SOLAR ELECTRIC



## ENECTOR



### Installation guide

### ENECTOR AC 3.7/11 wallbox

The guide covers the following:

- wiring and installation of the ENECTOR wallbox (with KOSTAL Smart Energy Meter as an option)
- DIP switch settings in the wallbox
- If necessary, the settings for the ENECTOR wallbox in the KOSTAL Smart Energy Meter
- Potential errors and solutions

#### **WARNING**

This installation guide is provided for informational purposes only and does not replace the operating instructions and manuals required for proper assembly and installation.

Whenever working on the device or feed cables, the entire house grid must be switched to a completely voltage-free state. Consult the relevant operating manuals for the devices in question for more details.

We accept no liability for the content of the manual. The conditions pertinent to our products apply.

Observe the safety notices in the operating manual for the devices.

Only a trained and qualified electrician may perform installation and commissioning.

### Operating manual required to install the ENECTOR AC 3.7/11 wallbox

You will find the manual in the download area for the product or by clicking on the following link: https://www.kostal-solar-electric.com//ba\_wallbox\_enector-ac-3\_7-11-de



### Wiring and installation

#### (As an option with KSEM)

You will find more information in the ENECTOR AC 3.7/11 operating manual

- Chapter 4 Installation
- Chapter 5 Connection of additional components
- 1. Select a permissible location and ambient conditions, taking account of the operating manual.
- 2. Lay connection cable and install the ENECTOR wallbox, taking account of the operating manual.
- 3. Make the electrical connection, taking account of the operating manual.



4. Optional: Connect up KOSTAL Smart Energy Meter, taking account of the operating manual.



### **DIP** switch settings

You will find more information in the ENECTOR AC 3.7/11 operating manual:

Chapter 6 Commissioning/configuration - Settings for bank 1



1. ENECTOR wallbox with KOSTAL Smart Energy Meter and convenience functions (S1: 4,5,6,7 set to ON)



2. ENECTOR wallbox with KOSTAL Smart Energy Meter (without convenience functions) for blackout protection (house connection monitoring) (S1: 4,6 set to ON)



The default setting for bank 2 (all OFF) assumes a house connection of maximum 63A and maximum charging of 16A. If this is not the case, change the settings for bank 2, taking account of Chapter 6 Commissioning/configuration - Settings for bank 2 in the operating manual.

### Settings in the KSEM

You will find more information in the ENECTOR AC 3.7/11 operating manual.

- Chapter 7 Setting up wallbox in the KSEM
- 1. Update KOSTAL Smart Energy Meter to at least software version 2.1.0.
- 2. Purchase activation code from online shop and enter under Activation codes.

Aktivierungscodes Freischaltung von Zusatzoptionen			~
Bitte geben Sie ihren 10-stelligen Aktivierungs	code in das Eingabefeld ein, um die r	neue Zusatzoption freizu	schalten.
Aktivierungscodes	1234567890		HINZUFÜGEN

3. *Modbus settings*: Deactivate Modbus RTU, interface B.

Schnittstelle RS485 B Schnittstelle aktivieren			
Voreinstellung	Benutzerdefiniert	~	
Erweitert			>
	ZURÜCKSETZEN	SPEICHERN	D

4. Wallbox: Add ENECTOR wallbox.

KOSTAL ENECTOR AC 3.7/11 hinzufügen			
Name	ENECTOR-Wallbox		
Modbus Schnittstelle	Bitte Interface wählen	¢	
Slave Adresse	Bitte Interface wählen RS485 B	ß	
		ок	

→ Example showing a connected wallbox.

ENECTOR-Wallbox KOSTAL ENECTOR AC 3.7/11 RS485 B - 50 💉 i 🕑

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5. Solar portal: Activate portal connection.

KOSTAL Solar P Konfiguration des KOSTAL Sola	ortal Portals	Ý
Aktiviere Solar Portal		SPEICHERN

6. Time zone: Check set time zone, adjust or activate time server (NTP).

Gerät (1) Zeiteinstellungen, Neustart und Logs			~
Datum und Uhrzeit			
Ihre Zeitzone	Europe/Berlin	¢	SPEICHERN
NTP			

7. Inverters: Add inverters in the KSEM by going to Inverters > Devices > +.

Wechselrichter bearbeiten				×
Serie	PLENTICORE plus	÷		
Тур	PLENTICORE plus 7.0	\$		
Kategorie	Photovoltaik mit Batterie	\$		
IP-Adresse	192.168.178.78			
Max. AC-Ausgangsleistung Wechselrichter	7000	W		
Unit ID	71			
			ок	

### Geräte

Verwaltung der angeschlossenen Geräte.

Name 🔺	Тур	Adresse	Status		+		
PLENTICORE plus	PLENTICORE plus 7.0	192.168.178.78	<ul> <li>Image: A second s</li></ul>	i	ß	Ŵ	

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# Potential sources of error and solutions

Red error LED / wallbox not working:
 Possible cause: DIP switch set incorrectly.
 Solution: Check DIP switch settings by consulting operating manual, ensure that you are looking at banks 1 and 2 correctly (bank 2 = when opened, visually this is the *top bank*, OFF switch position = visually, this is the *top switch position*, see operating manual).

#### • Wallbox cannot be added in KSEM:

Possible cause: RS485 interface has not been deactivated.Solution: In the KSEM menu, go to *Modbus settings*, deactivate the *RS485 interface B* and save.This can then be selected to add the wallbox.

#### Communication error in KSEM when/after adding the wallbox:

**Possible cause:** RS485 connection to KSEM not connected correctly / poor contacts / cable break or DIP switch set incorrectly.

Solution: Check connection and DIP switch and adjust

- KSEM connection to the wallbox (RS485 A and B may have been mixed up),

- Check for contact problems and check line flow (if necessary, use flying lead as cross check to test between KSEM and wallbox),

- DIP switch set incorrectly (check according to operating manual and adjust).

### No wallbox data on the portal and KOSTAL Solar App / network connection:

**Possible cause:** Portal connection not activated in advance or there is not a correct network connection (e.g. network settings (IP address, gateway and DNS server not correct) or RS485 connection not connected correctly).

Solution: Activate KOSTAL Solar Portal in the KSEM. Check network settings, RS485 settings and RS485 connection to the KSEM

### No wallbox data on the portal and KOSTAL Solar App / equipment:

**Possible cause:** On the KOSTAL Solar Portal, KSEM has not been added as device for the same PV system.

**Solution:** In order to see the wallbox as a device in the KOSTAL Solar App, the KOSTAL Smart Energy Meter must be added to the same PV system as the inverters on the KOSTAL Solar Portal. After integrating and charging for the first time (5 minutes is sufficient), an extra button is displayed after approx. 20 min in the KOSTAL Solar App during local use within your own WLAN.

### Wallbox charging is delayed on the portal:

Possible cause: Time zone/NTP set incorrectly in the KSEM.

Solution: Correct NTP server and time zone in the KSEM.

In the KSEM, go to *Device settings* > *Device*, and correct the NTP server and time zone in the KSEM.

- Wallbox charging with a PV element is not displayed as an item on the portal:
   Possible cause: The inverter(s) has/have not been added in the KSEM as a device/devices.
   Solution: In the KSEM, go to the *Inverter* menu and add all inverters as devices (if battery is present, under *Category* select *Photovoltaic with battery*).
- Charging process is not starting:
   Possible cause: In *Solar Pure Mode*, the power of the PV system is not presently sufficient to start charging.
   Solution: Reduce min. PV element or change charging mode, e.g. *Power Mode*.
- Charging is not starting or is interrupted after a short while
- Possible cause: If there is not sufficient power available when running in **Solar Pure Mode**, the charging process is paused.

Solution: Alternatively, you can select Solar Plus Mode with an element of grid power.

Charging is interrupted after a short while/error message 2011:
 Possible cause: Some vehicles need a higher minimum charging current of 8-10 A to start charging.

**Solution:** Increase the *Minimum charging current* (standard 6 A) in the KOSTAL Smart Energy Meter by going to *Wallbox > Settings > Advanced settings*.

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