EVCS-Cube Basic QUICK-START-GUIDE





1. Safety and Usage Instructions

- Read the "Safety Instructions" for additional precautions.
- Always handle the phyVERSO with care to avoid damage or hazards.
- Use only the supplied cold appliance cable to operate the EVCS-Cube.
- Operate the EVCS-Cube only with the door closed and locked.
- Route data cables through the side cable guide of the EVCS-Cube.

2. List of components

- phyVERSO-EVCS Baseboard
- TH-210 Serial Adapter with Ribbon Cable
- Cold appliance cable
- Ethernet Cable (RJ-45)
- Micro USB to USB-A Cable
- Counterplug
- Eastron Power Meter
- 16A Circuit Breaker
- 6A Circuit Breaker
- FI Circuit Breaker
- Contactor
- DC Power Supply
- Installation Contactor
- 12V Power Cable (Only necessary when using the phyVERSO-EVCS on its own)

3. Initial Setup Instructions

- The hardware must be assembled by qualified personnel.
- The 16A circuit breaker must be connected as per the wiring diagram
 - Without proper installation, the EVCS-Cube Basic will not function.
 - Product has been tested with Windows 10 and Ubuntu 20.04.
 - For questions, contact fae@phytec.de.

4. Initial Commissioning

- 1. Connect the EVCS-Cube to the power supply using the provided power cable.
- 2. Connect a car simulator or an electric vehicle to the phyVERSO Baseboard
- 3. The charging process starts automatically when:
 - The EVCS-Cube is powered.
 - A tester or vehicle is connected.
 - The tester is switched from state "A" to state "C."
- 4. Tested Compatible Vehicles:
 - Polestar V2
 - Smart Electric #1

Note: No external PC is required for an initial test. The BSP and Basecamp software boot automatically.

5. Installing Putty

On Windows:

- 1. Visit putty.org.
- 2. Download the installation package.
- 3. Install Putty on your computer.

On Linux:

- 1. Open a terminal.
- 2. Run the command: sudo apt update && sudo apt install putty -y

6.1 Establishing an SSH Connection

Assign a Static IP Address:

On Windows:

- 1. Open the Network Manager.
- 2. Navigate to "Change Adapter Settings."
- 3. Right-click your network connection and click to "Properties."
- 4. Highlight "Internet Protocol Version 4 (TCP/IPv4)" and click "Properties."
- 5. Assign a static IP address, e.g.,:
 - IP Address: 192.168.3.10
 - Subnet Mask: 255.255.255.0
- 6. Klick "Ok".

On Linux:

- 1. Open LAN settings.
- 2. Create a new profile and assign a static IP address, e.g.,:
 - IP Address: 192.168.3.10
 - Subnet Mask: 255.255.255.0

Establish a Connection (Windows & Linux):

- 1. Connect the right Ethernet port of the phyVERSO to the computer.
- 2. Route the cable through the EVCS-Cube side cable guide.
- 3. Ensure the EVCS-Cube door is closed and locked.
- 4. Plug in the EVCS-Cube with the power cable.
- 5. Open Putty and select "SSH"
- 6. Enter root@192.168.3.11 on Port 22 and click "Open"

6.2 Establishing Serial Connection



Ensure correct orientation of the red stripe on the rippon cable. (Figure 1)

- 1. Connect the serial adapter to the phyVERSO and the computer's USB port (Figure 1).
- 2. Route the USB cable through the EVCS-Cube cable guide.
- 3. Close and lock the EVCS-Cube door.
- 4. Connect the EVCS-Cube to the power supply using the power cable.



On Windows:

- 1. Open the Device Manager.
- 2. Go to Ports and note the used Port (e.g. COM6).
- 3. Open Putty, select "Serial" and enter the connection name (e.g., COM6).
- 4. Set the speed to 115200 and click "Open".
- 5. Use the login "root" and press "Enter"

On Linux:

- 1. Open a terminal and run:
 - Is /dev/ttyUSB*
- 2. Open Putty, select "Serial" and enter the highest number (e.g., ttyUSB3).
- 3. Set the speed to 115200 and click "Open".
- 4. Use the login "root" and press "Enter"

7. Managing Basecamp Logs

Check Status

- 1. Establish a connection to the system (serial or SSH).
- 2. Execute the following command: systemctl status basecamp"

Restart Basecamp

- 1. Stop the Basecamp Service: systemctl stop basecamp
- 2. Start the Basecamp Service: systemctl start basecamp

Monitor logs

1. Use the command: journalctl -u basecamp -f