

Green Motion Building Technical datasheet



Powering Business Worldwide

Discover Green Motion Building

Eaton Green Motion Building is an AC electric vehicle charger designed for both indoor and outdoor use in private and public parking facilities for multi-residential, light commercial and industrial applications. This electric vehicle charging station provides multiple benefits:

- Safe EV charging based on a proven EV charging technology
- Convenient charging suited to all types of private electric vehicles



Customizable EV charger suited to all types of applications

Green Motion Building was designed for indoor or outdoor use in multi-residential buildings or public spaces and suitable with all electric vehicles. With the RFID user authorization it is ideal for shared parking spaces while it is suitable even for small spaces as it allows for wall- or floor-mounting options.



Increase the value of your building and drive revenue

Reduce installation costs by avoiding expensive grid upgrades and control energy consumption at all times. The Green Motion Building enables billing through the certified way of measuring energy (MID) and integration with Eaton Charging network manager or other OCPP-based 3rd party CPO software or other billing platforms.



A future-proof EV charging

Ensure a future-ready building through scalable EV charger infrastructure. Easily integrate and manage chargers within building constraints, avoiding expensive grid upgrades. Control energy consumption at all times with static and dynamic load balancing. Connect up to 50 EV chargers with phase balancing and charger prioritization options. In line with Eaton's holistic approach to sustainable energy solutions, Green Motion Building is compatible with Eaton Building Energy Management Software, providing a platform to monitor and optimize usage of all energy assets including PV installation and Eaton Energy Storage systems.



Safe and reliable system with easy installation

Green Motion Building has been designed with safety in mind, with built-in earth protection, compatibility with single-phase IT grid installation, and emergency shutdown for EV Ready installations. Easy to install and configure with multiple networking options and configurations. The charger provides interoperability via OCPP and Modbus TCP/IP to 3rd party operators. Enabling a simple and seamless user experience, EV users can simply plug their electric vehicles in and charge.

Technical specifications

Technical disclaimer

All drawings, descriptions or illustrations contained in this document serve to provide a clear overview and/or technical explanation of the present product and its various components and accessories. In line with our goal to continuously improve the products and the customer service we provide, all specifications contained in this document are subject to change without notice.

Technical specifications

Power input		AC EV charger	
Input voltage		1 x 230 V 50 Hz – 1 phase 3 x 400 V 50 Hz – 3 phase	
Input current		1 x 16 A (3.7 kW) – 1 phase 1 x 32 A (7.4 kW) – 1 phase 3 x 16 A (11 kW) – 3 phase 3 x 32 A (22 kW) – 3 phase	
Power output			
Output power		3.7 kW to 22 kW	
Output type		Type 2 cable (Mode 3) or Socket (T2 or T2S)	
Type of cables		Straight	
Simultaneous charging		1	
Environmental			
Operating temperature		–25 °C to +45 °C	
Altitude		Up to 2000 m	
Installation		Wall-mounted, indoor or outdoor	
Humidity		< 95% relative humidity	
Mechanical			
Mounting method		Wall-mounted Floor-mounted column (Optional)	
Dimensions (W x H x D) in mm		285.5 x 264 x 116	
Weight of the charging station excluding cables		3 kg	
Cable length		5 meters	
Standards			
Conformity		IEC 61851-1	
Degree of protection		IP54	
Earth fault protection		Built-in 6mA DC RDC-DD protection acc. to IEC62955	
Impact strength		IK08	
Warranty			
Warranty		5 years	
Segment			
Segment		Multi-family homes (MFH) and parking facilities	
User interface and control			
User interface		LED strip status indicator MID display	
Access control		RFID	
Remote management		Eaton Charging network manager	
Connectivity			
Communication interface		Wi-Fi, Ethernet	
Network interface		Wi-Fi, Ethernet by default LTE 4G (Optional)	
Protocol		OCPP 1.6J	
EV charging balancing			
Load balancing		Yes	
Phase balancing		Yes	
E-metering			
MID		Yes	

Certifications and standards

General	
Charging mode	Mode 3 in accordance with EN/IEC 61851-1 AC charging
Cable	
Version	Type 2 cable: up to 32 A/400 V AC in accordance with EN/IEC 62196-1 and EN/IEC 62196-2
Electromagnetic compatibility	
Product	EN 61851-21-2, EN 61000-6-1, EN 61000-6-3, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12

Product references

Reference	Description
GMB2202BCAA00A00	GMB 3.7-22kW T2S MID 4GS
GMB2201BBAA00A00	GMB 3.7-22kW T2 Socket MID 4G
GMB2203BAAA00A00	GMB 3.7-22kW 5m T2C MID
GMB2203BBAA00A00	GMB 3.7-22kW 5m T2C MID 4G
GMB2201BAAA00A00	GMB 3.7-22kW T2 Socket MID
GMB2202BAAA00A00	GMB 3.7-22kW T2S MID
GMB2202BBAA00A00	GMB 3.7-22kW T2S MID 4G

Accessory references

Reference	Description
XCI3025221	Cable holder
XCI3025021	Foot-mounted column for one charger
XCI3025121	Foot-mounted column for two chargers
XCI000411	RFID Card x 5
GMA02AI000000A00	N.1 ethernet extender kit
GMA02AL000000A00	N.2 ethernet extenders kit

Protection device reference

Type	Reference
20 A breaker for the single-phase 16 A charging current	EMCH120
20 A breaker for the three-phase 16 A charging current	EMCH320, PLSM-C20/3N-MW
40 A breaker for the single-phase 32 A charging current	EMCH140
40 A breaker for the three-phase 32 A charging current	EMCH340, PLSM-C40/3N-MW
RCD type A for the single-phase 16 A charging current	PFIM-25/2/003-A-MW
RCD type A for the single-phase 32 A charging current	PFIM-40/2/003-A-MW
RCD type A for the three-phase 16 A charging current	PFIM-25/4/003-A-MW
RCD type A for the three-phase 32 A charging current	PFIM-40/4/003-A-MW
20 A RCBO (MCB+RCD Type A) for the three-phase 16 A charging current	MRB4-20/3N/C/003-A

Eaton Industries Manufacturing GmbH
Place de la Gare 2
1345 Le Lieu, Switzerland
[Eaton.com/greenmotionbuilding](https://eaton.com/greenmotionbuilding)

© 2023 Eaton
All Rights Reserved
Publication No.: TD191008EN
March 2023

Eaton is a registered trademark.

All other trademarks are property of their respective owners.