

VICTRON EV CHARGING STATION

Electric vehicle charging station for single-phase or three-phase operation, delivering up to 7.3 kW and 22 kW respectively. It allows the charging current to be adjusted between 6 and 32 A and offers a choice of manual charging, automatic charging using the available surplus energy, or scheduled charging. It features a 4.3-inch touchscreen, WiFi, Bluetooth, VictronConnect, and integration with GX devices and the VRM portal for easier control and monitoring.



Victron EVC

The **Victron Energy EV Charging Station** is designed to operate in both **single-phase** and **three-phase** installations. It delivers a **maximum rated power of 22 kW** in three-phase operation and up to 7.3 kW in single-phase operation. The charging current **can be adjusted between 6 and 32 A**, allowing users to adapt charging to the capacity available in their installation.

The unit offers three clearly differentiated operating modes. In manual mode, users select the output current and can start or stop charging when the vehicle is connected. The setting is adjusted using the slider on the touchscreen or the unit's web page. This mode is suitable when users want to decide directly when to charge and at what current.

In automatic mode, the station detects when surplus energy is available and uses only that energy to charge the vehicle. Charging can therefore be coordinated with the energy available in the installation. In scheduled mode, a scheduler allows specific operating intervals to be defined; for example, overnight periods when grid electricity may be cheaper.

Information and control are available through several interfaces. The **4.3-inch LCD touchscreen** allows the unit to be operated locally. The 2.4 GHz WiFi 802.11 b/g/n connection can be configured in access-point or station mode for initial setup and monitoring. The Bluetooth connection also enables the VictronConnect app to display operating parameters and session statistics.

The EV Charging Station can also be **integrated with a GX device**. The station can be **controlled and monitored from the GX device** touchscreen, Remote Console, and the VRM portal. VRM provides real-time information and customised reports for configurable time periods. Data communication uses Modbus TCP over WiFi and Bluetooth.

A programmable RGB light ring around the charging port provides a clear visual indication of the unit's status, such as disconnected, charging, or fully charged. It offers 55 light effects that can be configured through the integrated web interface. The connector is IEC 62196 Type 2 and the enclosure has an IP44 protection rating.

External protective devices must be provided for installation. The datasheet specifies an external circuit breaker and recommends 40 A as the means of disconnection; it also states that an external residual-current device is required. These protective devices must not be confused with the detection functions built into the unit.

Key features

Single-phase and three-phase charging: Up to 7.3 kW in single-phase operation and 22 kW in three-phase operation.

Adjustable current: Output current adjustable between 6 and 32 A.

Manual mode: Allows the current to be set and charging to be started or stopped directly.

Automatic mode: Detects surplus energy and uses only that energy for charging.

Scheduled mode: Allows charging time intervals to be defined using a scheduler.

Local control: 4.3-inch LCD touchscreen for monitoring and operation.

WiFi and Bluetooth: Setup, monitoring, and control via the web interface and VictronConnect.

GX and VRM integration: Remote control, real-time information, and configurable reports.

RGB status indicator: Programmable light ring with 55 configurable effects.

Type 2 connector: Charging port compliant with IEC 62196 Type 2.

Recommended applications

- Electric vehicle charging in single-phase or three-phase installations.
- Energy installations where the available surplus energy is to be used for charging.
- Victron systems with a GX device and monitoring through the VRM portal.
- Scheduled charging during time periods defined by the user.
- Installations requiring the charging current to be adjusted between 6 and 32 A.

Product advantages

- One unit for single-phase or three-phase power supply.
- Clear choice between manual control, surplus-energy charging, and scheduled charging.
- Local control from the display and access via WiFi or Bluetooth.
- Integration with GX devices, Remote Console, and the VRM portal.
- Quick status indication through the RGB light ring.
- No ventilation required, according to the datasheet.

Installation requirements that must remain visible

- An external circuit breaker is required; Victron recommends 40 A.
- An external residual-current device is required.

- The protective devices must be selected and installed to suit the installation and applicable regulations.

SPECIFICATIONS

Electrical characteristics

Model / part number	EV Charging Station / EVC300400300
Input voltage range	170 – 265 VAC
Rated charging current	32 A per phase
Rated power	22 kW
Maximum stated single-phase power	7.3 kW
Output current range	6 – 32 A
Configurable maximum current	6 – 32 A
Self-consumption	15 mA at 230 V
Connector type	IEC 62196 Type 2

Control and communications

Operating modes	Manual, automatic and scheduled
WiFi standards	802.11 b/g/n; 2.4 GHz only
WiFi configuration	Access point or station mode
Data communication	Modbus TCP over WiFi and Bluetooth
Control methods	Touch screen, web page, GX device via Modbus TCP and VictronConnect via Bluetooth
Display	4.3-inch LCD touch screen
Light ring	Programmable RGB; 55 configurable effects
Price-per-kWh calculator	Configurable in EUR; default value 0.13

Protection and environmental conditions

Means of disconnection	External circuit breaker; 40 A recommended
Residual-current protection	An external RCD is required
Operating temperature	From –25 °C to +50 °C
Storage temperature	From –40 °C to +80 °C
Humidity	95%, non-condensing

Enclosure

Colour	Blue, RAL 5012
Connection terminals	6 – 10 mm ² / AWG 10 – 8
Protection rating	IP44
Ventilation	Not required
Weight	3 kg
Dimensions (height x width x depth)	377 x 307 x 148 mm

Standards and detection functions

Standards	IEC 61851-1 and IEC 61851-22
Detection functions	Welded relay contact; missing protective conductor; missing earth connection; short-circuited control pilot

DOWNLOADS

ESPECIFICACIONES ESTACIÓN DE CARGA VICTRON ENERGY EV

 [Especificaciones Estación de carga Victron Energy EV.pdf](#) Size: 182.6 KiB

DATASHEET VICTRON ENERGY EV

 [Datasheet Victron Energy EV Charging-Station-.pdf](#) Size: 182.74 KiB