Wallbox eVolve Smart

The perfect combination of robustness, design and communications

Application

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 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.
- The door at the front with key access provides easy 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.
- Available in **two sizes**, a small one with no protections and a large one with protections.

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 (optional) not only to
 minimise the human safety risk of electrical
 shocks but also to ensure the maximum
 uptime thanks to independent protections per
 connector.





Wallbox 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
Ambient temperature storage	-40 °C to + 60 °C
Operating humidity	5% to 95% Non-condensing
Light beacon	RGB colour indicator
Display	Multi-language LCD
Power limit control	Mode 3 PWM control according to ISO/IEC 61851-1
Dimensions (D x W x H)	Small: 222x382x628 mm (Model S & T without protections) Large: 222x382x928 mm
Weight	Small: 25 kg Large: 30 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		
Type 2 socket protection	Locking System		
Compatible with DLM	·		

Optional devices				
Low temperature kit	-30 °C to +45 °C			
Overcurrent protection*	MCB (curve C)			
Electrical protection*	RCD Type A (30mA) RCD Type A (30mA) + 6mA DC RCD Type B (30mA) Autorecovery function optional**			
Type 2 socket protection	Shutter			
Wireless Communication	4G / 3G / GPRS / GSM			
Tethered Cable (spring)* (Cable length: 4 m)	Type 1 + Type 1 Type 2 + Type 2 Type 2 + Type 2 Socket			
RFID Extension	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa			
Customisation	Frontal Labelling			
Anti-vandal key				
*Not available in the TM4 model				

Model Specifications

Mod	del		S One	T One	S	Т	TM4	
AC	power su	pply	1P + N + PE	3P + N + PE	1P + N + PE	3P + N + PE	3P + N + PE	
AC	input vol	tage	230 VAC +/-10%	400 VAC +/-10%	230 VAC +/-10%	400 VAC +/-10%	400 VAC +/-10%	
Max	cimum inp	out current	32 A	32 A	64 A	64 A	64 A	
Max	cimum inp	out power	7.4 kW	22 kW	14.7 kW	44 kW	44 kW	
Number of plugs		lugs	1	1	2	2	4	
	Maximu output c		32 A	32 A	32 A	32 A	32 A	16 A
Outlet A	Maximu output p		7.4 kW	22 kW	7.4 kW	22 kW	22 kW	3.7 kW
0	AC outp	ut	230 VAC (1P + 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)
	Maximu output o				32 A	32 A	32 A	16 A
Outlet B	Maximu output p				7.4 kW	22 kW	22 kW	3.7 kW
0	AC outp	ut			230 VAC (1P + N + PE)	400 VAC (3P + N + PE)	400 VAC (3P + N + PE)	230 VAC (1P + N + PE)
Droi	tections	Small	No	No	No	No	Not Available	
110	icctions	Large	Yes	Yes	Yes	Yes	No	
Connection			Type 2 Socket (lock system)	Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x Type 2 Socket (lock system)	2x CEE/7
			A	A	A B	A B	A	8 ()

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

Post eVolve Smart Series



General Specifications

Network connection	40/400B TV (TOB IB)
	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
Ambient temperature storage	-40 °C to +60 °C
Operating humidity	5% to 95% Non-condensing
Light beacon	RGB colour indicator
Display	Multi-language LCD
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

Overcurrent protection	MCB (curve C)				
Safety protection	RCD Type A (30mA) Autorecovery function optional*				
Type 2 socket protection	Locking System				
Compatible with DLM					
Optional devices					
Low temperature kit	-30 °C to +45 °C				
Safety protection	RCD Type A (30mA) + 6mA DC RCD Type B (30mA) with autorecovery function optional*				
Surge protection	Four pole transient surge protector IEC 61643-1 (class II)				
Type 2 charging socket	Shutter				
Wireless Communication	4G / 3G / GPRS / GSM				
Anti-vandal key					
Anti-vandal door	Not available for TM4				
Tethered Cable (spring) (Cable length: 4 m)	Type 1 + Type 1 Type 2+ Type 2 Type 2 + Type 2 Socket				
RFID Extension	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa				
Customisation	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

Mod	del	S One	T One	C63 One	S	T	TM4	
AC	power supply	1P + N + PE	3P + N + PE	3P + N + PE	1P + N + PE	3P + N + PE	3P + N + PE	
AC	AC input voltage 230 VAC +/-1		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	
Max pov	kimum input ver	7.4 kW	22 kW	43 kW	14.7 kW	44 kW	44 kW	
Nun	nber of plugs	1	1	1	2	2	4*	
Outlet A	Maximum output current	32 A	32 A	63 A	32 A	32 A	32 A	16 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
Outlet B	Maximum output current				32 A	32 A	32 A	16 A
	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
					A B	A B		

Customisation Examples

The eVolve series features a broad frontal panel that can be easily customised.







* Exclusive use type 2 or CEE/7 per outlet



Post eVolve Smart

The most suitable charger for urban environments

Application

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Concept Design

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Product highlights

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- 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.
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