

ABB

Post eVolve Smart

The most suitable charger for urban environments

Application

AKENAVÄGEN S UT ART NYNA

Designed to be installed in both public access environments (urban spaces, shopping centres, car parks, airports, petrol stations...) and private areas (companies, community car park sites...) where its intelligent capabilities offer a range of possibilities which improve the user and/or operator experience.

Concept Design

Nowadays, the concept of smart cities demands an innovative design for its urban equipment, especially for EVSE (EV Supply Equipment) due to its innovative nature. With its stylised shape and modern lines, the eVolve series meets this demand.

In addition, not only has the exterior design been taken into account, but also the daily conditions (operational and environmental) that EVSE has to withstand.

Product highlights

For Charge Point Operators / Owners

- The **Integrated Load Management** allows for a lower TCO (Total Cost of Ownership) by charging two EVs simultaneously even when the charger is not supplied with its maximum output power.
- The door at the front with **key access** provides an access to the interior of the charger which results in a lower OPEX (operating expense) due to a quicker installation and service (preventive/corrective). Moreover, it allows the charger to be installed next to a wall, optimising the available space.
- In terms of the charger's **housing**, aluminium and ABS plastic have been combined in a robust structural design that provides protection against both mechanical stress and severe environmental conditions, increasing the charger's lifespan, meaning it will not need to be replaces after just a few years.
- In terms of **communication**, either through the Ethernet port (by default) or 4G/3G/ GPRS modem (optional), the charger can be connected to a back-office system (by means of OCPP), obtaining benefits such as user management, billing, remote error diagnostics, etc.
- To comply with the most demanding requirements regarding billing, the eVolve series includes **MID certified metres.**

For Charge Point Users

- Clear charging instructions and operating status are shown using a **backlit display**, increasing user satisfaction, especially useful when the charger has been previously reserved by another user.
- eVolve series offers a **flexible authentication**, meaning that the user can authenticate either before or after the cable to the EV. Additionally, the authentication process can also be disabled for a Plug 'n' Charge mode.
- Accessibility for disabled users has also been considered, complying with international standards regarding the height of connectors/ displays, facilitating their use.
- The eVolve series includes the necessary electrical protections not only to minimise the human safety risk of electrical shock, but also to ensure the maximum uptime thanks to independent protections per connector.

Post eVolve Smart Series

General Specifications

Network connection	10/100BaseTX (TCP-IP)				
Interface protocol	OCPP 1.5 or OCPP 1.6J				
Enclosure rating	IP54 / IK10				
Enclosure material	Aluminium & ABS				
Enclosure door lock	Key lock				
Enclosure access	Frontal door				
Operating temperature	-5 °C to +45 °C -40 °C to +60 °C				
Ambient temperature storage					
Operating humidity	5% to 95% Non-condensing				
Light beacon	RGB colour indicator Multi-language LCD				
Display					
Power limit control	Mode 3 PWM control according to ISO/IEC 61851-1				
Dimensions (D x W x H)	290x450x1550 mm				
Weight	55 kg				
RFID Reader	ISO / IEC14443A / B MIFARE Classic/DESFire EV1 ISO 18092 / ECMA-340 NFC 13.56MHz				
Meter	MID Class 1 - EN50470-3				
Power output management	Integrated Load Management				

MCB (curve C)			
RCD Type A (30mA) Autorecovery function optional*			
Locking System			
-30 °C to +45 °C			
RCD Type A (30mA) + 6mA DC RCD Type B (30mA) with autorecovery function optional*			
Four pole transient surge protector IEC 61643-1 (class II)			
Shutter			
4G / 3G / GPRS / GSM			
Not available for TM4			
Type 1 + Type 1 Type 2+ Type 2 Type 2 + Type 2 Socket			
Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa			
Frontal Labelling			

*As per regulations this function is not available for cable. It is also not compatible with the "RCD Type A + 6mA DC" option.

Model Specifications

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Mod	del	S One	T One	C63 One	S	т	TM4		
AC power supply		1P + N + PE	3P + N + PE	3P + N + PE	1P + N + PE	3P + N + PE	3P + N + PE		
AC input voltage		230 VAC +/-10%	400 VAC +/-10%	400 VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%	400 VAC +/-10%		
	kimum input rent	32 A	32 A	63 A	64 A	64 A	64 A		
Maximum input power Number of plugs		7.4 kW	22 kW 1	43 kW 1	14.7 kW 2	44 kW 2	44 kW 4*		
		1							
	Maximum output current	32 A	32 A	63 A	32 A	32 A	32 A	16 A	
Outlet A	Maximum output power	7.4 kW	22 kW	43 kW	7.4 kW	22 kW	22 kW	3.7 kW	
	AC output voltage	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)	
	Maximum output current				32 A	32 A	32 A	16 A	
Outlet B	Maximum output power				7.4 kW	22 kW	22 kW	3.7 kW	
	AC output voltage				230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)	
Cor	nnection	Type 2 Socket (lock system)	Type 2 Socket (lock system)	Type 2 Cable (4m)	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x CEE/7	
Customisation Examples					1		* Exclusive use type 2 or CEE/7 per outlet		
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