

**Eaton Grid-Tied Solar Inverter  
(3.8–7 kW)**



**Solar Power Center Loadcenters and  
Meter Breakers**



**Residential Electric Vehicle Charging**



## 1.1 Eaton Grid-Tied Solar Inverter (3.8–7 kW)

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Eaton Grid-Tied Solar Inverter (3.8–7 kW)



### Product Overview

The Eaton Grid-Tied Solar Inverter’s breakthrough technology and features deliver maximum return on investment for consumers. Eaton solar inverter units offer the highest efficiency and voltage operating ranges available in order to maximize energy yield.

Installation time and costs are greatly reduced through packaging the combiner box, AC/DC disconnects and wire raceway with the inverter. The design also simplifies service on the unit through a two-piece modular configuration, which allows the wiring box to remain connected and mounted if the need ever arises to replace the power module.

### Features and Benefits

#### Ratings

- 3800W, 4000W, 5000W, 6000W, 7000W

#### Maximum Energy Harvest

- 97% CEC efficiency
- Broad voltage operating range (105–500 Vdc) for superior performance in low light and high temperature environments
- Transformerless design

#### Saves Installation Time and Cost

- Integrated PV system AC/DC disconnect switch
- Four branch circuit-rated negative and positive fused inputs
- Integrated NEC®-compliant wire raceway

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#### Description

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### Application Description

Available in four individual sizes: 4 kW, 5 kW, 6 kW and 7 kW respectively. The 4 kW unit has the ability to be field-converted to output 3.8 kW to accommodate lower rated AC loadcenters. This inverter family is to be used in grid-tied applications only, thus having the ability to feed power to the utility grid. The design focus of these residential/light commercial inverters was on maximizing energy harvest and minimizing installation time and cost. The inverters boast an extremely high efficiency and a wide DC voltage operating range, while fully integrating the complete balance of system into the unit, including a four-string DC combiner, a DC disconnect switch, an AC disconnect switch and a wire raceway.

### Standards and Certifications

- ETL Listed (in compliance with UL® Std 1741)
- CSA® Listed (Std C22.2 No. 107.1)
- CEC Listed



## Product Selection/Technical Data and Specifications

## Eaton Grid-Tied Solar Inverter (3.8–7 kW)

Description	PV240	PV250	PV260	PV270
<b>Input (DC)</b>				
Nominal DC voltage	360V	360V	360V	360V
Maximum DC voltage	600V	600V	600V	600V
System startup voltage	150V	150V	150V	150V
Shutdown voltage	Typical 80V	Typical 80V	Typical 80V	Typical 80V
MPPT voltage range	105–500V	105–500V	105–500V	105–500V
Full rating voltage range	225–500V	200–500V	200–500V	200–500V
Maximum DC current	19A	26A	32A	37A
Number of DC input terminals	4	4	4	4
<b>Output (AC)</b>				
Nominal AC power at 240 Vac and 277 Vac	3800W	4000W	5000W	7000W
Nominal AC power at 208 Vac	3800W	3800W	4600W	7000W
Maximum AC power at 240 Vac and 277 Vac	3800W	4000W	5000W	7000W
Maximum AC power at 208 Vac	3800W	3800W	4600W	7000W
Nominal AC voltage	208V/240V/277V	208V/240V/277V	208V/240V/277V	208V/240V/277V
Nominal frequency	60 Hz	60 Hz	60 Hz	60 Hz
Disconnection time of excess operational frequency range	<0.16 sec	<0.16 sec	<0.16 sec	<0.16 sec
Nominal AC current at 208 Vac	18.3A	18.3A	22.1A	33.7A
Nominal AC current at 240 Vac	15.8A	16.7A	20.8A	29.2A
Nominal AC current at 277 Vac	13.7A	14.4A	18.1A	25.3A
Maximum AC current at 208 Vac	18.3A	18.5A	22.5A	35.0A
Maximum AC current at 240 Vac	15.8A	18.5A	22.5A	33.2A
Maximum AC current at 277 Vac	13.7A	16.4A	20.5A	28.7A
Power factor	> 0.99	> 0.99	> 0.99	> 0.99
<b>Efficiency</b>				
Peak efficiency	97.50%	97.50%	97.50%	97.50%
CEC efficiency	97%	97%	97%	97%
<b>General Data</b>				
Topology	Transformerless	Transformerless	Transformerless	Transformerless
Dimensions (W/H/D) inches	17.1/33.3/8.3	17.1/33.3/8.3	17.1/33.3/8.3	17.1/33.3/8.3
Weight (lbs)	86	90	101	101
Power consumption: standby/night	< 7W/< 0.2W	< 7W/< 0.2W	< 7W/< 0.2W	< 7W/< 0.2W
DC insulation resistance	> 4M ohms	> 4M ohms	> 4M ohms	> 4M ohms
Enclosure	NEMA 3R	NEMA 3R	NEMA 3R	NEMA 3R
Heat dissipation	Force air cooling, variable fan speed according to temperature on heat sink			
Operating temperature range	–25 to +50°C	–25 to +50°C	–25 to +50°C	–25 to +50°C
Humidity	0 to 95%, noncondensing	0 to 95%, noncondensing	0 to 95%, noncondensing	0 to 95%, noncondensing
Communication	RS-232/Super-485	RS-232/Super-485	RS-232/Super-485	RS-232/Super-485
Ground fault protection	Internal GFCI and Isolation detection function, in accordance with UL 1741			
Disconnect	Integrated AC and DC switch	Integrated AC and DC switch	Integrated AC and DC switch	Integrated AC and DC switch
Certifications	ETL (in compliance with UL 1741), CSA, CEC			
DC surge protection	4 kV	4 kV	4 kV	4 kV
AC surge protection	6 kV	6 kV	6 kV	6 kV



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### Solar Power Center Loadcenters and Meter Breakers

#### Product Description

Eaton’s Solar Power Centers combine both utility power and solar photovoltaic (PV) power into one enclosure. Solar Power Centers can be applied as a component of a complete PV electrical system. Eaton offers the most complete line of Balance of System (BOS) products in the industry, along with a wide variety of configurations including loadcenters and meter breakers.

The Solar Power Centers feature industry-exclusive factory-installed permanent markings, which help to ensure National Electrical Code® (NEC) compliance. Required by the NEC, these markings enable quick and easy identification of product ratings and location of the parallel energy source disconnect. Prior to installation, contact your local utility to confirm approval.

#### Product Types

Loadcenters are enclosures specifically designed to house the branch circuit breakers and wiring required to distribute power to individual circuits. They contain either a main breaker when used at the service entrance point or a main lug when used as a sub-panel to add circuits to existing service. The main breaker protects the entire panel and can be used as a service disconnect. The branch breakers protect the wires leading to individual electrical loads such as fixtures and outlets.

Meter breakers are service entrance equipment that consist of a single meter socket and loadcenter (circuit breaker distribution section) or meter socket and main breaker combined in one enclosure. Sometimes called Combos, All-in-Ones, Meter Centers or Meter Mains, these units are increasing in popularity as the socket and loadcenter or main breaker are located in one location, thus providing the contractor with a labor and material savings when installing.

Meter breakers are most often sold in the western, southwestern and southeastern United States. The popularity of meter breakers is continuing to increase as more utilities deregulate and pass the responsibility of supplying watt-hour meter sockets on to the electrical contractor.

## Application Description

### How to Size a Solar-Ready Loadcenter or a Meter Breaker for your Solar Application

The National Electrical Code (2008) Section 690.64(B)(2)/ (2011) Section 705.12(D)(2) states: "The sum of the ampere ratings of overcurrent devices in circuits supplying power to a busbar or conductor shall not exceed 120 percent of the rating of the busbar or conductor."

For example: A 200A main breaker loadcenter + a backfed 70A PV breaker = 270A = 120% of the 225A busbar rating. In 2014, 120% was extended to 125% of the conductor rating.

**Note:** Check with local utility for exact requirements.

Panel Main Breaker Ampere Rating	Standard Bus Ampere Rating	Maximum Total Ampere Rating of all PV Backfed Mains	Maximum Ampere Rating of Panel Mains + PV Mains
100	100	20	120
100	125	50	150
125	125	25	150
200	200	40	240
200	225	70	270
225	225	45	270
400	400	80	480

## Features and Benefits

### Solar Power Center

- Up to 225A rated copper bussing maximizes solar source up to 70A for standard units
- 100A, 125A and 200A main breakers available factory installed, which provides additional flexibility in PV sizing
- Main breaker and PV backfed main are located at opposite ends of the distribution panel
- Single-phase, three-wire 120/240 Vac
- Overhead and underground feed applications
- Padlocking provisions
- Surface and flush designs available
- Top or bottom exit of load wiring
- Limited lifetime warranty for Type CH and 10-year warranty for Type BR

### Loadcenters

- Type CH features plug-on neutral loadcenters and breakers that enable the contractor to connect the breaker directly to the neutral bar, eliminating the need for wiring a pigtail
- Type CH features unique stab design, which provides a tight connection to the bus
- Top or bottom feed
  - Straight-in wiring saves labor and material
  - Only one panel for either application—no modifications necessary
- Extra 1.50-inch (38.1 mm) knockout for bundling enables easier installation
- Drywall marking on enclosure indicates proper mounting depth for flush applications
- Unique sandalwood finish is aesthetically appealing with scratch-resistant powder coating
- Silver flash plated copper bus provides superior conductivity

### Meter Breakers

- Meter socket and distribution section are located in one enclosure, which provides labor and material savings
- EUSERC / West Coast and Non-EUSERC designs
- Ring, ringless and lever bypass designs
- 7-inch-deep designs available, which is ideal for stucco homes
- Endwall knockouts are easily accessible for future wiring without damaging stucco

## Standards and Certifications

- Complies with NEC (2008) Section 690.64(B) / (2011) Section 705.12(D), which identifies the acceptable installation and marking requirements for utility interactive solar inverters
- UL Listed
- Non-EUSERC
- EUSERC/West Coast

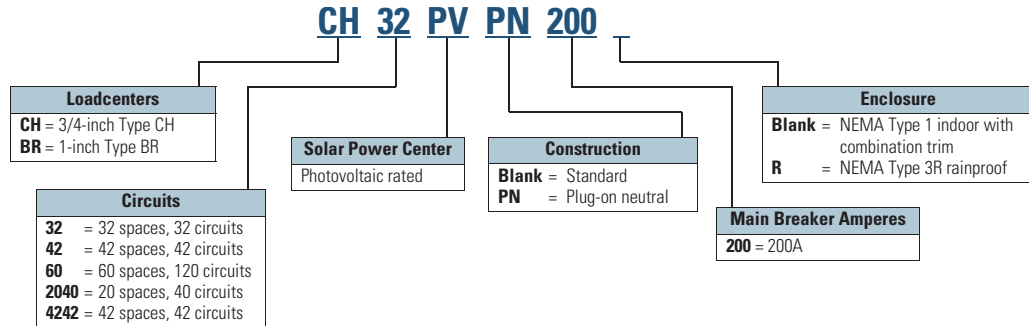
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## Solar Power Center Loadcenters and Meter Breakers

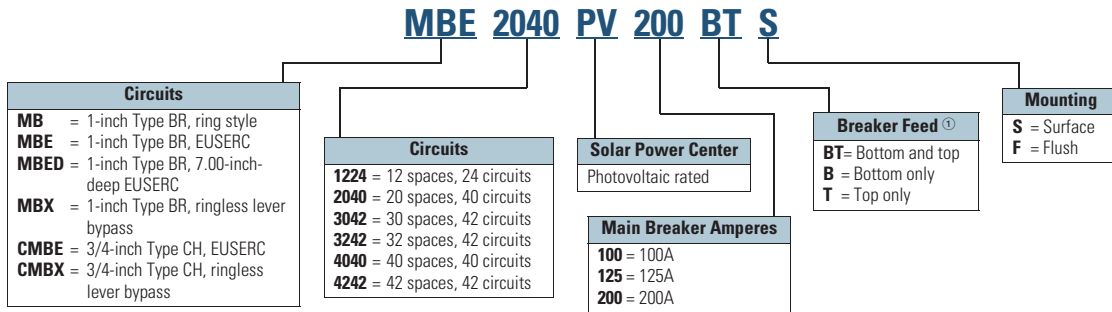
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### Catalog Number Selection

#### Solar Power Center Loadcenters



#### Solar Power Center Meter Breakers



**Note**

① See product selection table on next page for valid catalog strings. Contact the Eaton Flex Center with questions or if you can not find the right catalog string.

## Product Selection

## Solar Power Center Meter Breakers

## Type CH Meter Breakers

Max. Number of 3/4-Inch Spaces	Max. Number of Circuits	Main Breaker (A)	Bus Rating (A)	Max. PV Input (A)	Mounting	Service Design	Bus	kAIC	Enclosure ①	Catalog Number
<b>Combination Service Entrance Devices—EUSERC (Side-by-Side Construction)</b>										
32	42	200	225	70	Flush	UG	Cu	22	7	<b>CMBE3242PV200BF</b>
32	42	200	225	70	Surface	UG	Cu	22	7	<b>CMBE3242PV200BS</b>
42	42	200	225	70	Flush	UG/OH	Cu	22	12	<b>CMBE4242PV200BF</b>
42	42	200	225	70	Surface	UG/OH	Cu	22	12	<b>CMBE4242PV200BS</b>
42	42	200	225	70	Surface	OH	Cu	22	12	<b>CMBE4242PV200TS</b>
<b>Combination Service Entrance Devices—Non-EUSERC—Lever Bypass (Over/Under Construction)</b>										
32	42	200	225	70	Surface	UG/OH	Cu	22	14	<b>CMBX3242PV200TS</b>

## Type BR Meter Breakers

Max. Number of 1-Inch Spaces	Max. Number of Circuits	Main Breaker (A)	Bus Rating (A)	Max. PV Input (A)	Mounting	Service Design	Bus	kAIC	Enclosure ①	Catalog Number
<b>Combination Service Entrance Devices—EUSERC (Side-by-Side Construction)</b>										
12	24	100 ②	125	50	Flush	UG/OH	Al	10	2	<b>MBE1224PV100BTF</b>
12	24	100 ②	125	50	Surface	UG/OH	Al	10	2	<b>MBE1224PV100BTS</b>
12	24	125 ②	125	25	Flush	UG/OH	Al	10	2	<b>MBE1224PV125BTF</b>
12	24	125 ②	125	25	Surface	UG/OH	Al	10	2	<b>MBE1224PV125BTS</b>
20	40	200	225	70	Flush	UG/OH	Cu	22	18	<b>MBE2040PV200BTF</b>
20	40	200	225	70	Surface	UG/OH	Cu	22	18	<b>MBE2040PV200BTS</b>
30	42	200	225	70	Flush	UG	Cu	22	7	<b>MBE3042PV200BF</b>
30	42	200	225	70	Surface	UG	Cu	22	7	<b>MBE3042PV200BS</b>
40	40	200	225	70	Flush	UG/OH	Cu	22	12	<b>MBE4040PV200BTF</b>
40	40	200	225	70	Surface	UG/OH	Cu	22	12	<b>MBE4040PV200BTS</b>
<b>Combination Service Entrance Devices—EUSERC—7-Inch-Deep Design</b>										
30	42	200	225	70	Semi-flush	UG	Cu	22	—	<b>MBED3042PV200BF</b>
<b>Combination Service Entrance Devices—Non-EUSERC (Over/Under Construction)</b>										
20	40	200	225	70	Surface	UG/OH	Cu	22	—	<b>MB2040PV200BTS</b>
<b>Combination Service Entrance Devices—Non-EUSERC—Lever Bypass (Over/Under Construction)</b>										
20	40	200	225	70	Surface	UG/OH	Cu	22	—	<b>MBX2040PV200BTS</b>

## Solar Power Center Loadcenters

## Type CH Plug-On Neutral Loadcenters

Max. Number of 3/4-Inch Spaces	Max. Number of Circuits	Main Breaker (A) ③	Bus Rating (A)	Max. PV Input (A)	Mounting	Enclosure	Bus	kAIC	Box Size ④	Cover Included	Catalog Number
32	32	200	225	70	Combination	NEMA 1	Cu	25	J	Yes	<b>CH32PVPN200</b>
42	42	200	225	70	Combination	NEMA 1	Cu	25	K	Yes	<b>CH42PVPN200</b>
60	120 ⑤	200	225	70	Combination	NEMA 1	Cu	25	N	Yes	<b>CH60PVPN200</b>

## Type BR Loadcenters

Max. Number of 1-Inch Spaces	Max. Number of Circuits	Main Breaker (A) ③	Bus Rating (A)	Max. PV Input (A)	Mounting	Enclosure	Bus	kAIC	Box Size ④	Cover Included	Catalog Number
20	40	200	225	70	Combination	NEMA 1	Cu	25	D1	Yes	<b>BR2040PV200</b>
20	40	200	225	70	Surface	NEMA 3R	Cu	25	D1R	Yes	<b>BR2040PV200R ④</b>
42	42	200	225	70	Combination	NEMA 1	Cu	25	L2	Yes	<b>BR4242PV200</b>
42	42	200	225	70	Surface	NEMA 3R	Cu	25	L2R	Yes	<b>BR4242PV200R ④</b>

## Notes

① For box size information, refer to Electrical Sector Solutions—Volume 1: Residential and Light Commercial, Tab 1, CA08100002E.

② Type BR main breaker factory installed. All other units Type CSR.

③ Type CSR main breaker factory installed.

④ Rainproof panels are furnished with hub closure plates. For rainproof hubs or box size information, refer to Electrical Sector Solutions—Volume 1: Residential and Light Commercial, Tab 1, CA08100002E.

⑤ Requires the use of Type CHNT breakers.

Contact the Eaton Flex Center (1-800-330-6479 or [flexcenterlincoln@eaton.com](mailto:flexcenterlincoln@eaton.com)) for additional solar features including different device availability, main breaker, bus and solar input ratings.

### Additional Information

Loadcenter and accessories—reference **Volume 1—Residential and Light Commercial**, CA08100002E, Tab 1.

Meter breaker and accessories—reference **Volume 1—Residential and Light Commercial**, CA08100002E, Tab 1.

Replacement parts for Solar Power Centers.

- Meter breaker:
  - Deadfront
  - Swing door
  - Utility pull section cover
- Loadcenter:
  - Combination cover
  - NEMA 3R covers
  - NEMA 3R deadfronts

### Replacement Parts

#### Meter Breaker

Meter Breaker	Deadfront	Swing Door	Utility Pull Section Cover	Breaker Cover Deep
<b>CMBE3242PV200BF</b>	<b>MBICVR6PV</b>	<b>MBFCVR7PVCH</b>	<b>MBUCVR2PV</b>	—
<b>CMBE3242PV200BS</b>				
<b>CMBE4242PV200BF</b>	<b>MBICVR23PV</b>	<b>MBFCVR5PVCHB</b>	<b>MBUCVR4PV</b>	—
<b>CMBE4242PV200BS</b>				
<b>CMBE4242PV200TS</b>	<b>MBICVR23PV</b>	<b>MBFCVR5PVCHT</b>	<b>MBUCVR4PV</b>	—
<b>CMBX3242PV200TS</b>	<b>CMBXDICVR1PV</b>	<b>CMBXDFCVR1PV</b>	—	—
<b>MBE1224PV100BTF</b>	<b>MBICVR25PV</b>	<b>MBFCVR13PV</b>	<b>MBUCVR3PV</b>	—
<b>MBE1224PV100BTS</b>				
<b>MBE1224PV125BTF</b>				
<b>MBE1224PV125BTS</b>				
<b>MBE2040PV200BTF</b>	<b>MBICVR30PV</b>	<b>MBFCVR14PV</b>	<b>MBDCVR4PV</b>	—
<b>MBE2040PV200BTS</b>				
<b>MBE3042PV200BF</b>	<b>MBICVR31PV</b>	<b>MBFCVR7PVBR</b>	<b>MBUCVR2PV</b>	—
<b>MBE3042PV200BS</b>				
<b>MBE4040PV200BTF</b>	<b>MBICVR24PV</b>	<b>MBFCVR5PVBR</b>	<b>MBUCVR4PV</b>	—
<b>MBE4040PV200BTS</b>				
<b>MBED3042PV200BF</b>	<b>N/A</b>	<b>MBEDFCVR2PV</b>	<b>MBEDUCVR1PV</b>	<b>MBEDDCVR2PV</b>
<b>MB2040PV200BTS</b>	<b>MBICVR1PV</b>	<b>MBFCVR2PV</b>	—	—
<b>MBX2040PV200BTS</b>	<b>ARP03070CHPV</b>	<b>ARP03071CHPV</b>	—	—

#### Loadcenter

NEMA 1	Combination Cover	NEMA 3R Cover	NEMA 3R Deadfront
<b>CH32PVPN200</b>	<b>CH8JFPV</b>	—	—
<b>CH42PVPN200</b>	<b>CH8KFPV</b>	—	—
<b>CH60PVPN200</b>	<b>CH8NFPV</b>	—	—
<b>BR2040PV200</b>	<b>BRCOVC35PV</b>	—	—
<b>BR4242PV200</b>	<b>BRCOVC53PV</b>	—	—
<b>Raintight</b>			
<b>BR2040PV200R</b>	—	<b>BR3RDOOR9PV</b>	<b>BR3RDF11PV</b>
<b>BR4242PV200P</b>	—	<b>BR3RDOOR13PV</b>	<b>BR3RDF15PV</b>



### Charging Stations



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## Charging Stations

### Product Description

Eaton's established excellence in both the automotive and electrical distribution/control industries have created a perfect platform for all electrical vehicle charging needs. Whether it's a residential system, a commercial endeavor or a system to support fleet electric vehicles, Eaton has the products and the depth of experience to support, install and service electric vehicle chargers.

### Features

- Eaton has been managing power systems (electrical, fluid, and air) for over 100 years
- Eaton is a Tier 1 Automotive Supplier. This connectivity with the major automotives enables Eaton to be on the forefront of emerging vehicle technologies
- Turnkey installation solutions through Eaton Engineering Services (EES) and Eaton Certified Contractor Network (ECCN) throughout the United States and Canada
- Eaton is the only provider of a full family of electric vehicle charging products
- Eaton provides a one stop solution for all your electrical distribution needs
- Restricted accessibility options such as credit card and radio frequency identification (RFID)

# 1.3

## Residential Electric Vehicle Charging

### Charging Stations

#### 1

#### Product Overview

#### Vehicle Chargers



Description	Level 1 Universal Receptacle	Level 1 Charging Station	Level 2 Charging Station	Electric Vehicle Simulator
Input voltage	110/120 Vac	110/120 Vac	208/240 Vac	—
Input amperage	20A, 40A or 80A (1–4 vehicles)	16A	16A or 30A	—
Max power	Up to 1.9W at 16A per connection	1.9 kW (L116 style)	3.8 kW (L216 style) 7.2 kW (L230 style)	—
Mount	Pedestal/bollard	Wallmount or pedestal	Wallmount or pedestal	—
Safety specifications	UL 2594 for EV use cUL 2594 for EV use	ETL Listed to UL 2594/2231/1998 cETL Listed	ETL Listed to UL 2594/2231/1998 cETL Listed	—
Enclosure	NEMA 3R stainless steel	NEMA 3R stainless steel	NEMA 3R stainless steel	—
Quick and easy installation	Yes	Yes	Yes	—
Ground fault protection	Yes	Yes	Yes	—
Overcurrent protection	Yes	Yes	Yes	—
Features	1-4 multi-vehicle support Integrated high-efficiency LED lighting Build-to-order customization available	SAE J1772™ compliant Permanent or cord-and-plug wallmount Quick and easy installation Build-to-order customization available	SAE J1772 compliant Permanent or cord-and-plug wallmount Quick and easy installation Build-to-order customization available	—
Options	Utility grade, sub-metering, access control	High-efficiency, LED site-lighting, sub-metering	High-efficiency, LED site-lighting, sub-metering	—
Applications/markets	Single and multi-family homes, parking garages, university campuses, truck stops, restaurants, airports, municipalities, shopping centers, corporate offices, hotels	Single and multi-family homes, real estate developers, builders, military bases, government city centers, schools, small offices	Single and multi-family homes, real estate developers, builders, government city centers, schools, small offices	—
Charge time				—

### Level 1 Universal Receptacle



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## Level 1 Universal Receptacle

### Product Description

Eaton's 120 Vac Level 1 Universal Receptacle Charging Station provides a safe, reliable means for charging up to four vehicles at a time. It is the perfect solution for buildings that require multiple-vehicle charging, such as apartments and offices.

This innovative charging station provides a universal receptacle for up to four EVs. It's perfect for charging electric cars, e-bikes, NEVs, electric service vehicles and golf carts, simultaneously. For applications that require more than four vehicles to be charged, Eaton's Level 1 Universal Receptacle Charging Stations can be connected in a series with optional utility-grade sub-metering.

### Features

- Perfect for charging electric vehicles (with their respective cordsets), e-bikes, NEVs, electric service vehicles, and golf carts
- 110/120 Vac
- 20, 40, and 80A units available
- Charge up to four vehicles
- Pedestal and bollard styles available
- Locking provision to prevent cordset theft
- Support hook to prevent unintentional unplugging with heavier EV cordsets

### Standards and Certifications

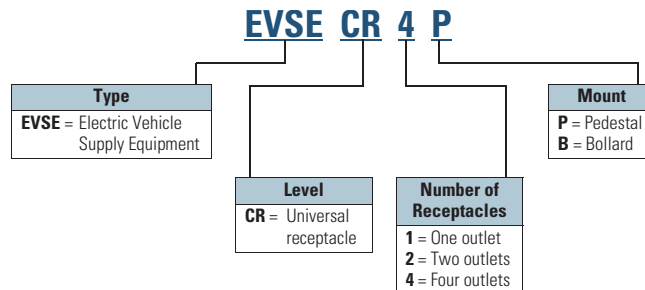
- NEC 625 compliant
- UL Listed to UL 2594 for EV use



- Charging stations can be connected in series
- NEMA 5-20 T-slot receptacles
- Rugged stainless steel construction
- Indoor/outdoor rated
- Optional LED lighting available
- Optional utility grade sub-metering
- Customization available

### Catalog Number Selection

#### Level 1 Universal Receptacle



# 1.3

## Residential Electric Vehicle Charging

### Level 1 Universal Receptacle

1

#### Product Selection

##### Level 1 Universal Receptacle



##### Level 1 Universal Receptacle

Description	
Input voltage	110/120 Vac
Input amperage	20A, 40A or 80A (1–4 vehicles)
Max power	Up to 1.9W at 16A per connection
Mount	Pedestal/bollard
Safety specifications	UL 2594 for EV use cUL 2594 for EV use
Enclosure	NEMA 3R stainless steel
Quick and easy installation	Yes
Ground fault protection	Yes
Overcurrent protection	Yes
Features	1–4 multi-vehicle support Integrated high-efficiency LED lighting Build-to-order customization available
Options	Utility grade, sub-metering, access control
Applications/markets	Single and multi-family homes, parking garages, university campuses, truck stops, restaurants, airports, municipalities, shopping centers, corporate offices, hotels
Charge time	

#### Technical Data and Specifications

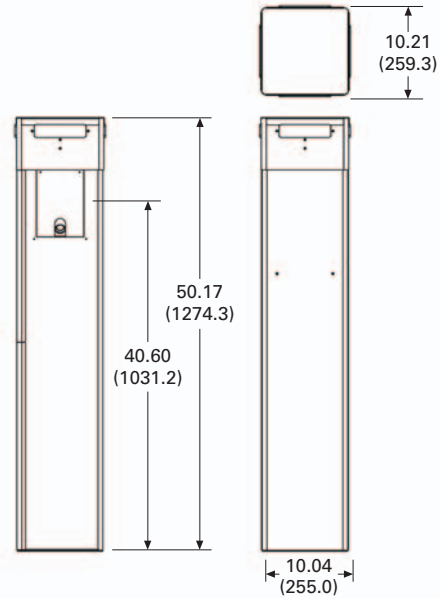
##### Level 1 Universal Receptacle

Description	Specification
<b>Electrical Input</b>	
Voltage	110/120 Vac
Amperage	20A, 40A, 80A (pedestal for 1–4 vehicles)
<b>Electrical Output</b>	
Power	Up to 1.9 kW at 16A per connection
Connection	1-4 NEMA 5-20T receptacles (pedestal mount)
<b>Physical/Environmental</b>	
Weight	50 lbs
Operating temperature	–30° to 50°C
Enclosure rating	NEMA Type 3R
<b>Safety</b>	
Listed to UL 2594 for EV use	✓
Listed to cUL for EV use	✓
Ground fault protection	✓
Overcurrent protection	✓

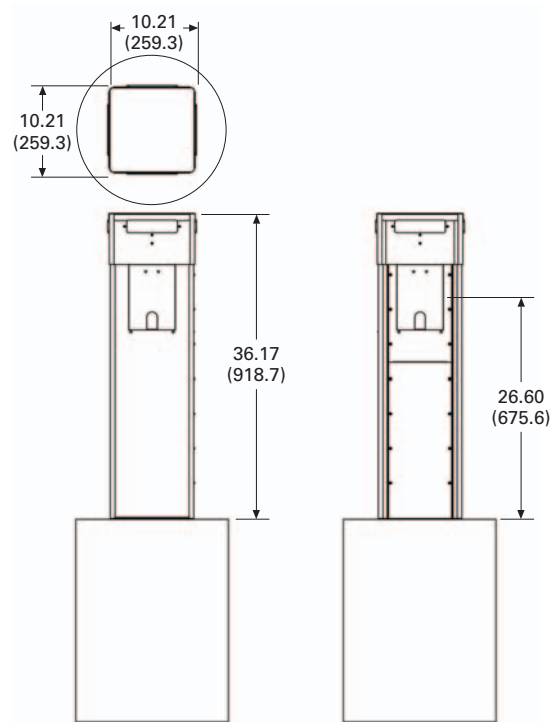
#### Dimensions

Approximate Dimensions in Inches (mm)

##### Pedestal



##### Bollard



### Level 1 Charging Station



### Level 1 Charging Station

#### Product Description

Eaton offers a full family of reliable, responsible electric vehicle (EV) chargers for residential applications. Our established excellence in the automotive and electrical distribution and control industries allows us to provide a wide range of innovative EV charging solutions to suit your individual needs. In addition, the Eaton Certified Contractor Network (ECCN) can provide turnkey services, from design to installation.

This 120 Vac charging station provides an economical and versatile EV charging solution.

#### Features

- Provides an economical and versatile solution for charging electric vehicles
- 110/120 Vac
- 16A units available
- Wallmount and pedestal styles
- Quick and easy installation
- Rugged stainless steel construction
- Indoor/outdoor rated
- Auto-reset feature
- Hardwire connected
- Optional advanced cord management to protect SAE J1772 connector
- Standard 24 foot cord
- Optional LED lighting available
- Optional utility grade sub-metering
- Customization available

### Contents

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#### Intuitive User Interface



#### Optional LED Lighting



#### Standards and Certifications

- SAE J1772 compliant connector
- ETL listed to UL 2594/2231/1998



# 1.3

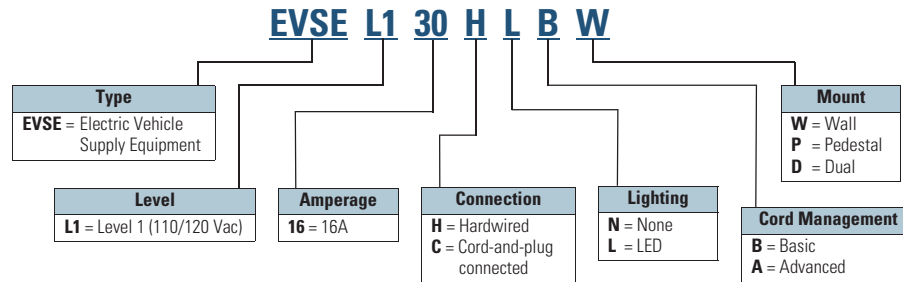
## Residential Electric Vehicle Charging

### Level 1 Charging Station

1

#### Catalog Number Selection

#### Level 1 Charging Station



#### Product Selection

##### Level 1 Charging Station



#### Level 1 Charging Station

Description	
Input voltage	110/120 Vac
Input amperage	16A
Max power	1.9 kW (L116 style)
Mount	Wallmount or pedestal
Safety specifications	UL 2594 for EV Use cUL 2594 for EV Use
Enclosure	NEMA 3R stainless steel
Quick and easy installation	Yes
Ground fault protection	Yes
Overcurrent protection	Yes
Features	SAE J1772 compliant Permanent or cord-and-plug wallmount Quick and easy installation Build-to-order customization available
Options	High-efficiency, LED site-lighting, sub-metering
Applications/markets	Single and multi-family homes, real estate developers, builders, military bases, government city centers, schools, small offices
Charge time	

#### Technical Data and Specifications

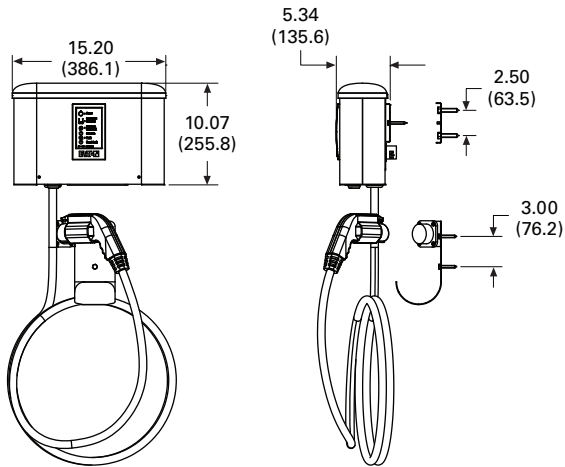
#### Level 1 Charging Station

Description	Specification
<b>Electrical Input</b>	
Voltage	110/120 Vac
Amperage	16A (L116 Style)
Connection	Hardwired connected
<b>Electrical Output</b>	
Power	1.9 kW (L116 Style)
Connector	SAE J1772
Cable length	24 feet
<b>Physical/Environmental</b>	
Weight	23 lbs
Operating temperature	-30° to 50°C
Status indicators	5 LEDs: "Power/Ready", "Connected/Charging", "Remotely Controlled", "Fault" and "Service"
Push buttons	Two buttons: "Override" and "Reset Fault"
Enclosure rating	NEMA Type 3R—stainless steel
<b>Safety</b>	
ETL Listed to UL 2594/2231/1998	✓
cETL Listed	✓
Interlocked power protection	✓
Ground fault protection	✓
Overcurrent protection	✓

### Dimensions

Approximate Dimensions in Inches (mm)  
(Advanced cord management)

#### Level 1 Charging Station



# 1.3

## Residential Electric Vehicle Charging

### Level 2 Charging Station

1

#### Level 2 Charging Station



#### Level 2 Charging Station

##### Product Description

Using an industry standard J1772 30A or 70A connector, the Level 2 charging station will easily fill a depleted all-electric vehicle battery in three to four hours while the owner is working, shopping or sleeping. The Level 2 charging station is ideal for residential or commercial EV charging applications.

##### Features

- Charge electric vehicles up to 5 times faster than with a vehicle's cordset
- 208/240 Vac
- 16 and 30A units available
- Wallmount and pedestal styles
- Quick and easy installation
- Rugged stainless steel construction
- Indoor/outdoor rated
- Auto-reset feature
- Hardwire connected
- Optional advanced cord management to protect SAE J1772 connector
- Standard 24 foot cord
- Optional LED lighting available
- Optional utility grade sub-metering
- Customization available

#### Contents

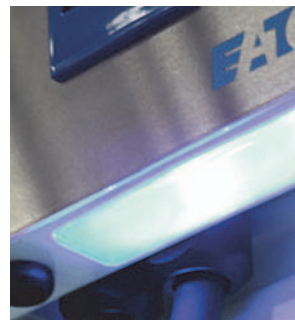
##### Description

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#### Intuitive User Interface



#### Optional LED Lighting



#### Standards and Certifications

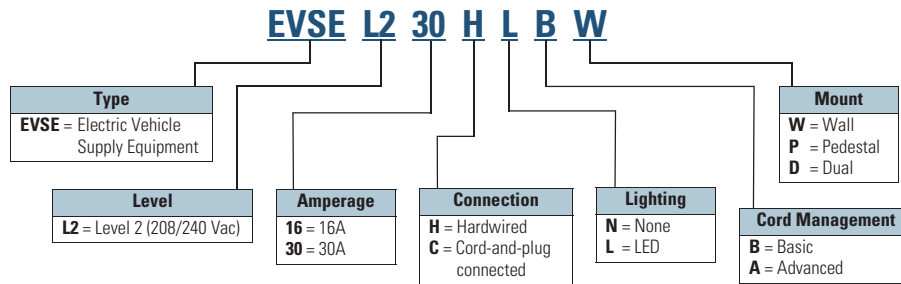
- SAE J1772 compliant connector
- ETL listed to UL 2594/2231/1998





### Catalog Number Selection

#### Level 2 Charging Station



### Product Selection

#### Level 2 Charging Station



#### Level 2 Charging Station

Description	
Input voltage	208/240 Vac
Input amperage	16A or 30A
Max power	3.8 kW (L216 style) 7.2 kW (L230 style)
Mount	Wallmount or pedestal
Safety specifications	ETL Listed to UL 2594/2231/1998 cETL Listed
Enclosure	NEMA 3R stainless steel
Quick and easy installation	Yes
Ground fault protection	Yes
Overcurrent protection	Yes
Features	SAE J1772 compliant Permanent or cord-and-plug wallmount Quick and easy installation Build-to-order customization available
Options	High-efficiency, LED site-lighting, sub-metering
Applications/markets	Single and multi-family homes, real estate developers, builders, government city centers, schools, small offices
Charge time	

### Technical Data and Specifications

#### Level 2 Charging Station

Description	Specification
<b>Electrical Input</b>	
Voltage	208/240 Vac
Amperage	16A (L116 Style) 30A (L230 Style)
Connection	Hardwired connected
<b>Electrical Output</b>	
Power	3.8 kW (L216 Style) 7.2 kW (L230 Style)
Connector	SAE J1772
Cable length	24 feet
<b>Physical/Environmental</b>	
Weight	23 lbs
Operating temperature	-30° to 50°C
Status indicators	5 LEDs: "Power/Ready", "Connected/Charging", "Remotely Controlled", "Fault" and "Service"
Push buttons	Two buttons: "Override" and "Reset Fault"
Enclosure rating	NEMA Type 3R—stainless steel
<b>Safety</b>	
ETL Listed to UL 2594/2231/1998	✓
cETL Listed	✓
Interlocked power protection	✓
Ground fault protection	✓
Overcurrent protection	✓

# 1.3

## Residential Electric Vehicle Charging

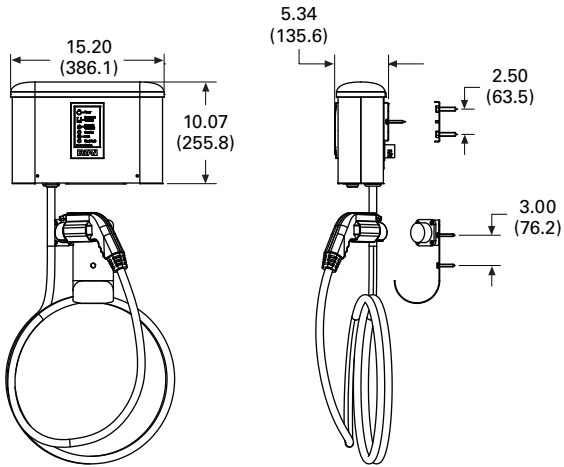
### Level 2 Charging Station

1

#### Dimensions

Approximate Dimensions in Inches (mm)  
(Advanced cord management)

#### Level 2 Charging Station



### Electric Vehicle Simulator



### Electric Vehicle Simulator

#### Product Description

To ensure correct installation of Electric Vehicle Chargers, Eaton introduces the EVSE Electric Vehicle Simulator. Eaton's EV Simulator allows installers to immediately test the functionality of the EVSE on-site during installation.

#### Features

- Confirm proper operation of any J1772 compliant EVSE without the need of an actual electric vehicle
- Rugged case is perfect for service personnel
- Easy-to-follow testing instructions printed on unit
- Ready to charge
- Ground fault simulation
- Charging indicator
- Pilot signal test points for oscilloscopes

### Contents

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#### Easy to Follow Test Instructions



# 1.3

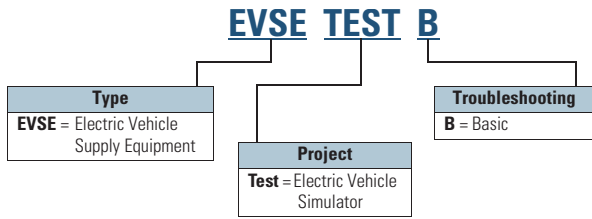
## Residential Electric Vehicle Charging

### Electric Vehicle Simulator

1

#### Catalog Number Selection

##### Electric Vehicle Simulator



#### Technical Data and Specifications

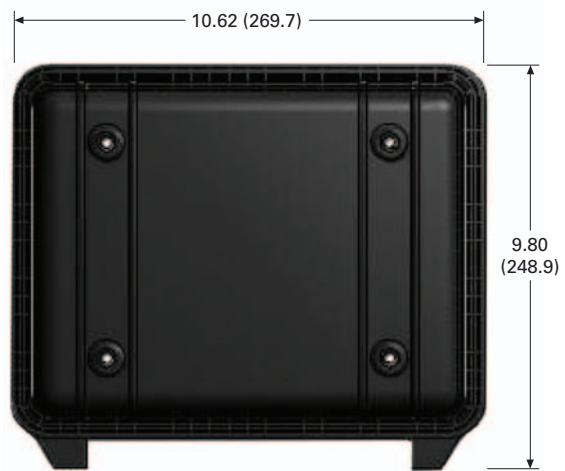
##### Electric Vehicle Simulator

Description	Specification
<b>Electrical Input</b>	
Voltage	120/208/240 Vac
Connection	J1772 inlet
<b>Physical/Environmental</b>	
Operating temperature	-30° to 50°C
Status indicator	One light: "Charging"
Push buttons	One button: "Ground Fault"
Switch	One switch: "Ready/Not Ready"
Test points (banana jack receptacles)	Pilot (1 kHz PWM signal) ground
<b>Tests EVSE Safety and Functionality</b>	
EVSE ability to charge vehicle	✓
Confirm interlocked power	✓
Confirm ground fault detection	✓
J1772 "handshake" compatibility	✓

#### Dimensions

Approximate Dimensions in Inches (mm)

##### Electric Vehicle Simulator



### Electric Vehicle Charging Station Pedestal



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### Electric Vehicle Charging Station Pedestal

#### Product Description

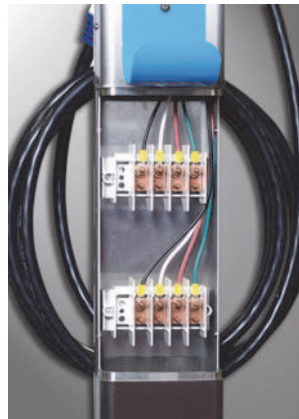
Plug-in electric vehicles are becoming popular due to rising fuel costs and environmental concerns.

Eaton's EV Charging Station provides a safe and reliable means to quickly power up electric vehicles.

#### Features

- EV Charging Pedestals ship with EV Chargers mounted and pre-wired
- Single or dual EVSE pedestal options
- Available with Eaton Level 1 and Level 2 charging stations
- Quick and easy installation
- Rugged stainless steel construction
- Indoor/outdoor rated
- Standard 24 foot cord
- Optional utility-grade sub-metering
- Greater flexibility for external installations
- Dual EVSE pedestal option allows for multiple vehicle charging
- Customization available

#### Pedestal Wiring



#### Standards and Certifications

- UL 1773/50/50E



# 1.3

## Residential Electric Vehicle Charging

### Electric Vehicle Charging Station Pedestal

1

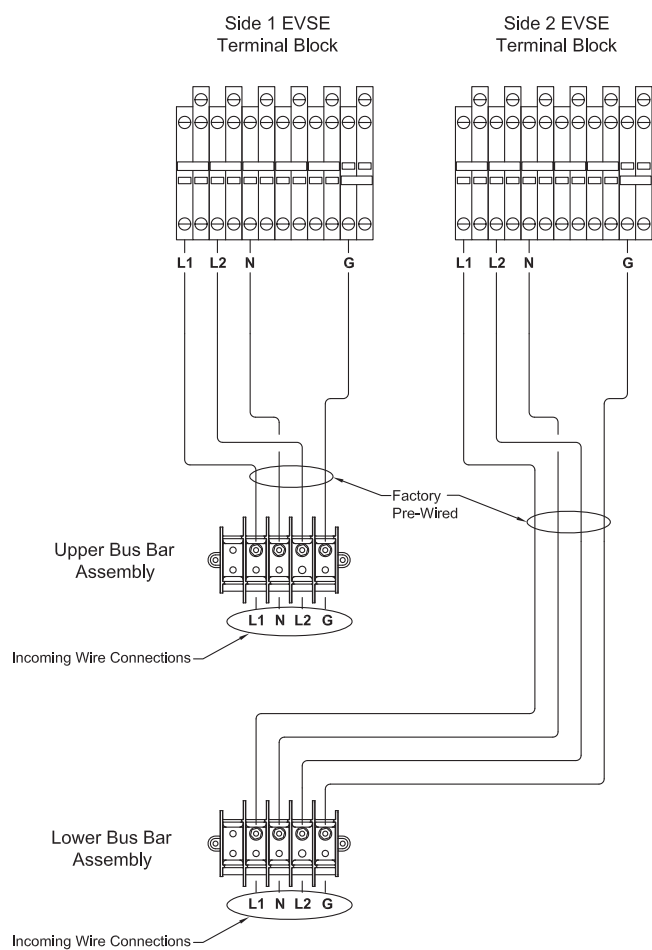
#### Technical Data and Specifications

##### Electric Vehicle Charging Station Pedestal

Description	Specification
<b>Weight (lbs)</b>	
Single EVSE—mount pedestal	42 lbs
Dual EVSE—mount pedestal	65 lbs
<b>Enclosure</b>	
Rating/material	NEMA 3R—stainless steel

#### Wiring Diagram

##### Electric Vehicle Charging Station Pedestal



#### Dimensions

Approximate Dimensions in Inches (mm)

##### Electric Vehicle Charging Station Pedestal

Description	H x W x D
Single EVSE pedestal	54.06 (1373.1) x 15.20 (386.1) x 9.70 (246.4)
Dual EVSE pedestal	54.06 (1373.1) x 15.20 (386.1) x 13.30 (337.8)

