

Morek EV AC Charger

Dynamic Load Management Installation Manual

ev.morek.eu

Not just for private use – find a suitable model and service for an apartment building, parking lot, commercial building, etc.

Smart charge (WiFi, LAN, and/or optional 4G)

Use it at a private house, apartment building, or work. Charge and share chargings. Perfect for public charging with Powered by Vonktech charge point & payment platform.

Plug & charge

For private use. No internet connection and smart features. Just plug & charge.



Network charger 3.8 " LCD display LAN. WiFi. RFID 5m cable Type 2 connector



Network charger 3.8 " LCD display LAN, WiFi, RFID Type 2 socket



Plug & Charge LED indicator 5m cable Type 2 connector

The installation process is simplified for maximum efficiency. The charger comes with a preset configuration and easy access with the Morek EV Tool APP to reduce setup time.









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DLM - CT installation and wiring

External CT or electric meter can be connected for household load management as the charger only reads (collects) external CT or Meter data. Additional configuration of CT or Meter also is needed trough the Morek EV Tool APP to activate the DLM functionality and set the correct parameters.

The charger communication mode is as follows:

Num	1	2	3	4
Define	CT +	CT -	RS485A	RS485B
Туре	CT (Current Transformer)		Meter(Power meter)	
Wiring				

Use CT wiring as follows:



Current direction, input towards home:

- 7KW one-phase electricity, need to use 1 CT, ring CT covers L.
- 22KW three-phase electricity, need to use 3 CTs, ring CT covers L1, L2, L3

DLM - Meter installation and wiring

Use the electric meter wiring as shown below:



The meter MDBUS protocol, the default meter address is 0x01 The flow chart is as follows:



Block diagram of power adjustment

Power distribution(0:Disable,1:Enable)	0	Home Power(A):	20
External PowerMeter Addr:	1	Home Power(0 CT,1 Meter):	0

DLM - configuration

Use the Morek EV TOOL configuration APP to set the charger parameters.

Power Distribution Enable:		
Sampling Method	: Ст	
Home Power Curr Power Meter Adde	en CT Electric meter ress: 1	
Phase Rotation:	NotApplicable	•

If an external CT is installed to sample current from the home grid, the DLM function can be used to control the output current. To activate the DLM function, turn on: Power Distribution Enable. The Sampling Method item value needs to be CT and Home Power Current is set to a value smaller than the maximum distribution of the current in your home.

Step 1: Set the parameter Power distribution (0: Disable, 1: Enable) to 1, and enable the intelligent management of household load.

Step 2: Set the Home Power (A) parameter, that is the maximum input current of the household (refer to the rated current of the household input switch), for example, one-phase 100A. The charger adjusts the real-time power according to this current to achieve the over-load function.

Step3: Set Home Power (0: CT, 1: Meter) and External Power Meter Address to select and address settings when selecting a meter.

The default value is CT. When selecting the meter, you need to set the meter address, Modbus protocol, the default meter address is 0x01.

< Back	Configuration	MOREK		
Charge Mode	: APP	•		
Power Distribution Enable:				
Sampling Met	hod: CT	-		
Home Power Current: 100				
Power Meter	Address: 1			
Phase Rotatio	n: NotApplicable	Ŧ		
	Set	Get		
	Morek EV Tool			
	Bluetooth Devices			
BLA8032/	A3F2622			
BL943CC	6C2B676			
301000230	0004012			
301000230	0076524	Disconnect		

To save the settings please scroll down in the application and click Set.

After confirming that settings are saved, move back to the login screen and disconnect the Bluetooth connection by clicking the Disconnect text. The disconnection will make the charger restart and a long single beep will confirm that the settings were changed and the charger has restarted.



Manage chargings the easy, effective, and versatile way

Manage electric car charging locally or in various locations across Europe from one system.

Morek AC chargers can be installed either on a wall or pole which enables infrastructure planning for indoor or outdoor parking spaces more exible.



Questions? Make us work harder!

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More information about Morek EV chargers and discussions about EV user cases can be found from *ev.morek.eu*

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