/ EVC22-3AC-20

preliminary

SMA eCharger

Unlock the full charging power of the sun

/ The best from EV & PV with unique SMA experience
/ Highest level of safety, reliability and convenience

powered by ennexOS

SMA Smart Connected

PV-optimized charging
- Intelligent charging modes
- Automatic phase switching
- Boost function
- Multi-EVC operation

Safe, reliable and convenient
- Easy planning
- Flexible installation
- Safe and reliable operation
- Convenient service

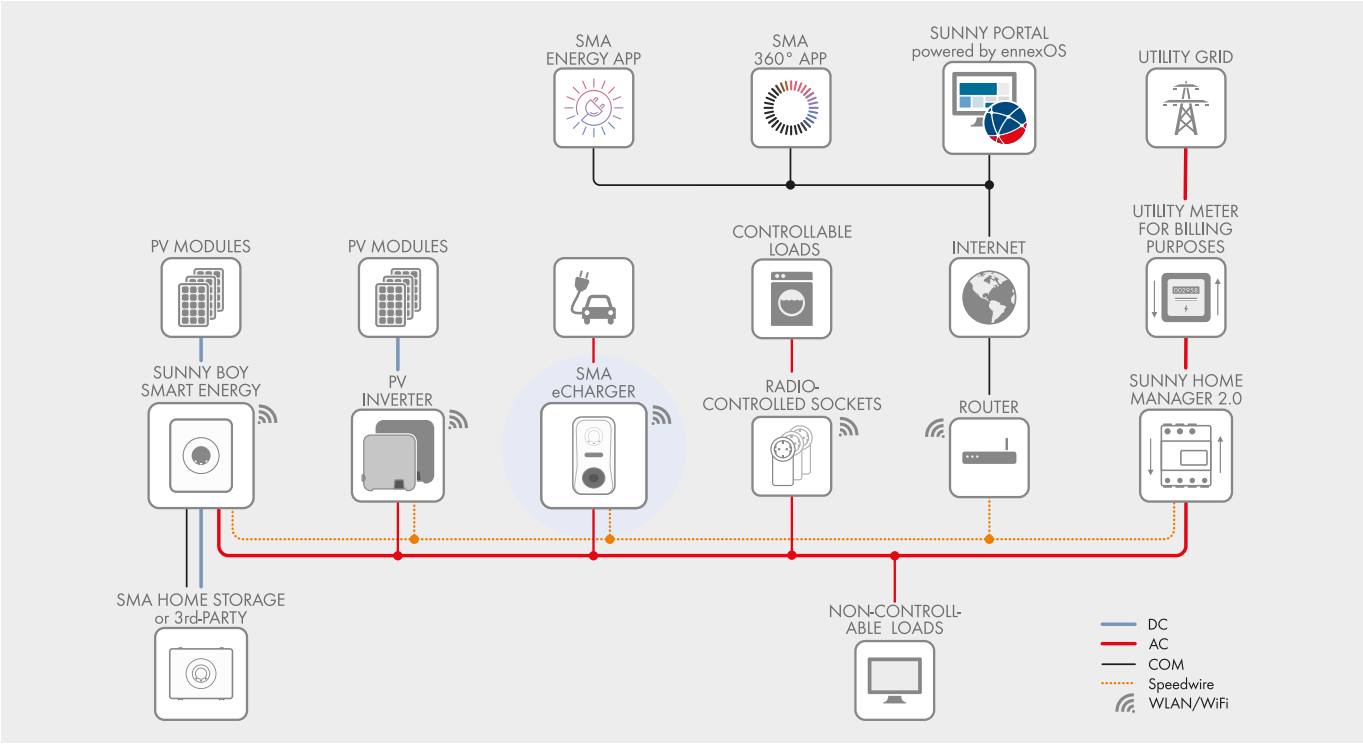
Automatic billing*
- Invoicing of charging operations
- Enables third-party use of charging infrastructure

Ready for the future
- Future compatibility with flexible rates
- AC-Bidi-ready**

The new PV-optimized SMA eCharger makes it easy to transition into EV installations: It's powered by SMA's unique PV expertise, easy to install, and ready for whatever the future holds.

The SMA eCharger is tailored to meet user needs. Its intelligent charging modes offer forecast-based operations, adapting seamlessly to user behavior. The automatic phase switching feature allows EVs to charge with self-generated energy, even during periods of low solar power. With its unique combination of grid and single-phase PV power, it charges vehicles up to 2x faster than standard wallboxes, complying with grid regulations.
Installation and operation are flexible, safe and convenient, supported by SMA Smart Connected and a 5-year warranty. Prepared for future demands, the SMA eCharger integrates smoothly with dynamic tariff structures, while its AC-Bidi compatibility ensures future-proof functionality.

*) Function in preparation
**) Future availability as a paid eProduct, compatible with select vehicle models, and subject to final standardization



Technical data	SMA eCharger 22
Inputs and outputs (AC)	
Charge power	1.38 kW to 22 kW (configurable)[1]
Nominal voltage	1N~, AC, 230 V / 3N~, AC, 400 V
Nominal frequency	50 Hz / 60 Hz
Nominal current	max. 32 A per line conductor
AC-connection via a spring terminal	5 x 2.5 mm² to 5 x 10 mm² inflexible / 5 x 2.5 mm² to 5 x 6 mm² flexible
Vehicle connection (in accordance with IEC 62196-1/2)	Type 2 charging socket with shutter
Communication	
Ethernet / Wi-Fi / RS485	● (2 ports) / ● / ●
Backend communication	OCPP 1.6 JSON[2]
Vehicle communication	IEC 61851-1/2 Mode 3, ISO 15118 [2]
Digital inputs / digital output	6 / 30 VDC[2]
Protective devices	
Internal DC residual current detection	6 mA
Compatibility with external residual-current devices	RCD type A functional according to IEC 62955
Overload protection	●
Ambient conditions during operation	
Operating temperature range	−25°C to +50°C with infinitely variable derating
Storage temperature range	−25°C to +70°C
Degree of protection (in accordance with IEC 60529) / impact resistance	IP 54 / IK 10
Protection class (in accordance with IEC 62103) / Overvoltage category	I / III
Max. permissible value for relative humidity (non-condensing)	95%
Altitude above MSL	0 m to 2000 m
General Data	
Dimensions (W / H / D)	350 mm / 600 mm / 250 mm
Weight	5.0 kg
Grid configurations	TN / TT / IT
Device display	LED status display, display[2], impuls LED[2] (1000 imp/kWh)
Standby self-consumption	< 6.5 W
Features / accessories	
Charging cable 5.0 m / 7.5 m / 10.0 m	○ / ○ / ○
Integrated energy meter	MID-conform class B (EN 50470-3)[2]
Authorization	RFID in accordance with standards ISO IEC 14443
Data logs	SEMP, SMA Modbus
Warranty	5 years
Certificates and approvals (more available on request)	CE, DIN EN IEC 61851-1, DIN EN ISO 15118, DIN IEC / TS 61439-7, IEC 62955
System compatibility (as of November 2023)	Webconnect, SMA Sunny Home Manager 2.0
Visualization and control	SMA Energy App, SMA 360° App, SMA eMobility Portal[2], SUNNY PORTAL, SUNNY PORTAL powered by ennexOS
RFID cards (MIFARE DESFIRE EV3)	2x RFID cards included in the scope of delivery
SMA Smart Connected	●
Model type number	EVC22-3AC-20

● Standard equipment ○ Optional – Not available Data at nominal conditions Last revised: 05/2024

1) Password-protected limitation of charging power, e.g., B. possible to 11 kW 2) Function in preparation

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