Solar power centers

The power you need in one enclosure

Powering Business Worldwide

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 industry's most complete line of balance of system (BOS) products, 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.

Features and benefits

Solar power center

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

Loadcenter

- 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 a unique stab design that provides a tight connection to the bus
- Top or bottom feed
  - Straight-in wiring provides savings in 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

Meter breaker

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

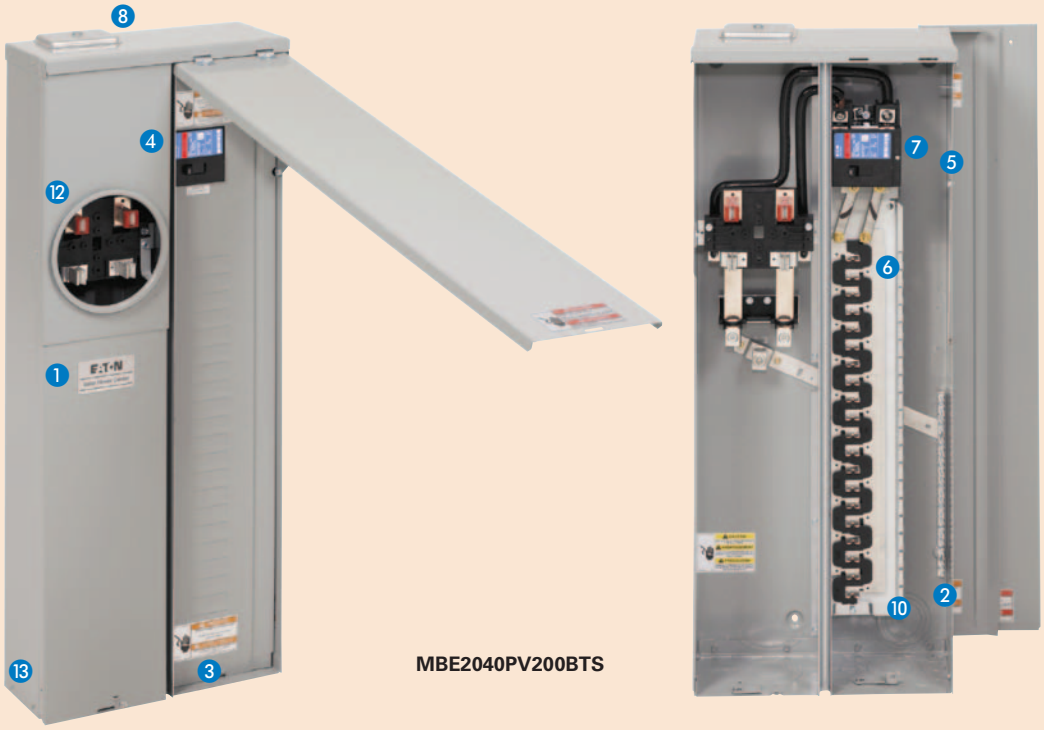
For customer support, contact Eaton's Technical Resource Center at

1-877-ETN-CARE

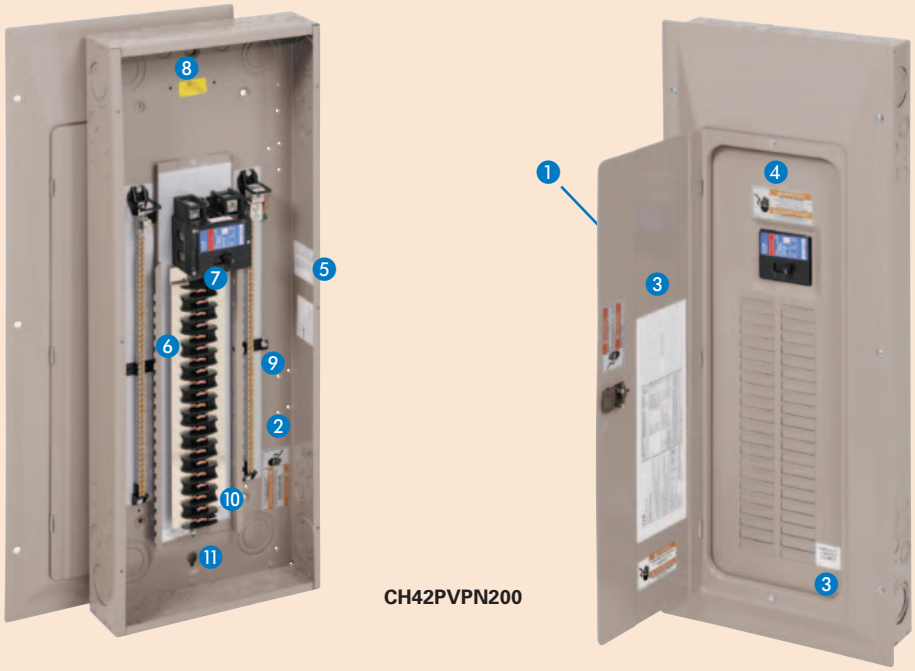
For additional solar features, including different device availability, main breaker, bus and solar input ratings, contact the Eaton Flex Center at

1-800-330-6479 or **flexcenterlincoln@eaton.com**

The solar power centers feature industry-exclusive, factory-installed permanent markings that help to ensure National Electrical Code (NEC) compliance.



MBE2040PV200BTS



CH42PVPN200

1. Solar power center nameplate (on the front of the door) highlights that the device is a component of a complete PV electrical system.
2. Permanent solar marking—identifies that the terminals on both line and load sides may be energized in the open position.
3. Permanent solar marking—identifies location of the parallel energy source disconnect (backfed PV breaker), which is always located opposite the normal power overcurrent device.
4. Permanent solar marking—identifies the use of dual power sources, one normal power and the other a power production source (for example, solar).
5. Permanent solar marking—identifies maximum bus, utility and PV disconnect ratings to ensure that the total utility and inverter power sources do not overload the busbar.
6. 225A rated copper bussing maximizes solar source up to 70A for standard units.
7. 200A main breaker factory installed and located at the end of the distribution panel, ensuring compliance with NEC requirements.
8. Overhead and underground feed applications.
9. Inboard neutral provides direct neutral connection for breaker, eliminating the need for wiring a pigtail.
10. One-piece steel backpan provides reliable breaker mounting and superior stability.
11. One keyhole at the top and bottom provides easier mounting and leveling.
12. Ring (shown), ringless and lever bypass designs available to meet different utility requirements.
13. Surface (shown), flush and semi-flush mounting designs available for all installation types, including stucco homes.

Solar power center meter breakers

Type CH meter breakers

Catalog Number	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]
Combination Service Entrance Devices—EUSERC (Side-by-Side Construction)										
CMBE3242PV200BF	32	42	200	225	70	Flush	UG	Cu	22	7
CMBE3242PV200BS	32	42	200	225	70	Surface	UG	Cu	22	7
CMBE4242PV200BF	42	42	200	225	70	Flush	UG/OH	Cu	22	12
CMBE4242PV200BS	42	42	200	225	70	Surface	UG/OH	Cu	22	12
CMBE4242PV200TS	42	42	200	225	70	Surface	OH	Cu	22	12
Combination Service Entrance Devices—Non-EUSERC—Lever Bypass (Over/Under Construction)										
CMBX3242PV200TS	32	42	200	225	70	Surface	UG/OH	Cu	22	14

Type BR meter breakers

Catalog Number	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]
Combination Service Entrance Devices—EUSERC (Side-by-Side Construction)										
MBE1224PV100BTF	12	24	100 [2]	125	50	Flush	UG/OH	Al	10	2
MBE1224PV100BTS	12	24	100 [2]	125	50	Surface	UG/OH	Al	10	2
MBE1224PV125BTF	12	24	125 [2]	125	25	Flush	UG/OH	Al	10	2
MBE1224PV125BTS	12	24	125 [2]	125	25	Surface	UG/OH	Al	10	2
MBE2040PV200BTF	20	40	200	225	70	Flush	UG/OH	Cu	22	18
MBE2040PV200BTS	20	40	200	225	70	Surface	UG/OH	Cu	22	18
MBE3042PV200BF	30	42	200	225	70	Flush	UG	Cu	22	7
MBE3042PV200BS	30	42	200	225	70	Surface	UG	Cu	22	7
MBE4040PV200BTF	40	40	200	225	70	Flush	UG/OH	Cu	22	12
MBE4040PV200BTS	40	40	200	225	70	Surface	UG/OH	Cu	22	12
Combination Service Entrance Devices—EUSERC—7-Inch-Deep Design										
MBED3042PV200BF	30	42	200	225	70	Semi-flush	UG	Cu	22	—
Combination Service Entrance Devices—Non-EUSERC (Over/Under Construction)										
MB2040PV200BTS	20	40	200	225	70	Surface	UG/OH	Cu	22	—
Combination Service Entrance Devices—Non-EUSERC—Lever Bypass (Over/Under Construction)										
MBX2040PV200BTS	20	40	200	225	70	Surface	UG/OH	Cu	22	—

[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.

Solar power center loadcenters

Type CH plug-on neutral loadcenters

Catalog Number	Max. Number of 3/4-Inch Spaces	Max. Number of Circuits	Main Breaker (A) [1]	Bus Rating (A)	Max. PV Input (A)	Mounting	Enclosure	Bus	kAIC	Box Size [2]	Cover Included
CH32PVPN200	32	32	200	225	70	Combination	NEMA 1	Cu	25	J	Yes
CH42PVPN200	42	42	200	225	70	Combination	NEMA 1	Cu	25	K	Yes
CH60PVPN200	60	120 [3]	200	225	70	Combination	NEMA 1	Cu	25	N	Yes

Type BR loadcenters

Catalog Number	Max. Number of 1-Inch Spaces	Max. Number of Circuits	Main Breaker (A) [1]	Bus Rating (A)	Max. PV Input (A)	Mounting	Enclosure	Bus	kAIC	Box Size [2]	Cover Included
BR2040PV200	20	40	200	225	70	Combination	NEMA 1	Cu	25	D1	Yes
BR2040PV200R [2]	20	40	200	225	70	Surface	NEMA 3R	Cu	25	D1R	Yes
BR4242PV200	42	42	200	225	70	Combination	NEMA 1	Cu	25	L2	Yes
BR4242PV200R [2]	42	42	200	225	70	Surface	NEMA 3R	Cu	25	L2R	Yes

[1] Type CSR main breaker factory installed.

[2] 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.

[3] Requires the use of Type CHNT breakers.

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Printed in USA
Publication No. BR003002EN / Z14323
October 2013

Powering Business Worldwide

For additional information about loadcenters, meter breakers and accessories, see

Volume 1: Residential and Light Commercial, CA08100002E, Tab 1