PGE Drive Change Fund Electric Vehicle Charging Guide

General Charging Information

Do you have questions about electric vehicle charging? This guide includes a sampling of popular Level 2 and DC Fast Chargers that meet the technical requirements for the Drive Change Fund. They are listed based on their most common use case category (fleet, public/destination, multifamily, workplace). However, you are free to choose a charger outside of a given category, or any charger not listed in this guide, as long as it meets the technical requirements (listed on the Drive Change Fund website). PGE does not endorse any particular manufacturer, contractor, or product.

For more information on the different types of electric vehicle charging, you can visit the Alternative Fuels Data Center.

Electric Vehicle Supply Equipment (EVSE) Requirements

All direct current (DC) fast charging EVSE must:

- Safely charge the intended electric vehicle(s)
- Be listed by a nationally recognized test lab to the requirements of UL 2251 and UL 2594
- Support installation requirements of National Electric Code article 625
- Have an enclosure suitable for the installation location (minimum rating of National Electrical Manufacturers Association [NEMA] Type 3R or 4 for outdoor installations; minimum rating of NEMA Type 2 for indoor installations)
- Conform to Open Charge Point Protocol (OCPP) v1.6 or later
- Offer support for OpenADR 2.0b
- Include network services able to communicate with a network management system (NMS)



Note: Based on best available information from manufacturers. Subject to change. This does not constitute a comprehensive list.

If the DC fast charging EVSE is intended to be publicly accessible, it additionally must:

- Safely charge all electric vehicle makes and models currently operating in North America that are equipped with non-proprietary DC fast charging capabilities:
 - Provide at least one SAE J1772 DC Combined Charging System Type 1 compliant connection
 - o Provide at least one CHAdeMO compliant connection
- Provide a charging rate of at least 50 kW
- Accept payment from major credit cards
- Be labeled upon installation with the appropriate Chargeway decals for the charging speed and connector type

All Level 2 EVSE must:

- Safely charge the intended electric vehicle(s)
- Be listed by a nationally recognized test lab to the requirements of UL 2202
- Have an enclosure suitable for the installation location (minimum rating of NEMA Type 3R or 4 for outdoor installations; minimum rating of NEMA Type 2 for indoor installations)
- Conform to Open Charge Point Protocol (OCPP) v1.6 or later
- Offer support for OpenADR 2.0b
- Include network services able to communicate with a network management system (NMS)

If the Level 2 EVSE is intended to be publicly accessible, it additionally must:

- Safely charge all electric vehicle makes and models currently operating in North America that are equipped with a standard connector
 - Provide at least one SAE J1772 connection
- Provide a charging rate of at least 6.2 kW
- Be labeled upon installation with the appropriate Chargeway decals for the charging speed and connector type

If Level 1 charging is utilized, an EVSE is not required - a standard 120V outlet may be used.



Charger Summary

Level 2

Model	Use Case	Max Power
ChargePoint CPF50	Fleet, Multifamily	12 kW
BTCPower 70A	Fleet	16.8 kW
EVOCHARGE iEVSE Plus	Fleet, Multifamily	7.2 kW
ChargePoint CT4000	Workplace, Public/Destination	7.2 kW
BTCPower 30A/40A	Workplace, Public/Destination	7.2 kW/9.6 kW
EVBox BusinessLine	Workplace, Multifamily	7.4 kW
SemaConnect Series 6	Workplace, Multifamily	7.2 kW

DC Fast Charging

Model	Use Case	Max Power
ABB HVC	Fleet	100 kW, 150 kW
Proterra PCS	Fleet	60 kW, 125 kW
ChargePoint CPE250	Fleet, Public/Destination	62.5 kW
ABB Terra 54	Public/Destination	50 kW
ABB Terra HP	Public/Destination	175 kW
BTCPower Slim Line DC Fact Charger	Public/Destination	50 kW
BTCPower HPC Modular System	Public/Destination	100 kW, 150 kW, 200 kW
Tritium Veefil	Public/Destination	50 kW



Fleet Charging

Level 2:

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ChargePoint CPF50



Key Features:

- 12 kW max power
- 50A @ 240VAC
- Single or dual port
- Pedestal or wall mount
- 18' or 23' cable

Contact:

Bill Pearson
Customer Success Account Manager
(669) 237-3401
Bill.pearson@chargepoint.com

BTC POWER

BTCPower 70A



Key Features:

- 16.8 kW max power
- 70A @ 240VAC
- Single port
- Pedestal mount
- 18' or 25' cable
- Can choose network provider
 - EV Connect, Greenlots

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:





iEVSE Plus



Key Features:

- 7.2 kW max power
- 30A @ 240VAC
- Single or dual port
- Pedestal or wall mount
- 18' or 25' cable
- Can choose network provider
 - EV Connect, Greenlots

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681

RSham@evconnect.com

Greenlots Contact:

John Murnin Enterprise Sales Director, West (415) 816-6635 jmurnin@greenlots.com

DC Fast Charging:



ABB HVC



Key Features:

- 100 kW max power
 - o 132A @ 480VAC
- 150 kW max power
 - o 198A @ 480VAC
- Connect up to 3 dispensers to 1 HVC cabinet
- Wall or pedestal dispenser mount
- 8.5' or 20' cable
- Ethernet or cellular connectivity

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:

John Murnin Enterprise Sales Director, West (415) 816-6635 jmurnin@greenlots.com



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Proterra PCS



Key Features:

- 60 kW max power
 - o 79A @ 480VAC
- 125 kW max power
 - o 166A @ 480VAC
- Connect up to 4 dispensers to 1 PCS cabinet
- Wall or pedestal dispenser mount
- 10', 18', or 25 cable
- Cellular connectivity

Contact:

David Nguyen (805) 264-8602 Dnguyen2@proterra.com



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ChargePoint CPE250



Key Features:

- 62.5 kW max power
- 80A @ 480VAC
- All-in-one unit
- Pair two stations together to get 125 kW
- 14' cable
- Wifi or cellular connectivity

Contact:

Bill Pearson
Customer Success Account
Manager
(669) 237-3401
Bill.pearson@chargepoint.com



Public/Destination Charging

Level 2:

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ChargePoint CT4000



Key Features:

- 7.2 kW max power
- 30A @ 240VAC
- Single or dual port
- Pedestal or wall mount
- 18' or 23' cable
- Credit card reader (contactless)

Contact:

Bill Pearson Customer Success Account Manager (669) 237-3401 Bill.pearson@chargepoint.com

BTC POWER

BTCPower 30/40A



Key Features:

- 30A @ 240VAC:
 - o 7.2 kW max power
- 40A @ 240VAC
 - o 9.6 KW max power
- Single or dual port
- Pedestal or wall mount
- 18' or 25' cable
- Credit card reader (swipe)
- Can choose network provider
 - o EV Connect, Greenlots

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:



DC Fast Charging:



ABB Terra 54



Key Features:

- 50 kW max power
- 80A @ 480VAC
- All-in-one unit
- 12.8' cable
- Cellular connectivity

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:

John Murnin Enterprise Sales Director, West (415) 816-6635 jmurnin@greenlots.com



ABB Terra HP



Key Features:

- 175 kW max power
 231A @ 480VAC
- Pair two cabinets together to get 350 kW
- One dispenser per cabinet or paired cabinet
- 10.5' or 12.5' cable

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:



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ChargePoint CPE250



Key Features:

- 62.5 kW max power
- 80A @ 480VAC
- All-in-one unit
- Pair two stations together to get 125 kW
- 14' cable
- Wifi or cellular connectivity
- Credit card reader (contactless)

Contact:

Bill Pearson Customer Success Account Manager (669) 237-3401 Bill.pearson@chargepoint.com

BTC POWER

BTCPower Slim Line DC Fact Charger



Key Features

- 50 kW max power
- 72A @ 480VAC
- All-in-one unit
- Cellular connectivity
- Credit card reader

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:

John Murnin Enterprise Sales Director, West (415) 816-6635 jmurnin@greenlots.com



BTC POWER

BTCPower HPC Modular System



Key Features

- 100 kW max power
 - o 132A @ 480VAC
- 150 kW max power
 - o 198A @ 480VAC
 - 200 kW max power o 264A @ 480VAC
 - 1 to 4 dispenser
- configurationCredit card reader

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:

John Murnin Enterprise Sales Director, West (415) 816-6635 jmurnin@greenlots.com



Tritium Veefil



Key Features

- 50 kW max power
- 480VAC input
- All-in-one unit
- Cellular and ethernet connectivity

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:



Multifamily Charging

Level 2:

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ChargePoint CPF50



Key Features:

- 12 kW max power
- 50A @ 240VAC
- Single or dual port
- Pedestal or wall mount
- 18' or 23' cable

Contact:

Bill Pearson Customer Success Account Manager (669) 237-3401

Bill.pearson@chargepoint.com



EVBox BusinessLine



Key Features:

- 7.4 kW max power
- 32A @ 240VAC
- Single or dual port
- · Pedestal or wall mount
- 18' or 25' cable
- Can choose network provider
 - EV Connect, Greenlots

EV Connect Contact:
Rob Sham
West Coast Sales

(213) 884-4681

RSham@evconnect.com

Greenlots Contact:



Workplace Charging

Level 2:

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ChargePoint CT4000



Key Features:

- 7.2 kW max power
- 30A @ 240VAC
- Single or dual port
- Pedestal or wall mount
- 18' or 23' cable
- Credit card reader (contactless)

Contact:

Bill Pearson Customer Success Account Manager (669) 237-3401

Bill.pearson@chargepoint.com

BTC POWER

BTCPower 30A/40A



Key Features:

- 30A @ 240VAC:
 - o 7.2 kW max power
 - 40A @ 240VAC
 - o 9.6 KW max power
- Single or dual port
- Pedestal or wall mount
- 18' or 25' cable
- Credit card reader (swipe)
- Can choose network provider
 - EV Connect or Greenlots

EV Connect Contact:

Rob Sham West Coast Sales (213) 884-4681 RSham@evconnect.com

Greenlots Contact:

John Murnin Enterprise Sales Director, West (415) 816-6635 jmurnin@greenlots.com



Note: Based on best available information from manufacturers. Subject to change. This does not constitute a comprehensive list.



EVBox BusinessLine



Key Features:

- 7.4 kW max power
- 32A @ 240VAC
- Single or dual port
- · Pedestal or wall mount
- 18' or 25' cable
- Can choose network provider
 - EV Connect, Greenlots

EV Connect Contact:
Rob Sham
West Coast Sales
(213) 884-4681
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Greenlots Contact:
John Murnin
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(415) 816-6635
jmurnin@greenlots.com



SemaConnect Series 6



Key Features:

- 7.2 kW max power
- 30A @ 240VAC
- Single or dual port
- · Pedestal or wall mount
- 18' or 25' cable
- Can choose network provider
 - o EV Connect, Greenlots

Contact:

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