

Pow-R-Station Level 2 AC electric vehicle charging station



Note: Wallmount shown. Pedestal configuration also available.

Product family overview

The electric vehicle (EV) revolution is here, and with it the need for a robust and accessible EV charging infrastructure. Eaton meets that need with a family of EV charging stations specifically designed for use in the places where people work, shop, and play. Eaton's Pow-R-Station™ Level 2 AC charging stations are offered in 30A and 70A styles, and provide a 4–6 hour charging range, depending on battery size, making this design suitable for residential or commercial installations.

Product description

The Pow-R-Station Level 2 AC charging station provides users with a robust, dependable solution to their EV charging needs. Designed to meet the most rigorous electrical and environmental standards, the charging station is housed in an attractive steel case and equipped with the industry standard SAE J1772™ power connector mounted on a 9–18-foot cord. A series of six LED indicators gives users system status and feedback for ease of use. The Pow-R-Station Level 2 charging station is available as a wallmount or as a freestanding pedestal. The charging station can be applied as standalone with data supplied via a dedicated static IP or be configured as a network and used with Eaton's optional Network Manager software to monitor and manage the entire network's performance. The charging stations can be equipped with optional secure access control devices or point-of-sale systems.

Standard features

- Level 2 AC charging—208 Vac or 240 Vac
- Eaton's standard one-year warranty on all electrical components and housing per Selling Policy 25-000
- NEMA® 3R exterior housing

Standards compliance

- SAE J1772 2010 EV conductive charge coupler
- NFPA® 70 National Electrical Code®, Article 625 Electric Vehicle Charging System
- UL® 2231 personnel protection systems for EV charging circuits
- UL 2594 EV supply equipment (outline of investigation)
- UL 1998 software in programmable components
- FCC compliant

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Table 1. Catalog Numbering

Type ①	Description	Wallmount	Pedestal
Standard	Level 2 Wall EVSE 30A; 18-foot cable	SAR3BX000000	SBR3BX000000
Network manager capable	Level 2 Wall EVSE 30A network capable; 18-foot cable	SAR3B1000000	SBR3B1000000

① Consult factory for additional configurations.

Specifications

Table 2. Technical Specifications

Description	30A	70A
Incoming voltage and connections	208–240 Vac, Line 1, Line 2, Neutral and Earth ground	
Input frequency	50/60 Hz	
Upstream breaker size per NFPA 70 National Electrical Code, Article 625.14	40A	100A
Output amperage—max. continuous	30A	70A
Interlocked power output	Yes	
Overcurrent rating	Output amperage +5%	
Ground fault interruption	20 mA (UL 2231-1 / UL 2231-2 personnel protection)	
Automatic reset after nuisance trip feature	DIP switch selectable Enable/Disable (default Enabled)	
Cold-load pickup (randomized restart on power failure/delay before charging resumes after a power failure)	Yes	
Mechanical operations	10,000 cycles (EV connector, replaceable) 100,000 cycles (contactor, replaceable)	
De-energization on breakaway	Yes	
Surge withstand	Up to 6 kV at 3000A	
Soft start	No—Field selectable (DIP switch)	

Table 3. Physical and Environmental Specifications

Description	Wallmount	Pedestal
Cable length	Available up to 18 feet	
Dimensions H x W x D in inches (mm)	22.00 x 15.00 x 8.00 (558.8 x 381.0 x 203.2) Add 9 inches below for cable hanger	53.00 x 15.00 x 8.00 (1347.0 x 381.0 x 203.2)
Weight unpackaged	52	110
Weight packaged	63	154
Status indicators	Six LEDs: Power, Charging, Complete, Remotely Controlled, Temporary Fault, and Service	
Pushbuttons	Two buttons: Override and Reset	
Ingress protection	IP14	
Type rating	3R	
Temperature—storage	–30 to 80°C	
Temperature—operating	–25 to 40°C	
Humidity	90% RH, noncondensing	

Eaton Corporation
Electrical Sector
1111 Superior Ave.
Cleveland, OH 44114
United States
877-ETN-CARE (877-386-2273)
Eaton.com

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Printed in USA
Publication No. TD0EV00003E / Z10841
June 2011



Table 4. I/O Specifications

Description	Wallmount	Pedestal
J1772 pistol-grip EV connector	Same as output rating	
Permissive run contact	NC dry contact input	
Current control to vehicle	4–20 mA analog input	
RS-485	Modbus®-RTU four-wire port	
Memory	SD memory slot	
Ethernet	RJ45, IEEE® 802.3, TCP/IP, Modbus TCP	
Field diagnostics and upgrade port	RS-232 DB9 (Telnet support)	

Table 5. Optional Specifications

Description	Wallmount	Pedestal
Through-feed (daisy chain) compatible	No	Yes
Network controller	Enables connectivity to Pow-R-Station Network Manager with real-time status and historical information	
Cellular ①	GSM/GPRS	
Wireless ②	Wi-Fi (WPA or WPA2)	
RFID basic	Basic lock/unlock with card or keyfob	
RFID user	Third-party database of users integrated for authentication	
Credit card processing	PCI-DSS	

① Cellular data plan required.

② Wireless routers type G or above are preferred for best compatibility.

Installation

The Pow-R-Station EVSE's electric requirements and wiring installation procedure vary by form-factor, but can easily be performed by any qualified electrician. For the wallmount Level 2 AC, the procedure is much like installing an electric stove circuit, and for the outside pedestal, it is much like installing a lighting bollard circuit.

See installation guide IM0EV00002E for more details.

For more information, visit www.eaton.com/plugin, call 855-ETN-EVSE (855-386-3873), or call your local Eaton sales office.



Canadian Operations
5050 Mainway
Burlington, ON L7L 5Z1
Canada
800-268-3578
Eatoncanada.ca

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