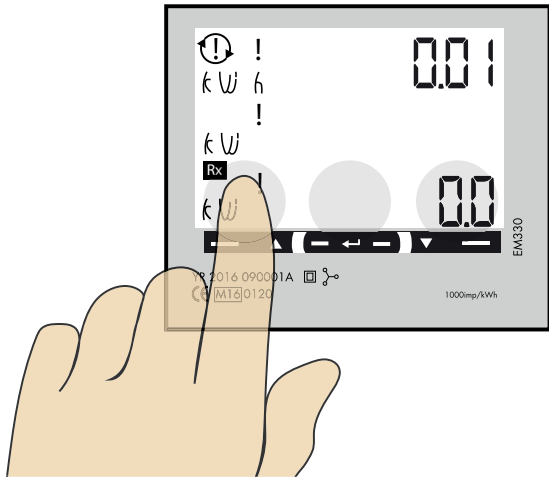


3P

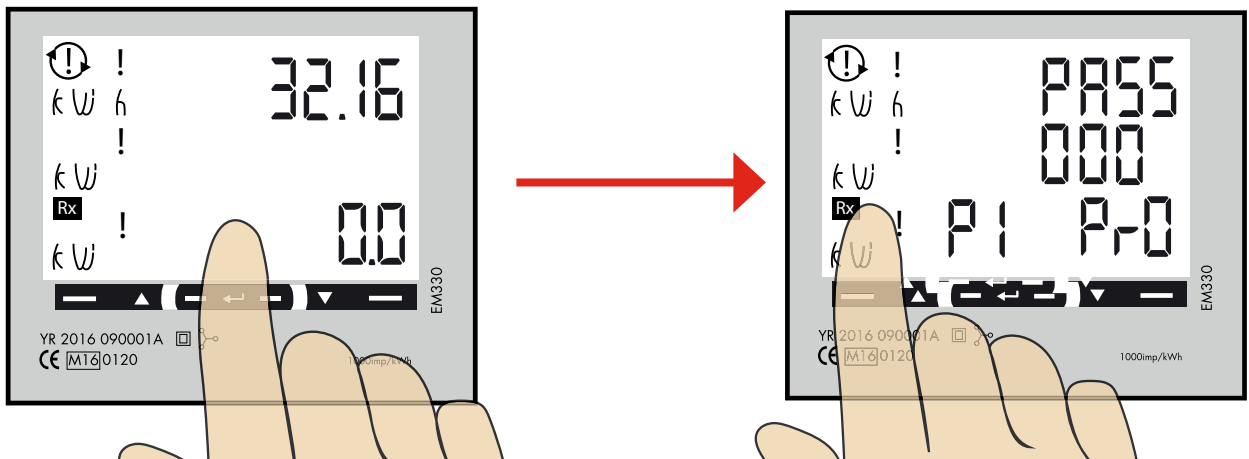


DLM METER SETTINGS

Touch area

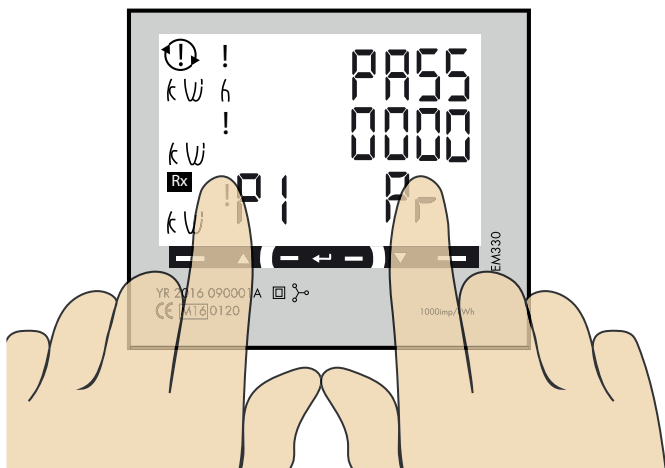


1



"Longpress" center touch area until you see "PASS".

2

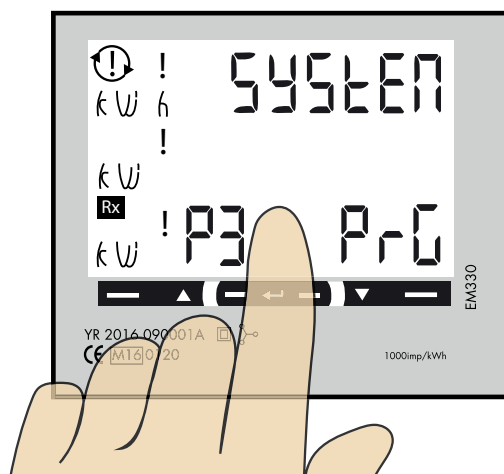
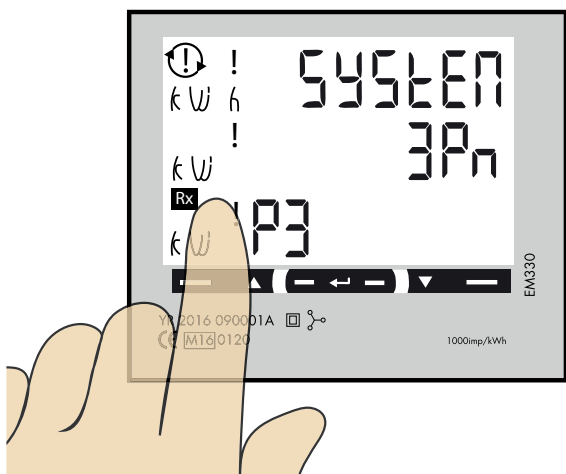


"Longpress" both left and right touch area to bypass the password. The blinking "0" will stop to blink after 2 seconds

3

System setting

- 1P = 1phase + N
- 2P = 2phase + N (3-wire)
- 3P = 3phase (3-wire)
- 3Pn = 3phase + N (4-wire)



1. Click left touch area until "SYSStEn" is visible.

If you need to change the current System setting, follow below instructions:

- 2. Longpress center touch area and PrG is visible.
- 3. Click left or right touch area until wanted value is visible. Confirm by longpress center touch area.

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CT Ratio setting

CT Ratio values (depending on the CT you use):

100/5A = CT Ratio 20

150/5A = CT Ratio 30

250/5A = CT Ratio 50

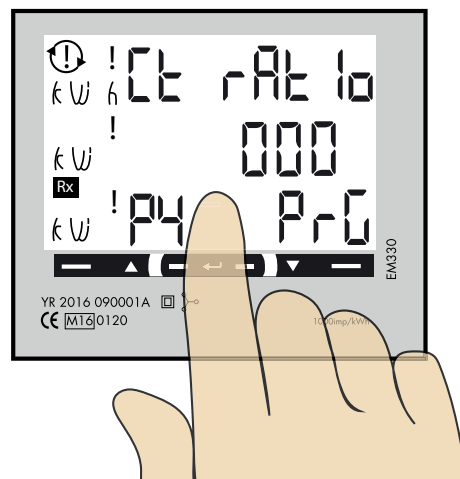
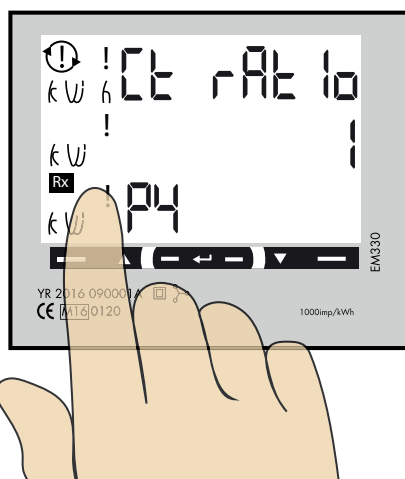
400/5A = CT Ratio 80

750/5A = CT Ratio 150

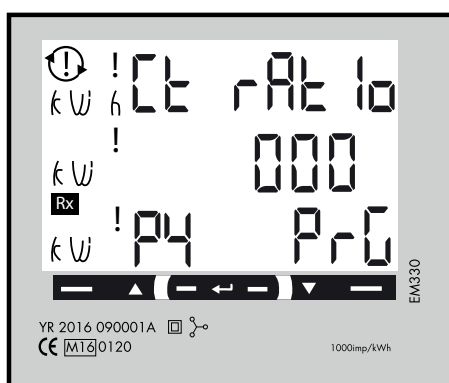
800/5A = CT Ratio 160

1250/5A = CT Ratio 250

1600/5A = CT Ratio 320



1. Click left touch area until "Ct rAt lo" is visible.
2. Longpress center touch area and PrG is visible.

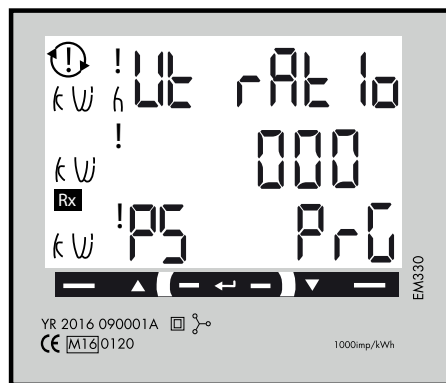
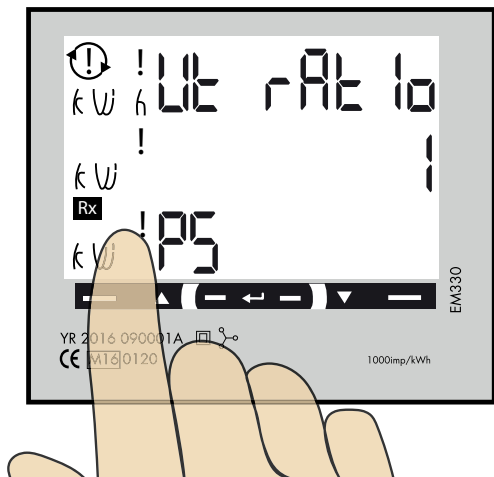


3. Click left or right touch area until wanted value is visible. Confirm by longpress center touch area and next figure starts to blink.
4. Repeat step 3 until the complete value is correct.

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UT Ratio setting

NOTE! Correct Ut Ratio value is "1" for 230/400V systems.

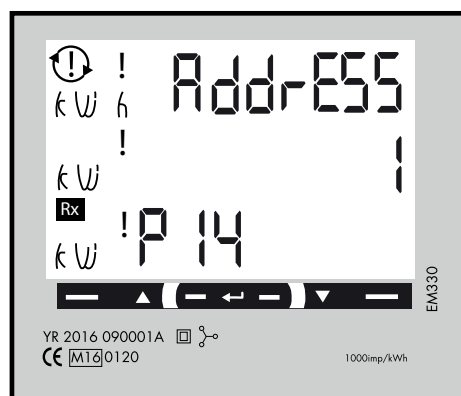
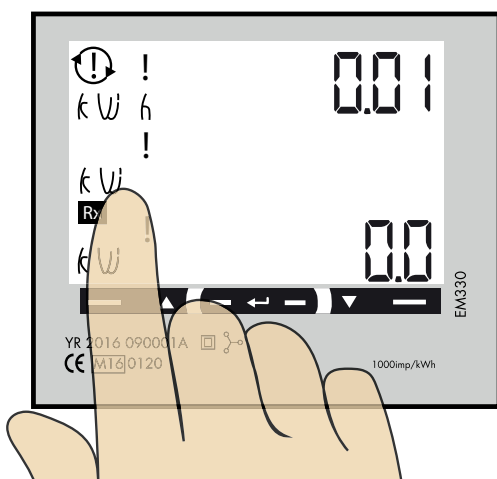


1. Click left touch area until "Ut rAtio" is visible.

If you need to change the Ut Ratio value, follow below instructions:

- 2. Longpress center touch area and PrG is visible.
- 3. Click left or right touch area until wanted value is visible. Confirm by longpress center touch area and next figure starts to blink.
- 4. Repeat step 3 until the complete value is correct.

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Click left touch area until you see "AddrESS".

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Modbus address information

For a stand alone wallbox, recommended address is 002.

This mode will pause the charging process if available current in the system is below 6A. 6A is the minimum an EV can charge according to standard.

Note: No need to do any settings in the wallbox webinterface.

Modbus address 002 is the only address that you can use if you don't have any Wifi-module installed in your wallbox.

Modbus address 002 is only valid for stand alone wallbox installations.

For multiple wallboxes connected in a grid, use address #100.

DLM settings in the webinterface are required.

Address 100 requires an installed wifi-module in the Master Wallbox.

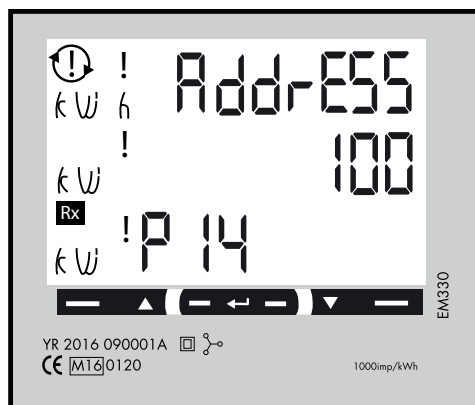
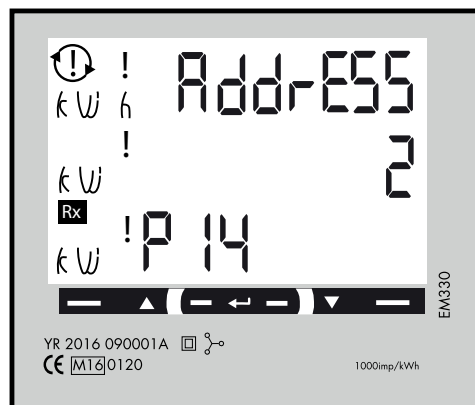
Note: When using Address 100, the wallbox will not pause the charging process if available current is below 6A.

If you want to monitor a 2nd mains cabinet, a 2nd DIM meter can be installed in the 2nd mains cabinet. The modbus address for the 2nd DIM meter should be 101.

Both 100 and 101 will not pause the charging process if available current in the system is below 6A.

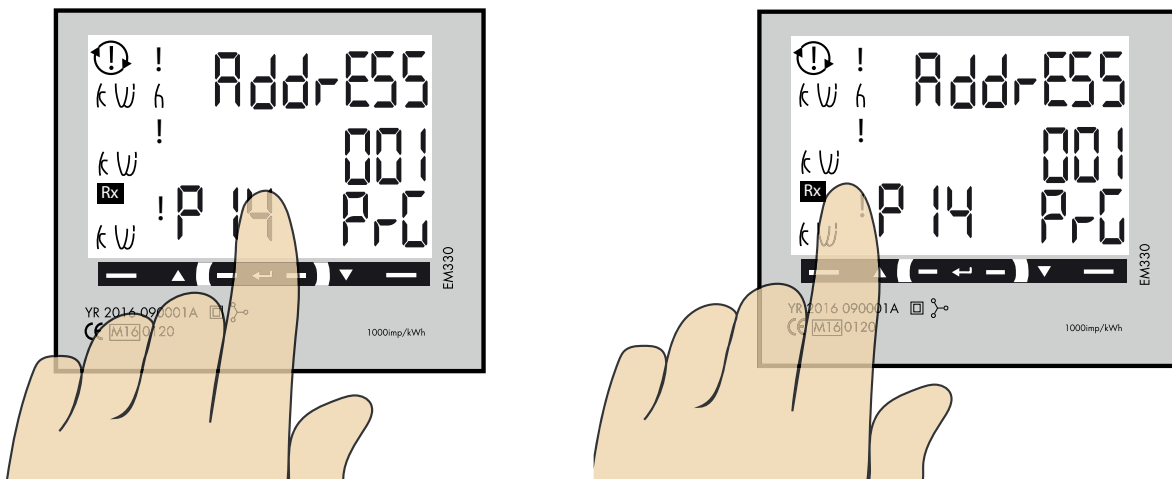
Note: DLM settings are required in the master wallbox webinterface.

Modbus address 100 and 101 require an installed wifi-module in your master wallbox.

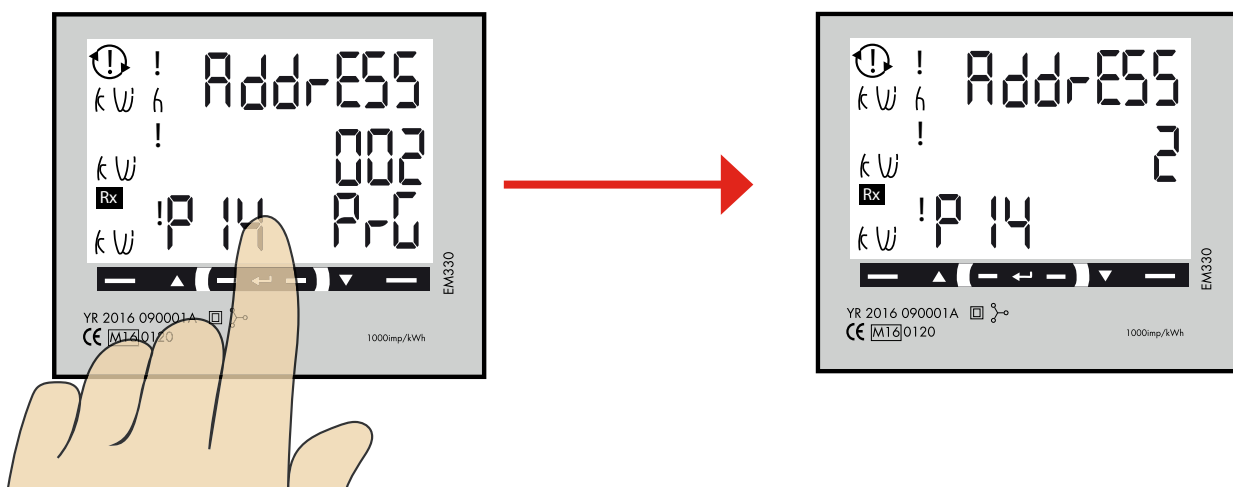


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Set the Modbus Adress



- 1. Longpress center touch area. 00"1" starts to blink.
- 2. Click left or right touch area to modify the figure.
- 3. Longpress center touch area to change to next figure and repeat step 2.

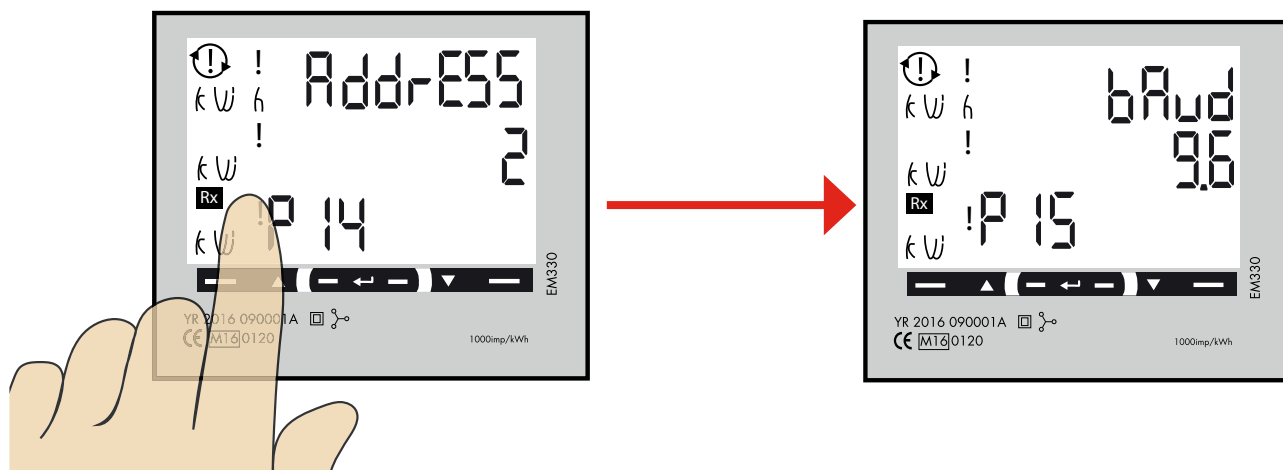


- 4. When the adress is correct, longpress center touch area to confirm the address.

9

Set/verify the Baudrate

NOTE! Correct Value:Baudrate: 9.6

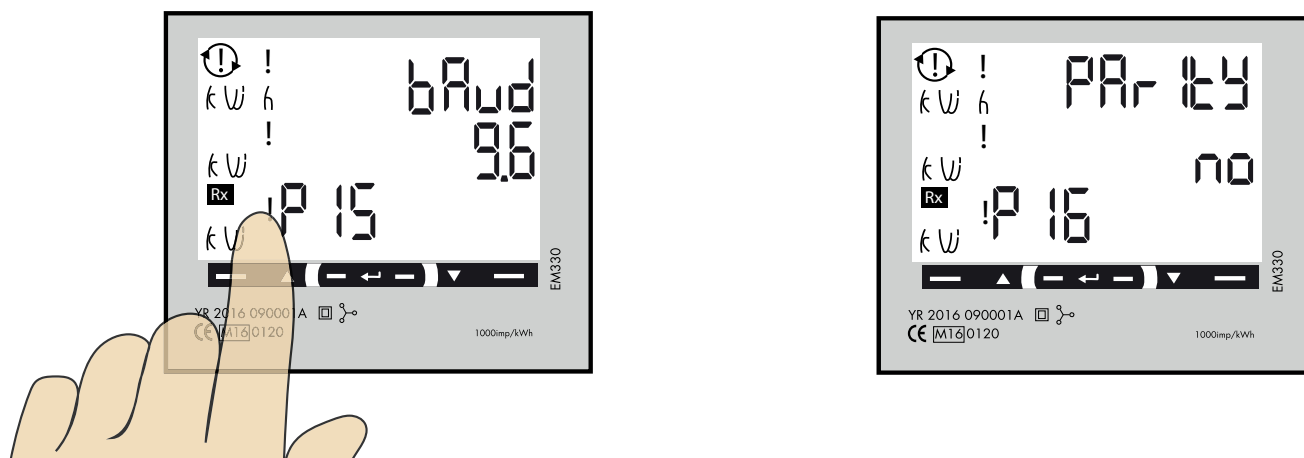


Click left touch area until "bAud" is visible. Default is 9.6 and this is correct.
 If you need to change baud, longpress center touch area and click left or right touch area until 9.6 is visible. Confirm by longpress center touch area.

10

Set/verify the Parity and stopbit

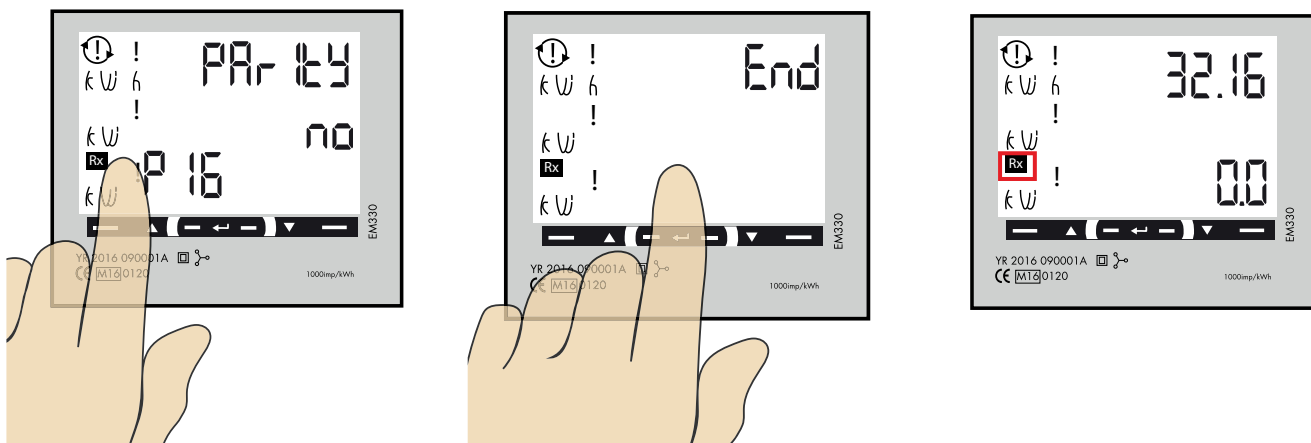
NOTE! Correct Values:Parity: no Stopbit: 1



Click left touch area until "PARITY" is visible. Default is "no" and this is correct.
 If you need to change the parity, longpress center touch area and click left or right touch area until "no" is visible. Confirm by longpress center touch area. StoP bit should be "1".
 Longpress center touch area to confirm.

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Confirm settings



1. Click left touch area until "End" is visible.
2. Longpress center touch area when "End" is visible and the setting is confirmed.
3. The square is blinking when DIM meter have communication with the wallbox.