



GARO GNM3D-RS485 and GARO GNM3D-LP RS485 as DLM meter

DLM = Dynamic Loadbalancing Meter

Installation and Programming Manual (EN)



Manual 380249

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INFORMATION

All information in this guide is valid for both
GARO GNM3D-RS485 (GARO art nr 108047)
and
GARO GNM3D-LP RS485 (GARO art nr 109306).

Warnings

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

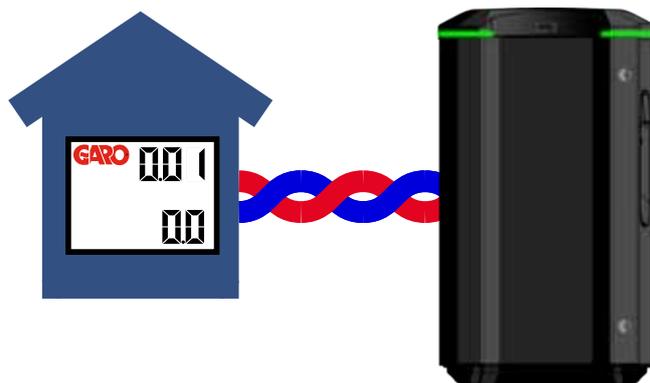
MODBUS CONNECTION

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

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

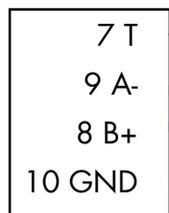
Suitable cables:

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



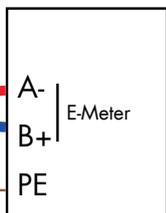
GNM3D-RS485, GNM3D-LP RS485

DLM Meter



Shielded Twisted Pair

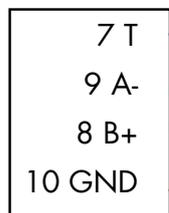
GLB



NOTE! JUMPER 7-9

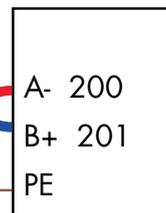
GNM3D-RS485, GNM3D-LP RS485

DLM Meter



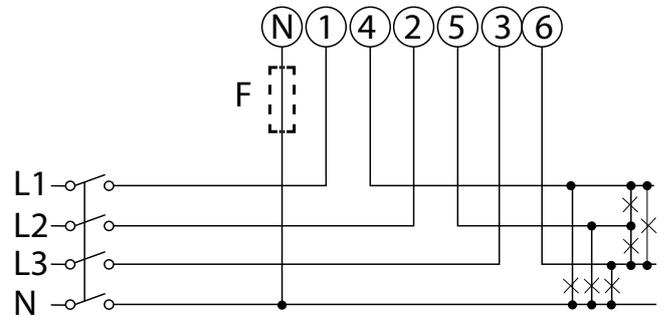
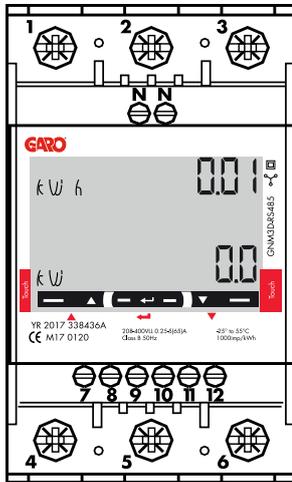
Shielded Twisted Pair

TWIN



NOTE! JUMPER 7-9

ELECTRICAL CONNECTION POWER CABLES

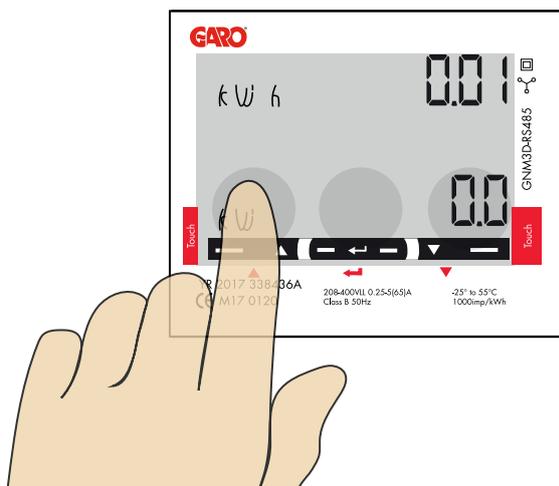


F=Fuse 315mA if required by local regulation

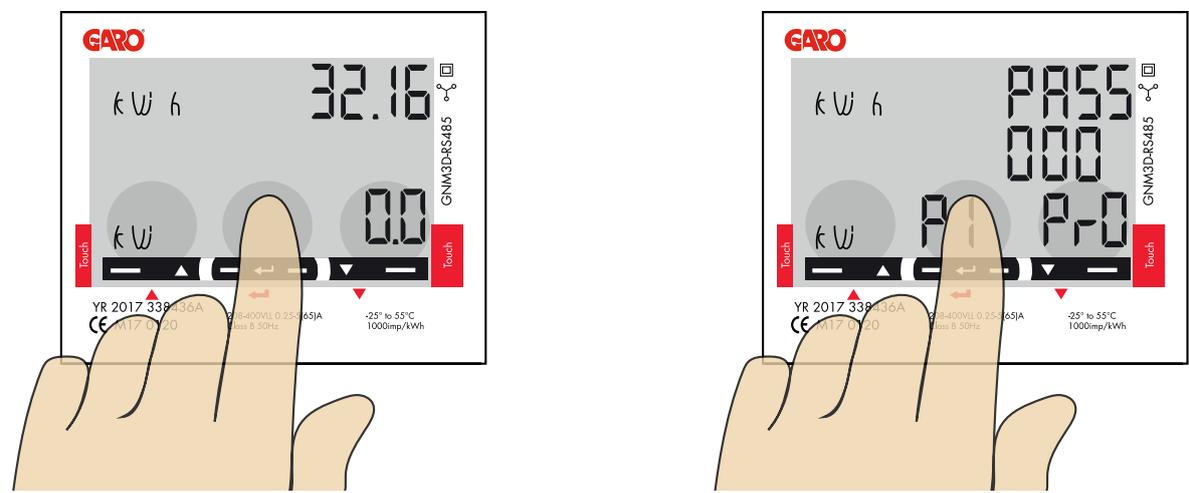
1-6: section 2.5-16 mm², torque 2.8 Nm
7-12, N: section 1.5 mm², torque 0.4 Nm

DLM METER SETTINGS

Touch area

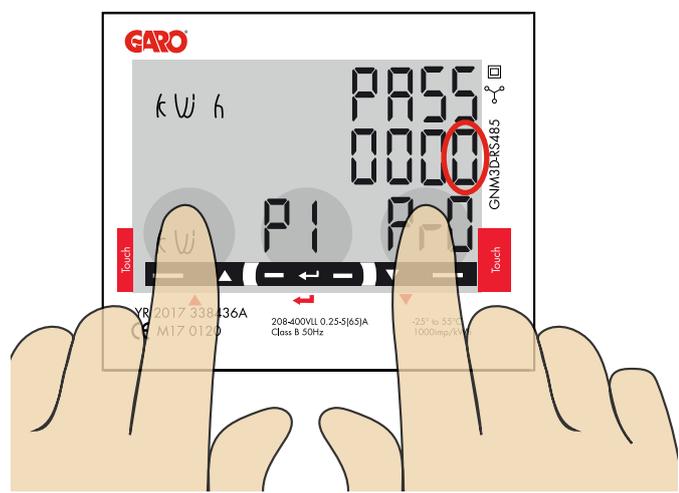


1



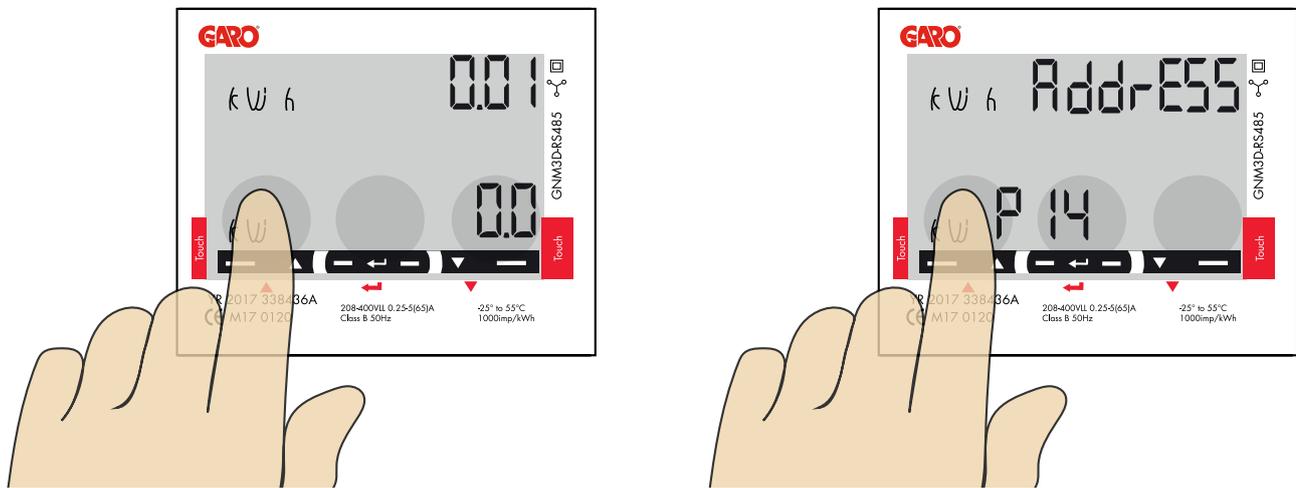
"Longpress" center touch area until you see "PASS".

2



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

3



Click left touch area until you see "AddrESS".

4

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.
 DIM settings in the webinterface are required.

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

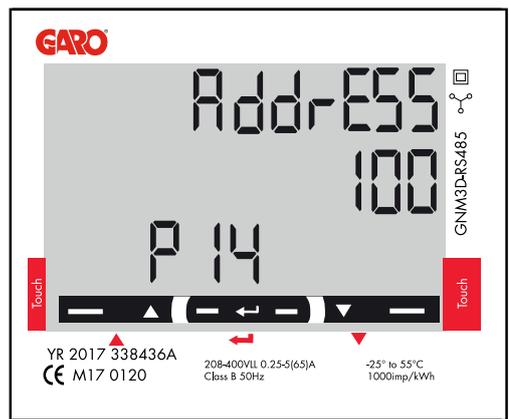
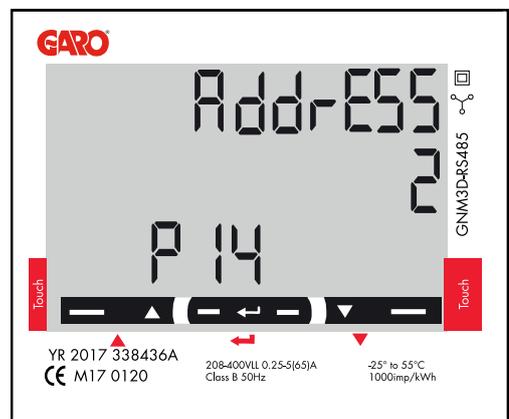
Note: When use of Address 100, the wallbox will not pause the charging process if available current is below 6A.

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.

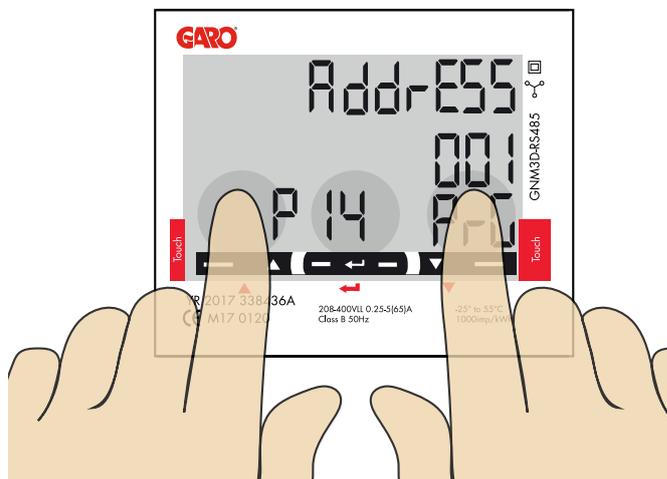
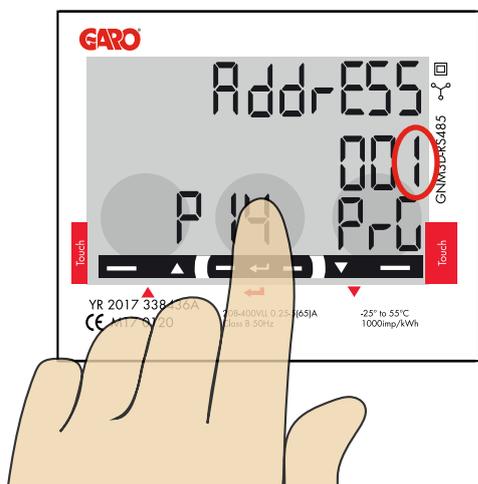
Note: DIM settings are required in the master wallbox webinterface.

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

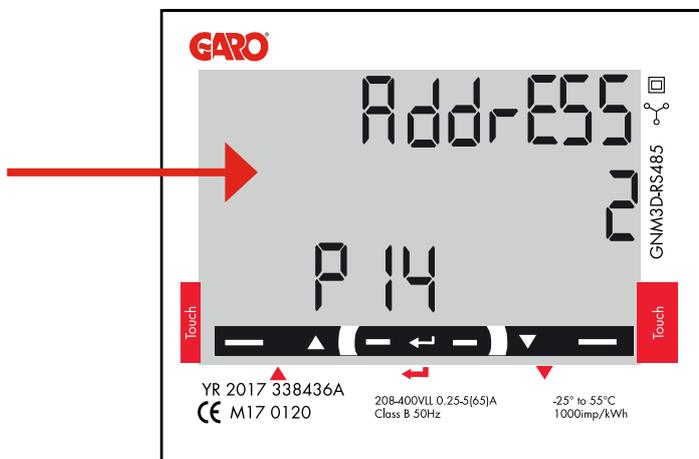
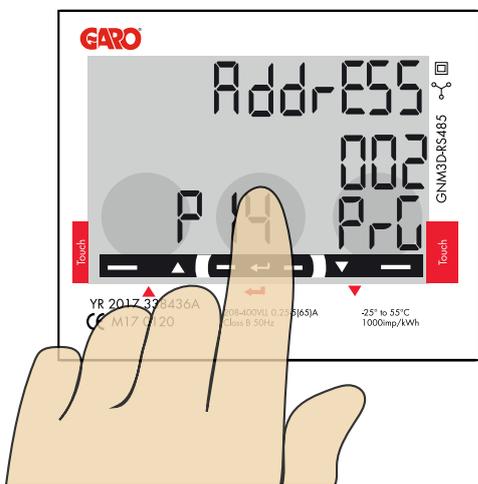


5

Set the Modbus Address



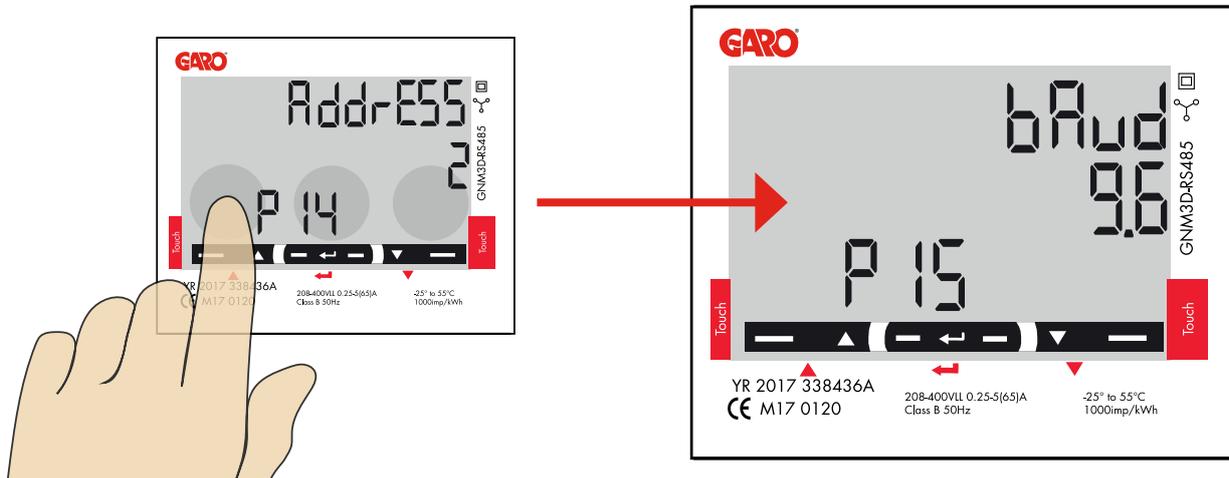
- 1. Longpress touch area. 00"1" starts to blink.
- 2. Click left or right touch area to modify the figure.
- 3. Longpress touch area to change to next figure and repeat step 2.



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

6

Set/varify the Baudrate

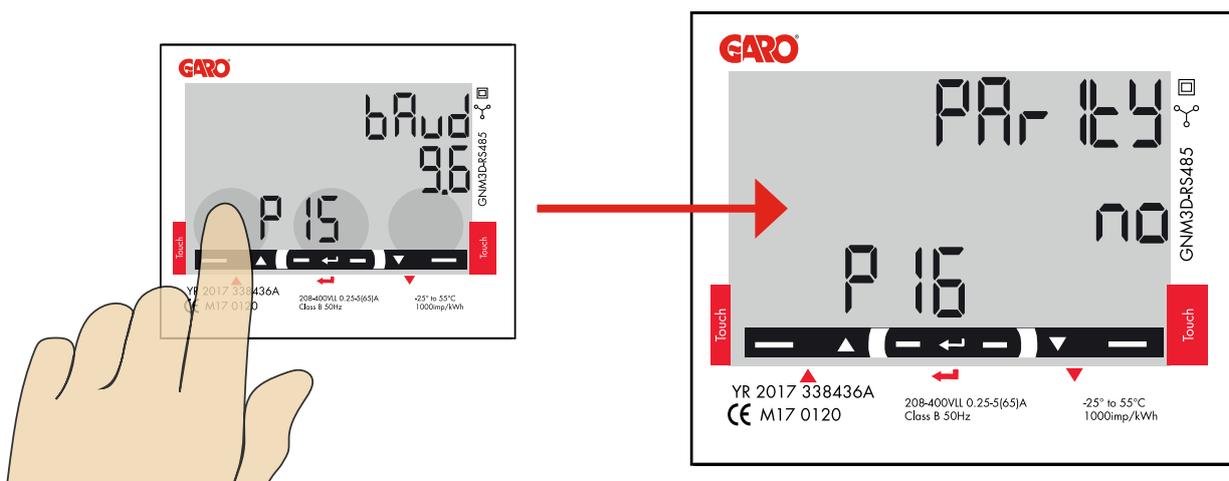


Click left touch area until "bAud" is visible. Default is "9.6" and this is correct.

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 touch area .

7

Set/varify the Parity and stopbit



Click left touch area until "PARty" is visible. Default is "no" and this is correct.

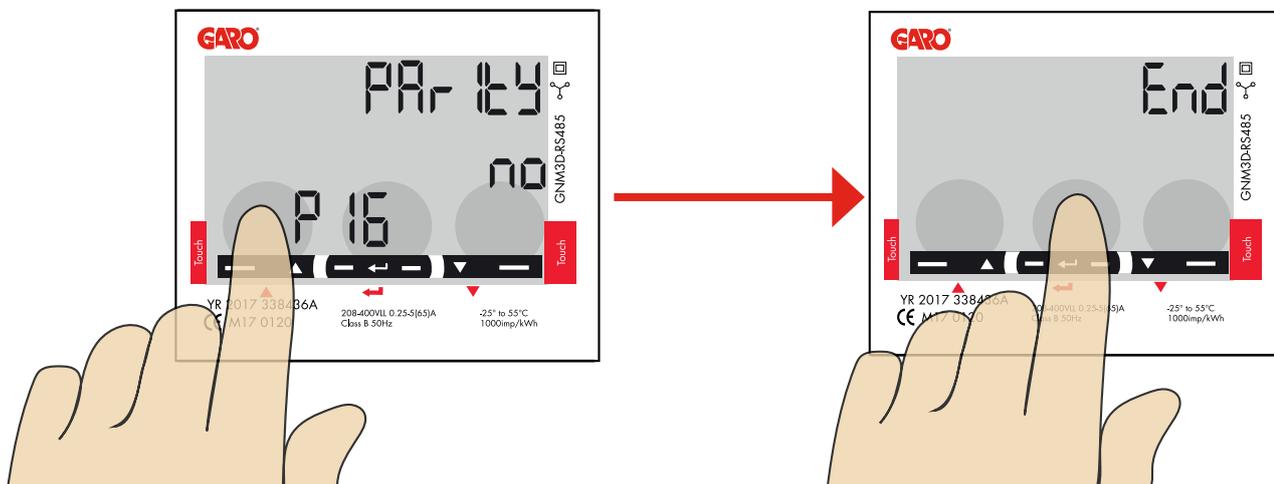
If you need to change the parity, longpress touch area and click left or right hand touch area until "no" is visible. Confirm by longpress center touch area.

StoP blt should be "1".

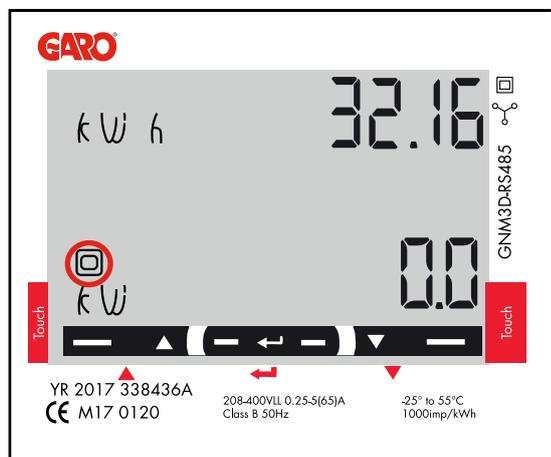
Longpress center touch area to confirm.

8

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 DLM meter have communication with the wallbox.

