Specification sheet

GENERATION 3

ENERGY MANAGEMENT SYSTEM

DCC-12

Now compatible with loads up to 100A (80A continuous)

PAT. NO. 10.486.539

BREAKER	MAIN POWER SUPPLY											
EV charger***	30A	40A	50A	60A	70A	80A	90A	100A	125A	150A	175A	200A
20A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
30A	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
40A	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50A	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
60A	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓
70A	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓
80A	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓
90A	×	×	×	×	×	×	×	✓	✓	✓	✓	✓
100A	×	×	×	×	×	×	×	×	✓	✓	✓	✓

Voltage and wiring	240/208V AC single phase: L1, L2, Neutral, Ground.
Frequency	50 à 60 Hz
Operation temperature	-22°F à 113°F (-30°C à 45°C)
Rated	NEMA 3R
Wire Gauge Size	2 to 12 AWG**
Max torque	Relay terminals: 50 in-lbf
Dimensions* (H" x W" x D")	11" x 8" x 5"
Total weight*	8 lb (3,63 kg)

*Approximative and can change without notice.
** See Connecting aluminum conductors section in the installation manual V5
*** Not limited to compatibility with electric vehicle charging stations, this product can be installed with resistive loads of up to 100A (80 continuous) and inductive loads of up to 50A (40A continous)

The DCC-12 is an Energy Management System (EMS) that enables the connection of a new electrical load (e.g., an EV charging station) to an electrical panel that would otherwise lack sufficient capacity to support it.

OPERATION

- Real-time reading of the total power consumption of the home's electrical panel;
- Detects when total power consumption exceeds 80% of main circuit breaker capacity and temporarily de-energizes the EV charger;
- Automatically re-energize the EV charger when the total power consumption of the electrical panel is less than 80% of its capacity for more than 15 minutes.
- Requires one double pole breaker slot available in a panel.

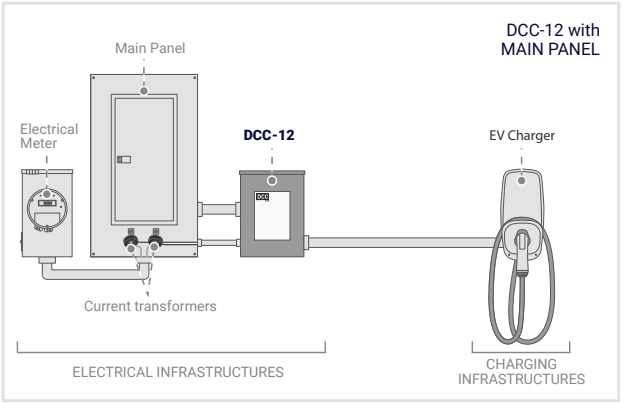
FEATURES

- Does not affect load calculation of a panel.
- Automatic billing of electricity by the utility.
- Can be wall or ceiling mounted.
- NEMA 3R enclosure for outdoor and indoor installation.
- Possibility to receive and transmit load shedding instructions from an external energy management system via a dry contact input and output

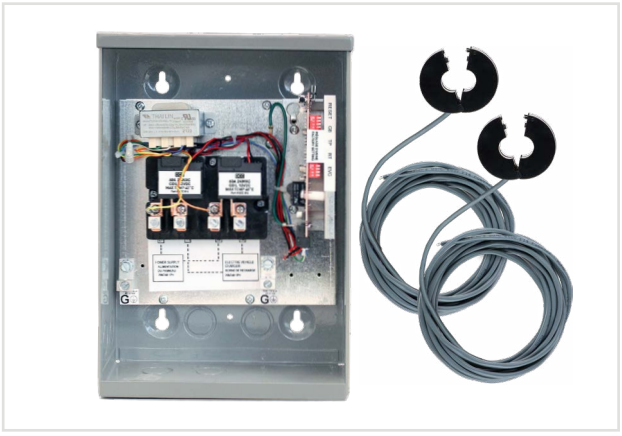
INCLUDED

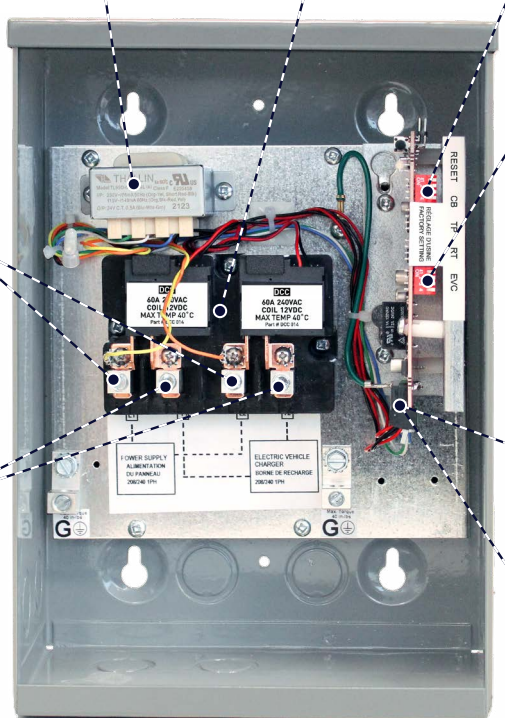
- Energy Management System (EMS)
- Power Relay (Max 100A)
- 2 Split Core Current Transformers (CT)
  - CT Opening: Up to 250 kcmil (MCM) CU/AL)

INSTALLATION EXAMPLES



INTERNAL COMPONENTS





Transformer,
Input: 240/208V,
Output: 24V

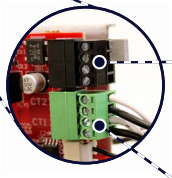
Power Relay
(Max 100A)

DIP switch configuration
for panel capacity
(Max 200A)

DIP switch configuration
for EV Charger breaker
(Max 100A)

Main Power
Lugs 240/208V

EV Charger Lugs
(Max 100A)



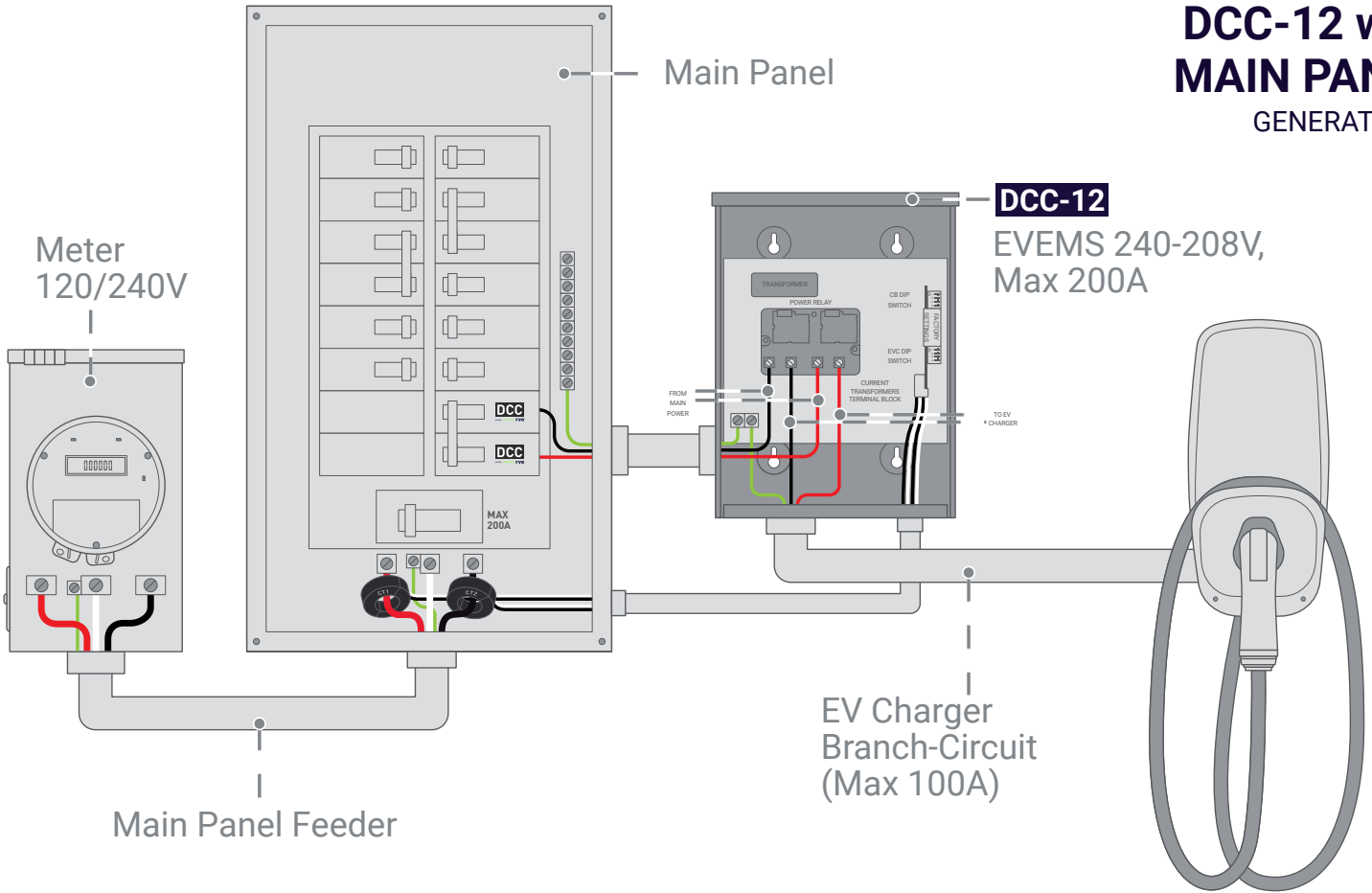
Dry contact
for control via
external energy
management system

Current
Transformers
terminal block

Split Core Current
Transformers (CT)
to install on L1and
L2 (Max 200A)

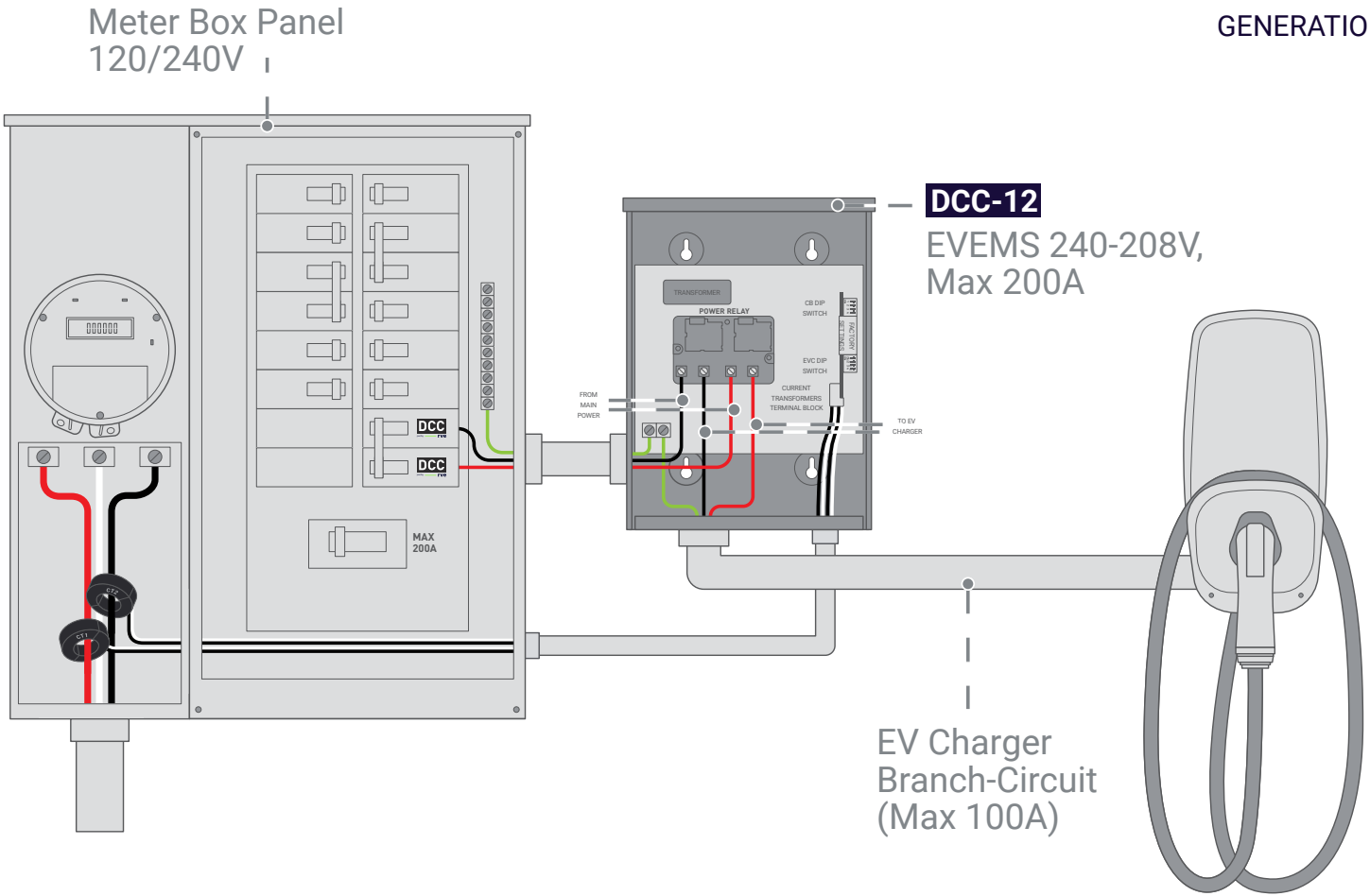
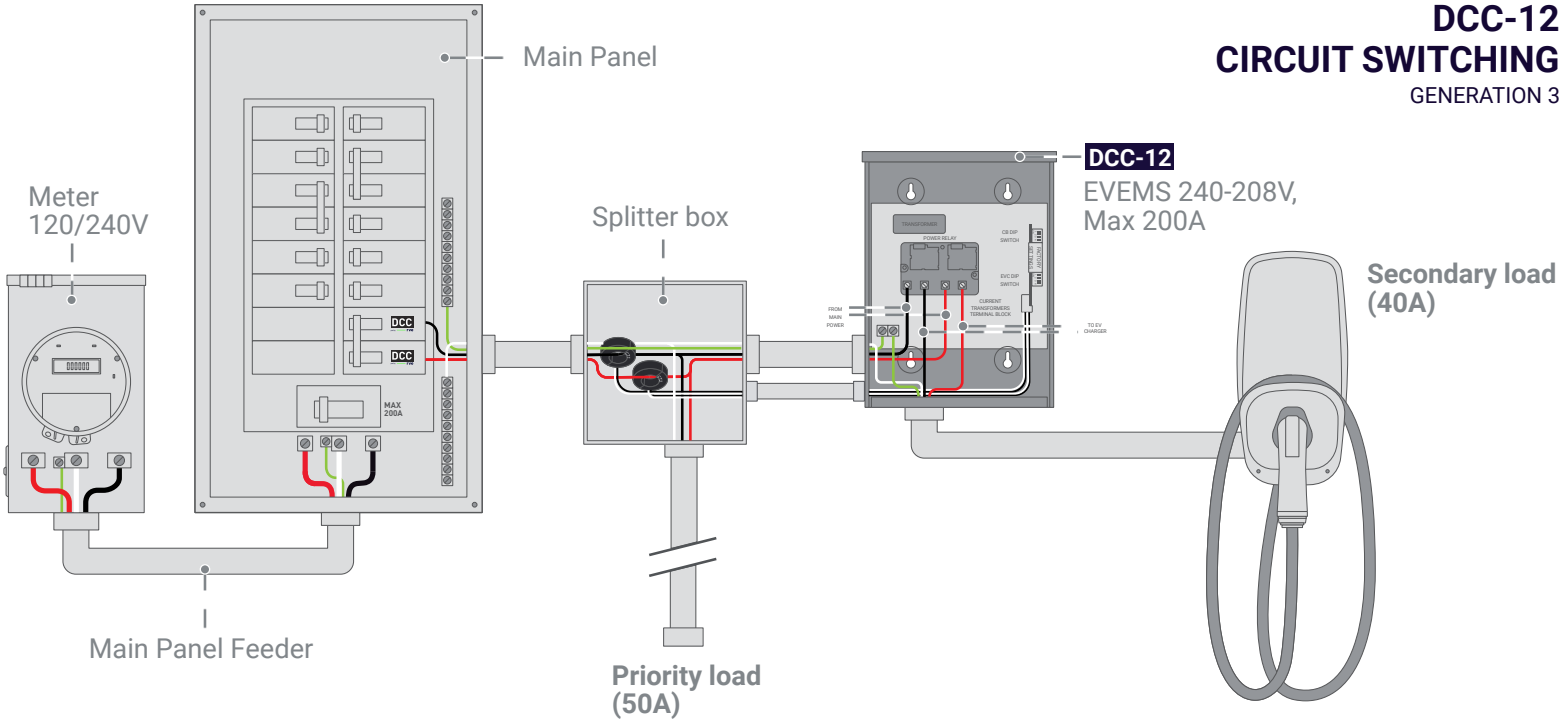
DCC-12 with MAIN PANEL

GENERATION 3



DCC-12 with METER BOX PANEL

GENERATION 3



DCC-12
CIRCUIT SWITCHING
GENERATION 3