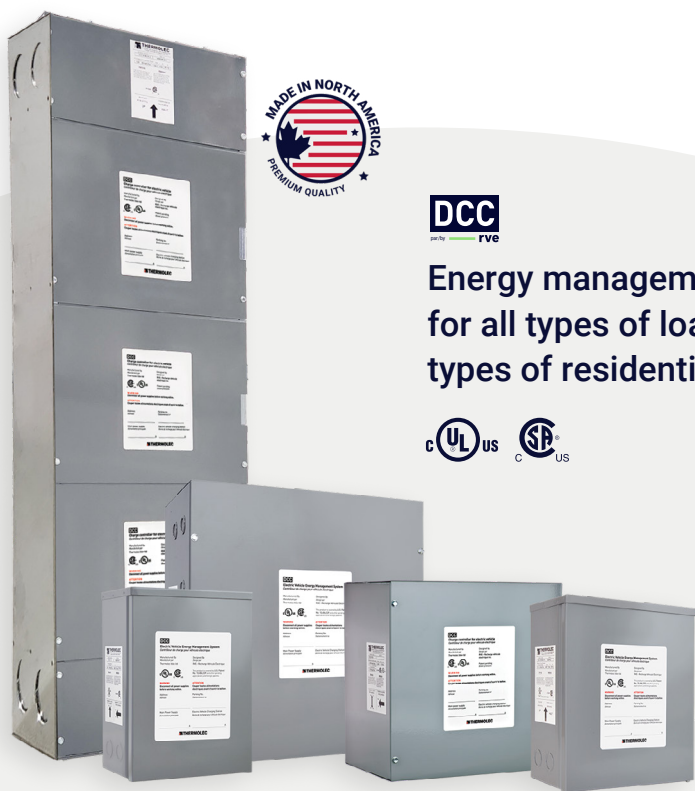




THE 2024 RVE ENERGY MANAGEMENT PRODUCT CATALOG



DCC
rve

Energy management products
for all types of loads and all
types of residential buildings.



rve-usa.com

USA - 2024. V3



THE RVE SOLUTION: FOR INFRASTRUCTURE OF THE PAST, PRESENT AND FUTURE

Designed by electricians,
for electricians.

**VISIT OUR BLOG AND
FOLLOW US ON SOCIAL MEDIA!**



@rve_evems



@rve.evems



@rechargevehiculeelectrique



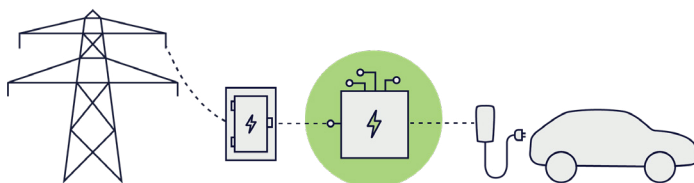
rve-usa.com/blog

Questions? Don't hesitate to contact us today: sales@rve-usa.com | 1 833-717-1355

RVE'S ELECTRIC VEHICLE ENERGY MANAGEMENT SYSTEMS (EVEMS)

- ✓ Unique technologies in North America
- ✓ Compatible with all electric vehicles and most chargers
- ✓ 100% future proof for retrofits and newbuilds
- ✓ UL listed and CSA certified as an Industrial Controller
- ✓ National Electric Code (NEC) compliant
- ✓ Optimize available electrical capacity without adding any load
- ✓ Prepare homes for future buyers' charging needs
- ✓ A single household bill from utility provider

Our patented* electric vehicle energy management systems (EVEMS) is the only solution that facilitates the installation of charging stations in all residential buildings.



*PAT. NO. 10.485.539

THE **DCC** PRODUCT RANGE

	 DCC-9	 DCC-11	 DCC-10	 DCC-12	 DCC-BOX
Turn to this page to learn more	Page 11	Page 15	Page 6	Page 6	Page 17
TYPICAL INSTALLATION CONTEXT*					
Mutli-unit dwelling	✓	✓	—	—	✓
Single-family home	—	—	✓	✓	—
FEATURES					
Main entrance capacity	60-125A	150-200A	60-200A	60-200A	60-200A**
Model available for outdoor installation	✓	—	✓	✓	✓
Connection to the main power supply/accessible meter cable	✓	✓	—	—	✓
Connection to the main panel	—	—	✓	✓	—
Built-in circuit breaker	✓	✓	✓	—	Not applicable
Ready to connect a charger	✓	✓	✓	✓	✓ With the PCB

* In most cases. Contact us for more details.

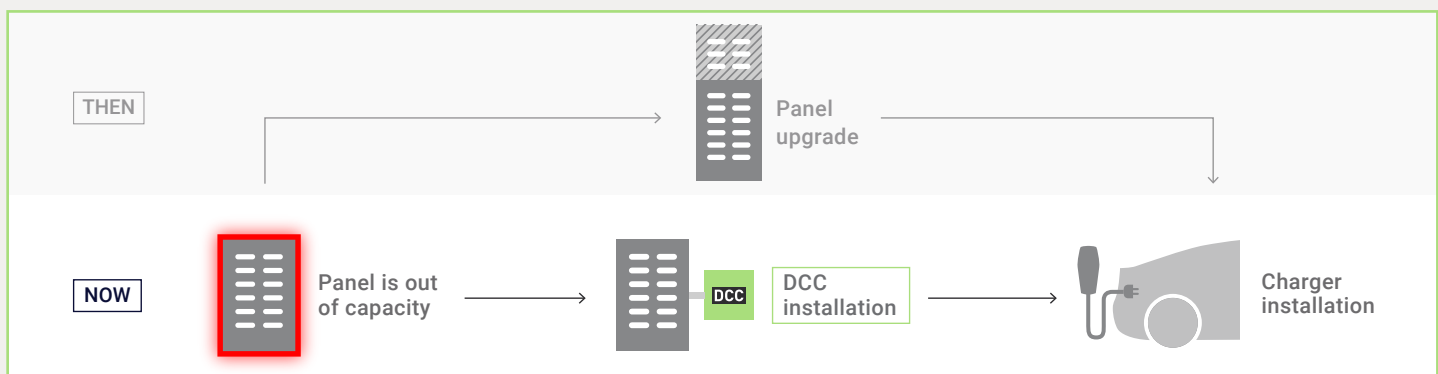
** Depending on the model.

Available and used across the United States and Canada-wide since 2015, the DCC is the ideal solution even where EV charging may seem impossible.

Is there an alternative to a service upgrade for the installation of an electric vehicle charger on a fully loaded panel?



Yes, DCC by RVE is designed to maximize the existing service capacity, protect against overload, and allow the connection of an EV charger without affecting the load calculation.



OPERATION

How does DCC work?

DCC allows the connection of an EV charger to a fully loaded panel by managing the energy available at any given time, whether in a home or in a condo.

01. DCC does a real-time reading of the total power consumption of a home or condo electrical panel;
02. It detects when the total power consumption of the main circuit breaker exceeds 80% and temporarily de-energizes the charger;
03. When DCC detects that the total power consumption of the electrical panel is less than 80% for more than 15 minutes it automatically re-energizes the EV charger.

DCC will only allow power to be delivered to the EV charger if the total demand of the panel is below its full capacity when including the EV charger.

Does DCC work with a NEMA 14-50 outlet?

Yes. No neutral is required.

Does the DCC work with any other types of loads?

Yes. Even if this product is advertised for EV chargers it can be installed with other types of loads such as: HVAC, spas, pools, jacuzzis, floor heating, generators, heat pumps, sump pumps, sewage pumps for septic tanks and solar applications*.

*Contact us for more information.

WILL MY INSPECTOR APPROVE A DCC?

Yes, all DCC devices are UL Listed and/or CSA Certified.



We encourage our customers to speak with their local inspector prior to their first order for product approval and familiarization.

DOES DCC COMPLY WITH THE ELECTRICAL CODE?

DCC is fully compliant with National Electric Code (NEC) 70-619- Article 750.

The DCC product line has been deployed since 2015 across the United States and Canada-wide however, some local inspectors may not be familiar with this Energy Management System.

It is recommend to share the DCC specifications with inspectors, prior to purchase, for familiarization and approval.

Any questions by a local inspector can be directed to support@rve-usa.com.

SINGLE-FAMILY HOME



CHARGE CONTROLLER

DCC-12



UL US CS US
PAT. NO. 10.486.539

The DCC-12 is an Electric Vehicle Energy Management System (EVEMS) that allows a charger to be connected directly to an electrical panel which would otherwise not have sufficient capacity to allow the connection.

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

- Electric Vehicle Energy Management System
- Power Relay (Max 60A)
- 2 Split Core Current Transformers (CT)

BREAKER		MAIN POWER SUPPLY							
EV charger ***	60A	70A	80A	90A	100A	125A	150A	200A	
30A	✓	✓	✓	✓	✓	✓	✓	✓	
40A	✗	✗	✓	✓	✓	✓	✓	✓	
50A	✗	✗	✗	✗	✓	✓	✓	✓	
60A	✗	✗	✗	✗	 ****	✓	✓	✓	
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			up to 250 kcmil (MCM) (CU/AL)**						
Max torque			Relay terminals: 40 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.

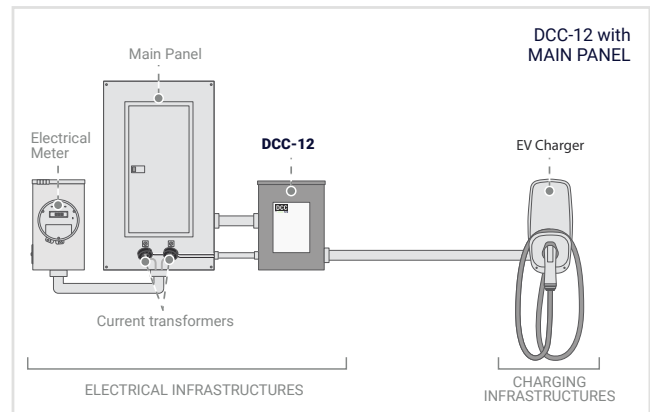
** See Connecting aluminum conductors section in the installation manual

*** Not limited to compatibility with electric vehicle charging stations, this product can be installed with resistive loads of up to 60A and inductive loads of up to 40A

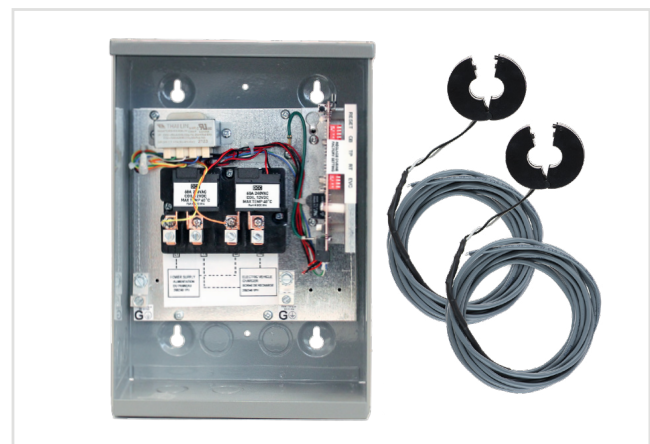
**** See dip switch programming step in manual for more details.

V4

INSTALLATION EXAMPLES

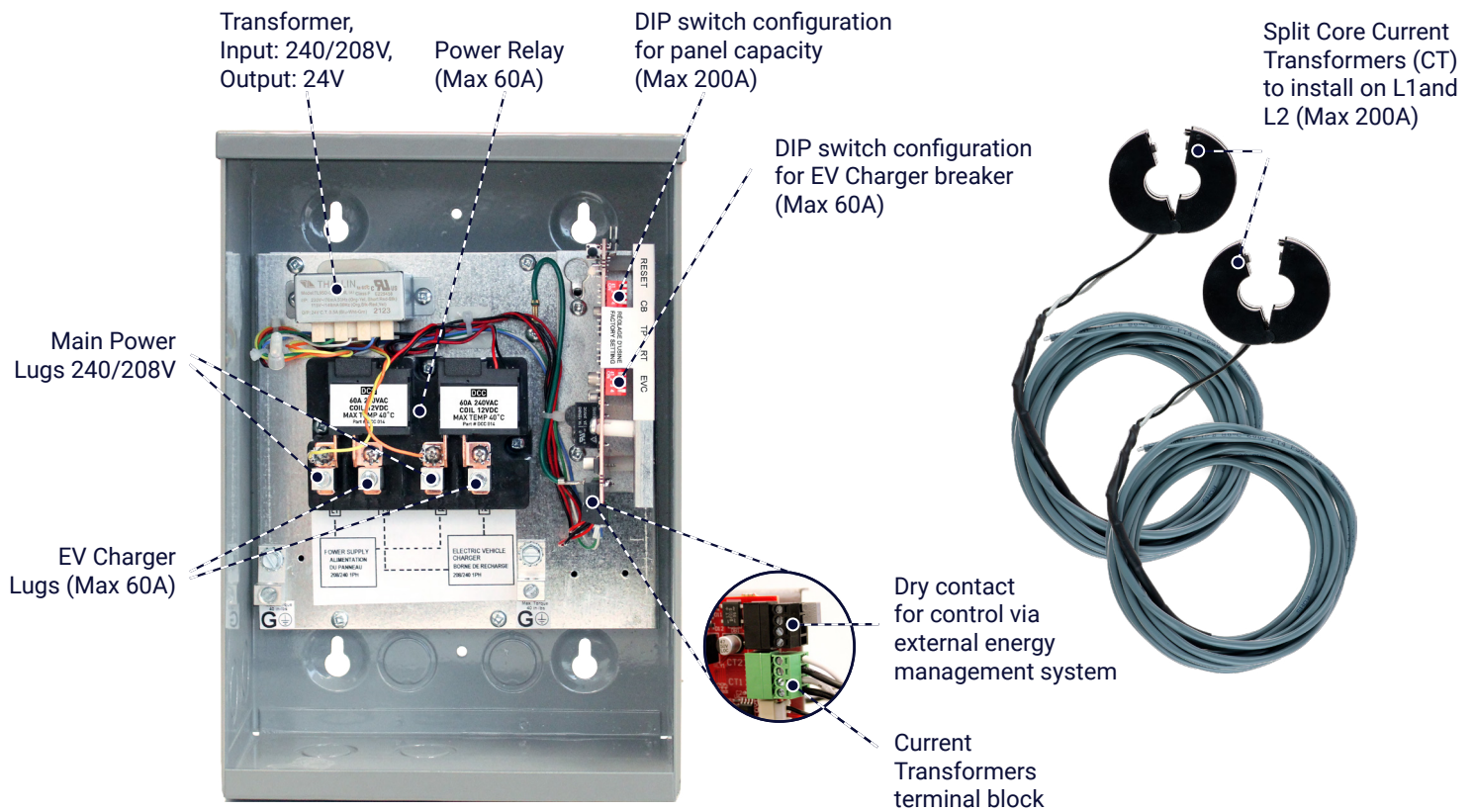


INTERNAL COMPONENTS



DCC-10

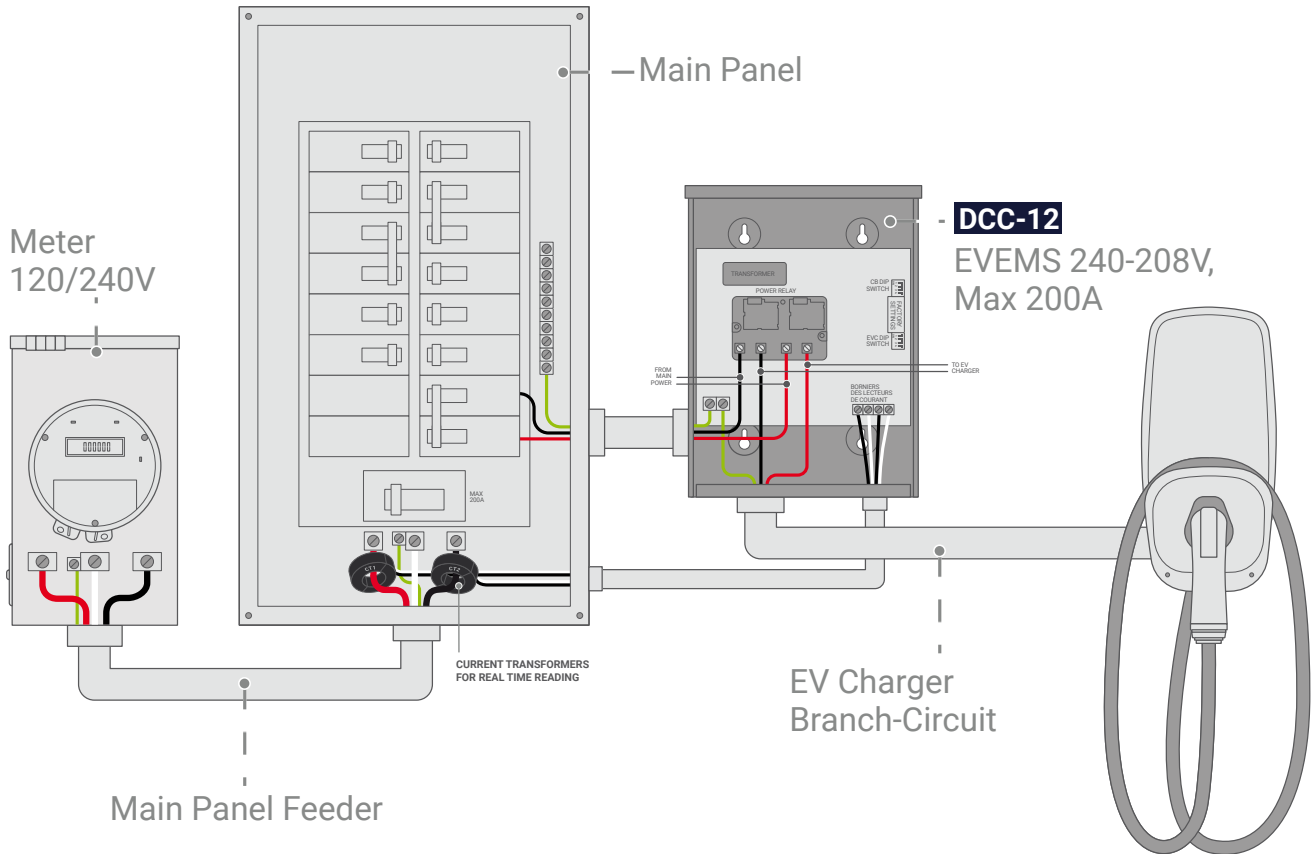
Also available is the DCC-10 having the same function as the DCC-12 in addition to featuring a built-in circuit breaker



WATCH OUR **DCC-10 & **DCC-12****
STEP-BY-STEP INSTALLATION VIDEO

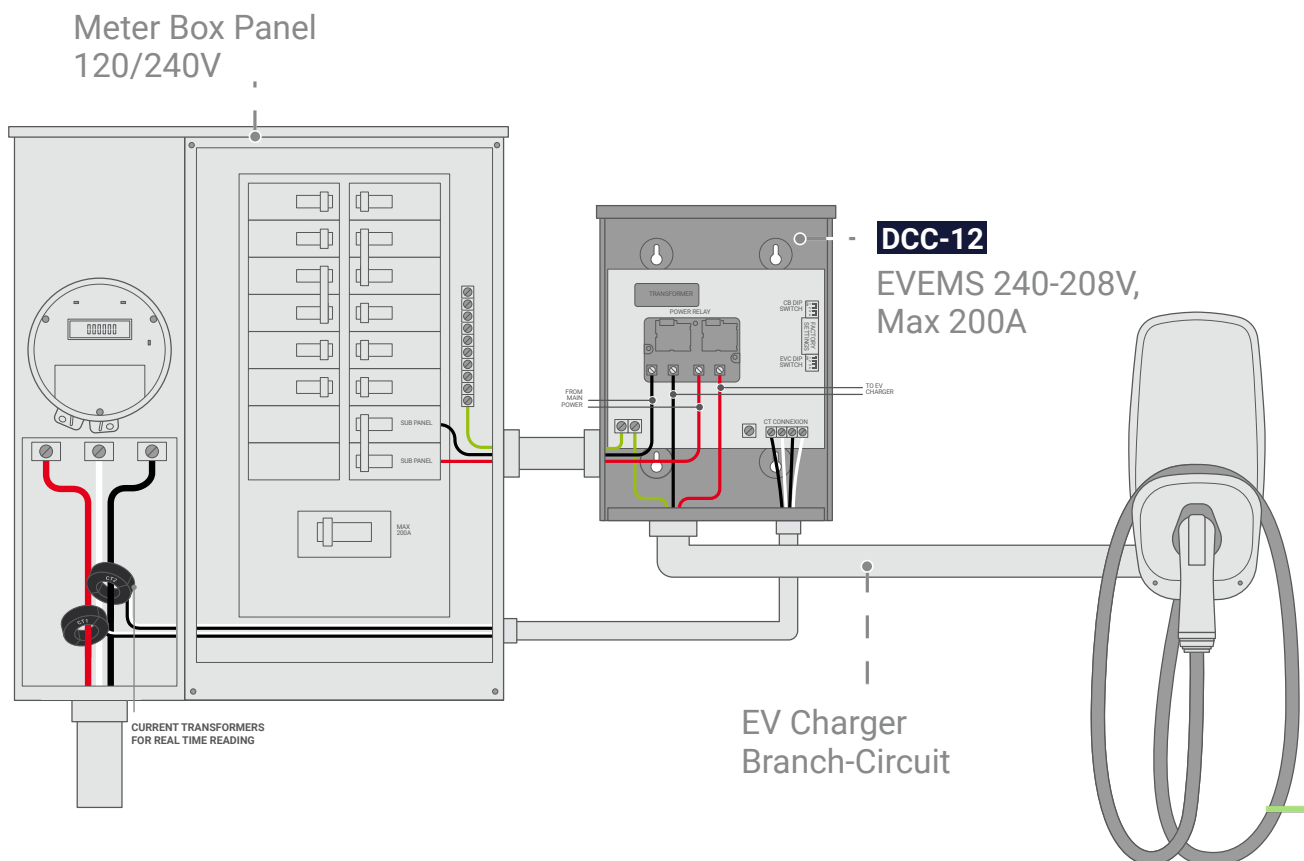
with MAIN PANEL

DCC-12



with METER BOX PANEL

DCC-12





DCC-12

SINGLE FAMILY HOME INSTALLATION EXAMPLE

[Click here to view the case study online](#)

TECHNICAL SPECIFICATIONS

Type of construction	single-family home
Electric meter location	accessible from the parking space
Electrical panel capacity	100A
Location of the parking space	outside, possible wet conditions (rain/snow)

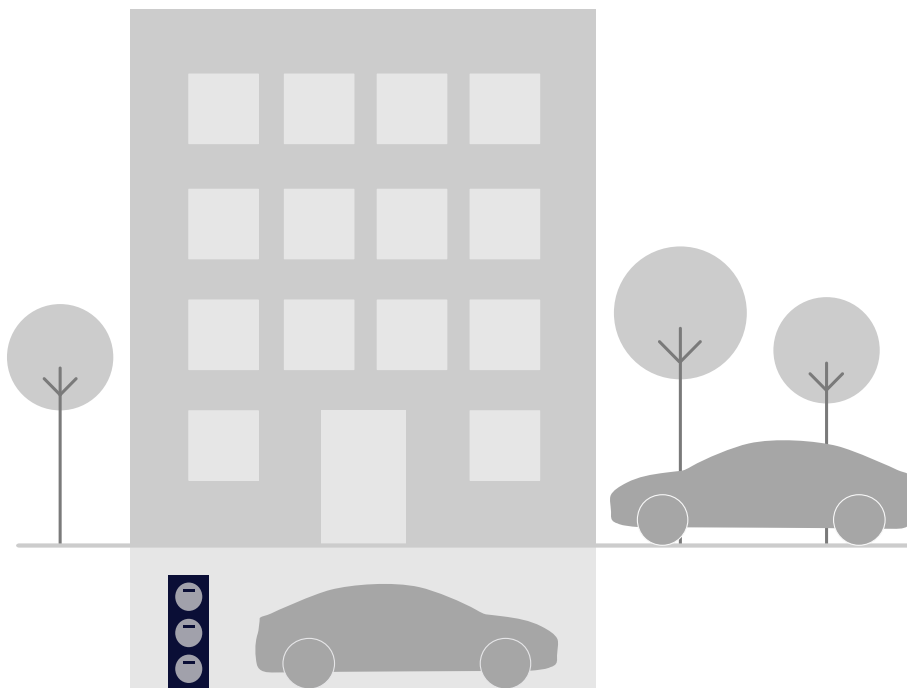
PRODUCT USED



To power a charging infrastructure installed in this single-family home with a 100A panel at full capacity, a **DCC-12** has been installed.



MULTI-UNIT DWELLING



CHARGE CONTROLLER

DCC-9



PAT. NO. 10.486.539

The DCC-9 is an Electric Vehicle Energy Management System (EVEMS) that allows a charger to be connected directly to an electrical panel of a multi-unit residential building (MURB) dwelling, which would otherwise not have sufficient capacity to allow the connection.

OPERATION

- Real-time reading of the total panel power consumption with pre-wired current transformers (CT).
- Detects when total power consumption exceeds 80% of main circuit breaker capacity and temporarily de-energizes the EV charger.
- Automatically re-energizes the EV charger when the total power consumption is less than 80% of main circuit breaker capacity for more than 15 minutes.

FEATURES

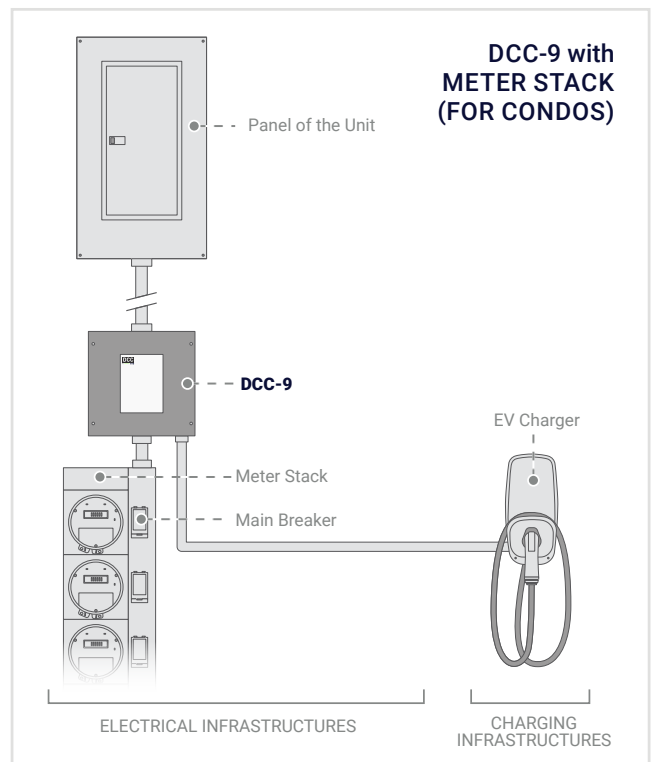
- Does not affect load calculation of a panel.
- Automatic billing of electricity by the utility for multi-unit residential building installations.
- Can be ceiling or wall mounted.
- NEMA 3R enclosure available for outdoor installations.
- Possibility to receive and transmit load shedding instructions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

INCLUDED

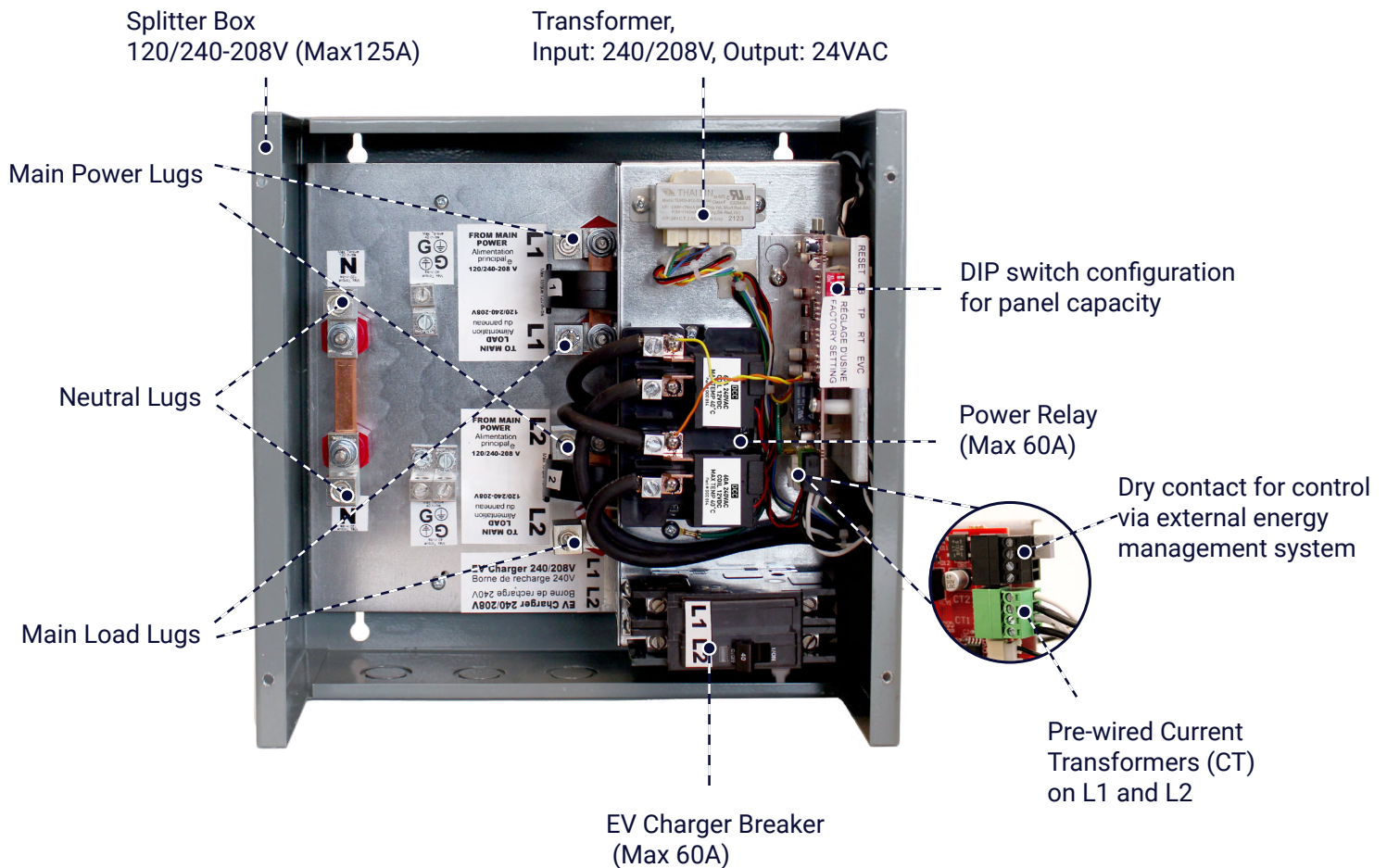
- Electric Vehicle Energy Management System
- Splitter Box (Max 125A)
- EV Charger Breaker (Max 60A)
- 2 Pre-Wired Current Transformers (CT)

MODELS	BREAKER	MAIN POWER SUPPLY							
	*** EV charger	60A	70A	80A	90A	100A	125A	150A	200A
DCC-9-30A	30A	✓	✓	✓	✓	✓	✓	✗	✗
DCC-9-40A	40A	✗	✗	✓	✓	✓	✓	✗	✗
DCC-9-50A	50A	✗	✗	✗	✗	✓	✓	✗	✗
DCC-9-60A	60A	✗	✗	✗	✗	●**	✓	✗	✗
Voltage and wiring		240/208V AC single phase: L1, L2, Neutral, Ground.							
Terminals size		up to 2/0 (CU/AL)							
Frequency		50 to 60 Hz							
Operation temperature		-22°F to 113°F (-30°C to 45°C)							
Max torque		L1, L2, Neutral: 120 in-lbf / Ground: 50 in-lbf Breaker terminals: 45 in-lbf							
Dimensions* (H" x W" x D")		Total weight*							
12" x 12" x 7.5"		17 lb (7,71 kg)							
NEMA 3R enclosure	14" x 13" x 8"	18 lb (8,16 kg)							
*Approximative and can change without notice.									
** See dip switch programming step in manual for more details.									
*** Not limited to compatibility with electric vehicle charging stations, this product can be installed with resistive loads of up to 60A and inductive loads of up to 40A									

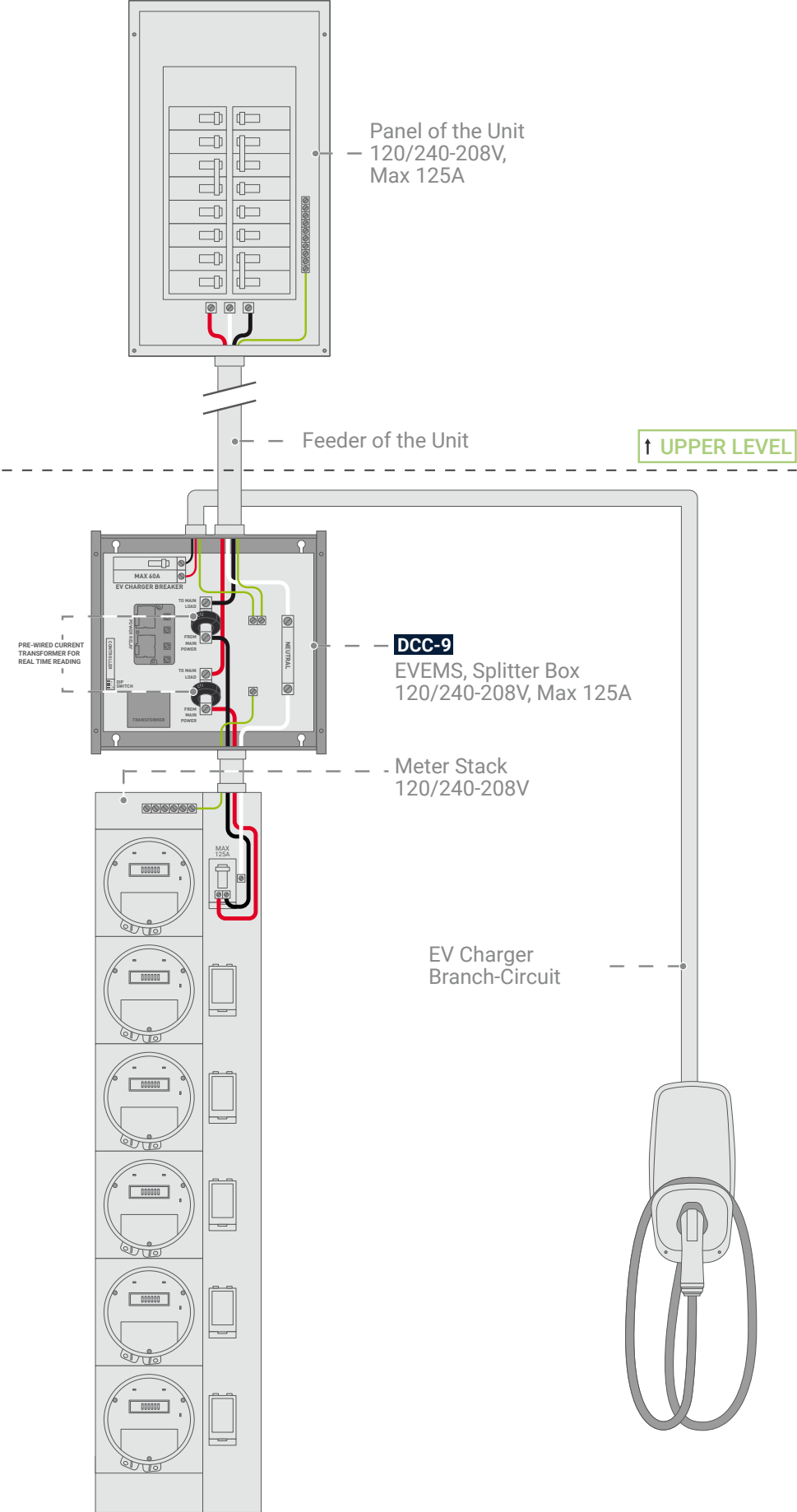
INSTALLATION EXAMPLES



INTERNAL COMPONENTS

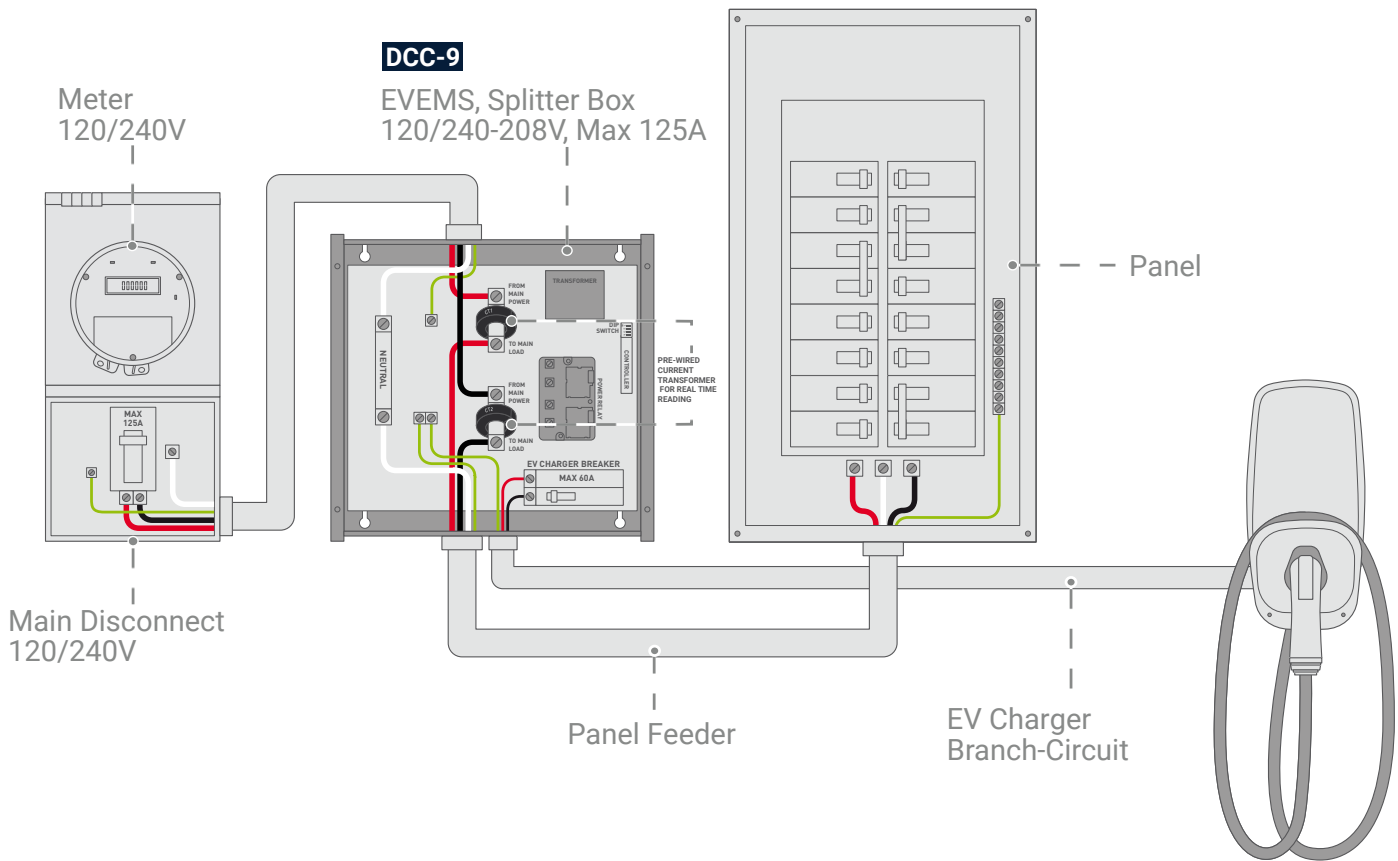


WATCH OUR **DCC-9 & **DCC-11****
STEP-BY-STEP INSTALLATION VIDEO



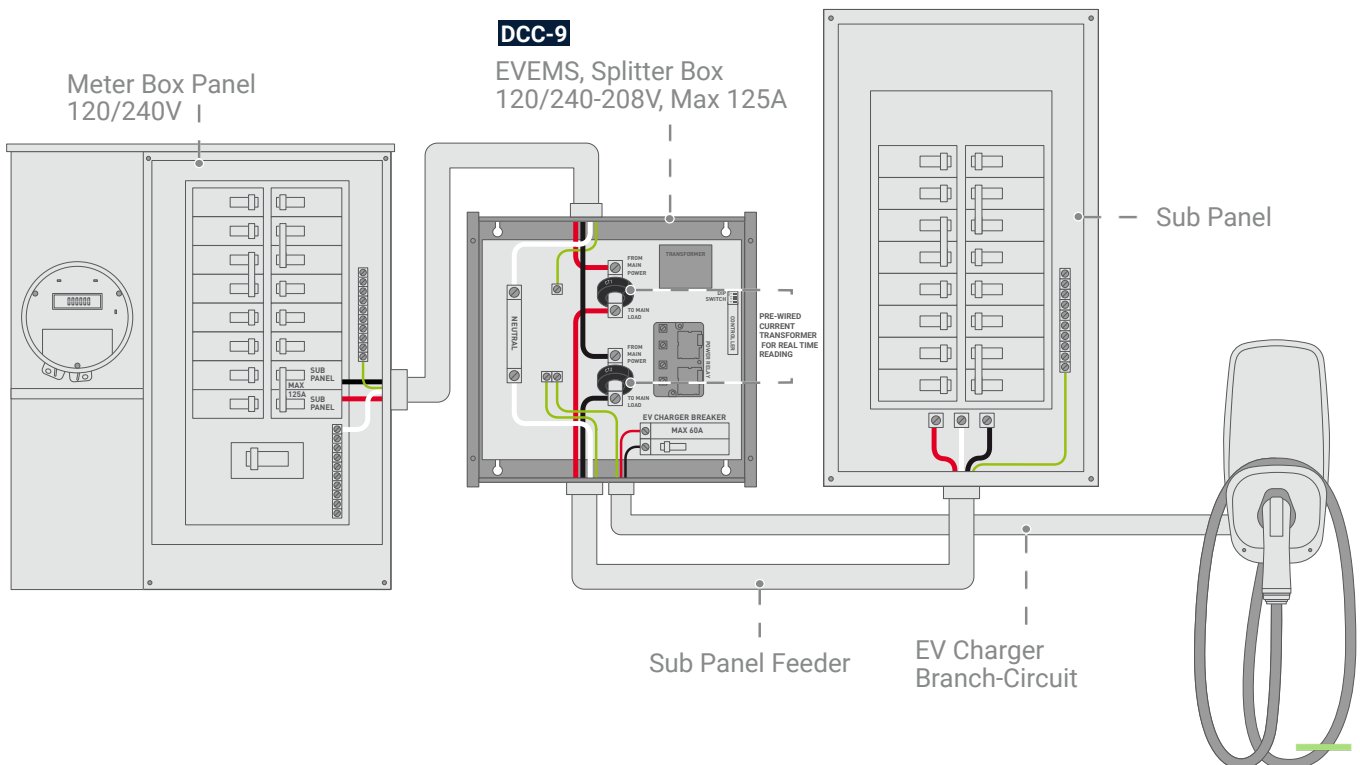
with MAIN DISCONNECT

DCC-9



with SUB PANEL

DCC-9



CHARGE CONTROLLER

DCC-11



The DCC-11 is an Electric Vehicle Energy Management System (EVEMS) that allows a charger to be connected directly to an electrical panel of a multi-unit residential building (MURB) dwelling, which would otherwise not have sufficient capacity to allow the connection.

OPERATION

- Real-time reading of the total panel power consumption with pre-wired current transformers (CT).
- Detects when total power consumption exceeds 80% of main circuit breaker capacity and temporarily de-energizes the EV charger.
- Automatically re-energizes the EV charger when the total power consumption is less than 80% of main circuit breaker capacity for more than 15 minutes.

FEATURES

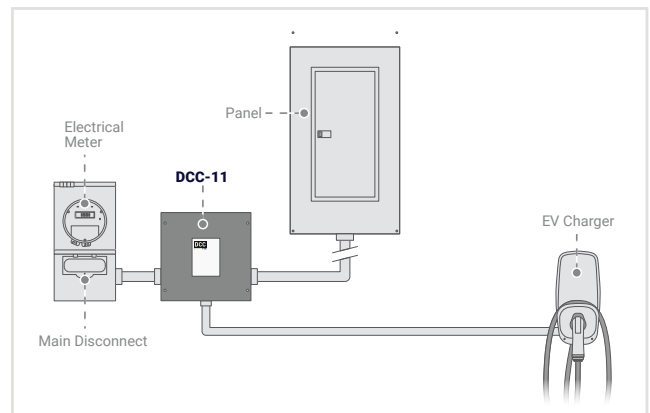
- Ideal when no more breaker slots are available in a panel
- Does not affect load calculation of a panel
- Automatic billing of electricity by the utility for multi-unit residential building installations.
- Can be ceiling or wall mounted.
- Possibility to receive and transmit load shedding instructions from an external energy management system via a dry contact input and output.

INCLUDED

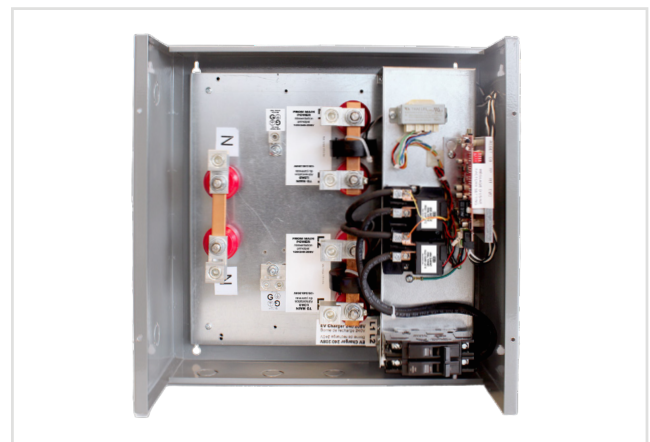
- Electric Vehicle Energy Management System
- Splitter Box (Max 200A)
- EV Charger Breaker (Max 60A)
- 2 Pre-Wired Current Transformers (CT)

MODELS	BREAKER	MAIN POWER SUPPLY							
		60A	70A	80A	90A	100A	125A	150A	200A
DCC-11-30A	30A	×	×	×	×	×	×	✓	✓
DCC-11-40A	40A	×	×	×	×	×	×	✓	✓
DCC-11-50A	50A	×	×	×	×	×	×	✓	✓
DCC-11-60A	60A	×	×	×	×	×	×	✓	✓
Voltage and wiring		240/208V AC single phase: L1, L2, Neutral, Ground.							
Terminals size		up to 300 MCM (CU/AL)							
Frequency		50 to 60 Hz							
Operation temperature		-22°F to 113°F (-30°C to 45°C)							
Max torque		L1, L2, Neutral: 120 in-lbf / Ground: 50 in-lbf Breaker terminals: 45 in-lbf							
Dimensions* (H" x W" x D")		16" x 16" x 8"							
Total weight*		23 lb (10,43 kg)							
*Approximative and can change without notice.									V5
** Not limited to compatibility with electric vehicle charging stations, this product can be installed with resistive loads of up to 60A and inductive loads of up to 40A									

INSTALLATION EXAMPLES



INTERNAL COMPONENTS





DCC-9 DCC-11

RETROFIT CONDO INSTALLATION EXAMPLE

[Click here to view the 360° image](#)

TECHNICAL SPECIFICATIONS

Type of construction	existing building (retrofit)
Type of occupancy	condo
Building size	43 units
Number of floors	5 and less
Number of parking spaces	51 to 100
Location of electricity meters	accessible from the parking spaces
Location of parking spaces	indoors, covered
Type of parking spaces	assigned

PRODUCTS USED



+



- **DCC-9** for units with an electrical panel of 60-125A
- **DCC-11** for units with a panel of 150-200A



CHARGE CONTROLLER:
SPLITTER BOX

DCC-9-BOX

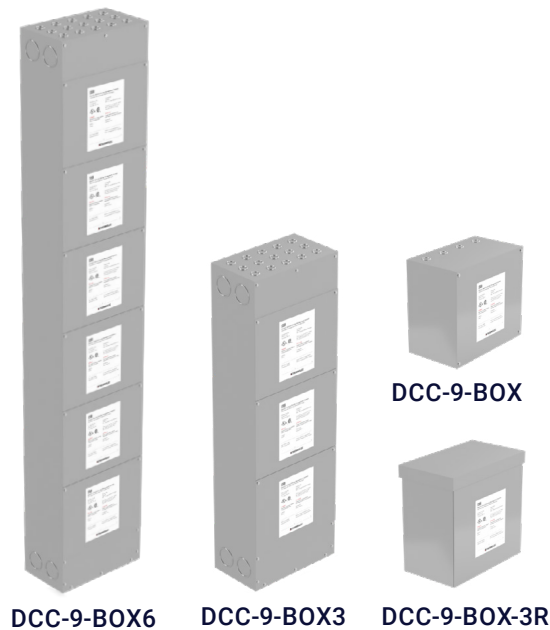
DCC-9-BOX is a splitter box specifically designed to make a building's electrical infrastructure fully ready for electric vehicles at the lowest possible price.

It allows the connection of the main power supply and the power supply of the EV charger while reducing the initial cost of installation.

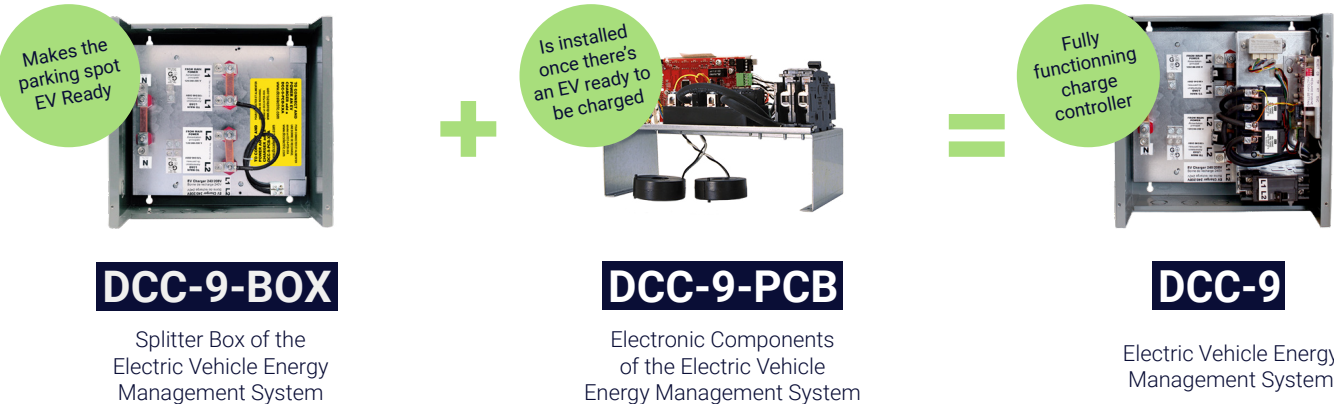
Each DCC-9-BOX model can be supplemented to allow connection of an EV charger by adding the DCC-9-PCB-XXA electronic infrastructure.

FEATURES

The DCC-9-BOX can be powered by a 240/208V AC single phase source, max 125A.

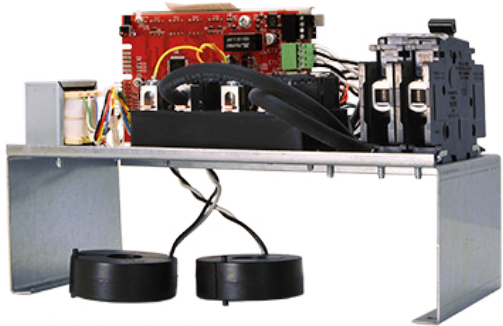


MODELS	MAIN POWER SUPPLY									DIMENSIONS* (H" x W" x D")	TOTAL WEIGHT*
	60A	70A	80A	90A	100A	125A	150A	200A			
DCC-9-BOX	✓	✓	✓	✓	✓	✓	✗	✗		12" x 12" x 7.5"	11 lb (4,99 kg)
DCC-9-BOX-3R	✓	✓	✓	✓	✓	✓	✗	✗	SEE DCC-11	14" x 13" x 8"	12 lb (5,44 kg)
DCC-9-BOX3	✓	✓	✓	✓	✓	✓	✗	✗		45" x 14" x 9"	40.5 lb (18,37 kg)
DCC-9-BOX6	✓	✓	✓	✓	✓	✓	✗	✗		78" x 14" x 9"	81 lb (36,74 kg)
Voltage and wiring		240/208V AC single phase: L1, L2, Neutral, Ground.									
Terminals size		up to 2/0 (CU/AL)									
Max torque		L1, L2, Neutral: 120 in-lbf / Ground: 50 in-lbf									
Certifications											
*Approximative and can change without notice.											V6
** Not limited to compatibility with electric vehicle charging stations, this product can be installed with resistive loads of up to 60A and inductive loads of up to 40A											



CHARGE CONTROLLER: ELECTRONIC COMPONENT

DCC-9-PCB



DCC-9-PCB is the electronic infrastructure that fits inside the DCC-9-BOX and allows the connection of an EV charger to the main feeder of a panel without affecting the load calculation.

FEATURE

- Components needed to connect and power an EV charger;
- Possibility to receive and transmit load shedding instructions from an external energy management system via a dry contact input and output.

OPERATION

- Real-time readings of the total power consumption of a unit's 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 is less than 80% of main circuit breaker capacity for more than 15 minutes.

INCLUDED

- Electronic Components
- EV Charger Breaker (Max 60A)
- 2 Pre-Wired Current Transformers (CT)
- 2 Power Cables

COMPATIBILITY

- DCC-9-BOX - DCC-9-BOX3
- DCC-9-BOX-3R - DCC-9-BOX6

MODELS	BREAKER	MAIN POWER SUPPLY							
		** EV charger	60A	70A	80A	90A	100A	125A	150A 200A
DCC-9-PCB-30A	30A	✓	✓	✓	✓	✓	✓	✓	×
DCC-9-PCB-40A	40A	×	×	✓	✓	✓	✓	✓	×
DCC-9-PCB-50A	50A	×	×	×	×	✓	✓	✓	×
DCC-9-PCB-60A	60A	×	×	×	×	×	***	✓	×
Frequency		50 to 60 Hz							
Operation temperature		-22°F to 113°F (-30°C to 45°C)							
Max torque		Relay terminals: 40 in-lbf Breaker terminals: 45 in-lbf							
Total weight*		6 lb (2,72 kg)							

*Approximative and can change without notice. V4

** Not limited to compatibility with electric vehicle charging stations, this product can be installed with resistive loads of up to 60A and inductive loads of up to 40A

*** See dip switch programming step in manual for more details.

DCC-9-BOX
Splitter Box of the Electric Vehicle Energy Management System

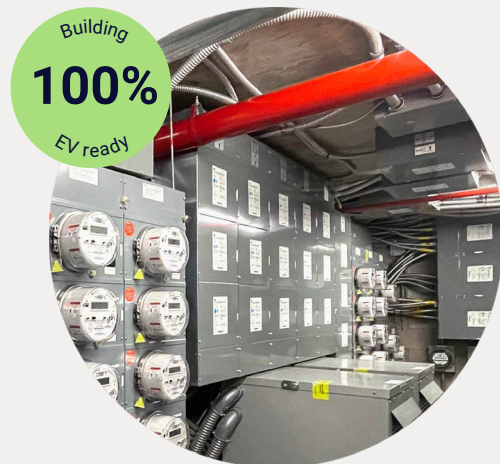
DCC-9-PCB
Electronic Components of the Electric Vehicle Energy Management System

DCC-9
Electric Vehicle Energy Management System

Makes the parking spot EV Ready

Is installed once there's an EV ready to be charged

Fully functioning charge controller



DCC-9 DCC-9-BOX3 DCC-9-BOX6

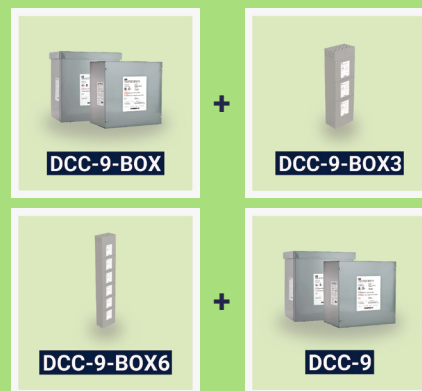
CONDO RETROFIT INSTALLATION EXAMPLE

[Click here to view the 360° image](#)

TECHNICAL SPECIFICATIONS

Type of construction	existing building (retrofit)
Type of occupancy	condo
Building size	173 units
Number of floors	20 to 30
Number of parking spaces	201 to 300
Electric meter location	accessible
Location of the parking spaces	indoor, covered
Type of parking spaces	assigned

PRODUCTS USED



- **DCC-9-BOX, DCC-9-BOX3 and DCC-9-BOX6** to provide charging infrastructure without installing chargers right away
- **DCC-9** for units with an electrical panel of 125A and less wanting a charger now





DCC-9 DCC-9-BOX3 DCC-9-BOX6

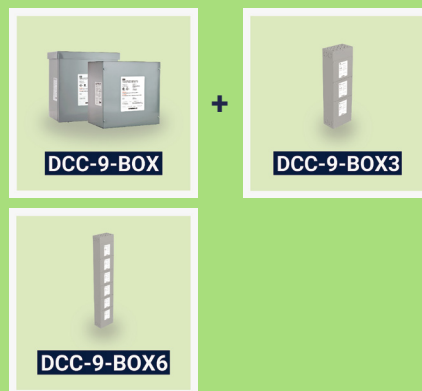
NEW BUILD RENTAL INSTALLATION EXAMPLE

[Click here to view the 360° image](#)

TECHNICAL SPECIFICATIONS

Type of construction	new build
Type of occupancy	rental
Building size	222 units
Number of floors	6 to 10
Number of parking spaces	201 to 300
Electric meter location	accessible
Location of the parking spaces	indoor, covered
Type of parking spaces	assigned

PRODUCTS USED



- **DCC-9-BOX, DCC-9-BOX3 and DCC-9-BOX6** to provide charging infrastructure without installing chargers right away



OTHER DCC APPLICATIONS

INDOOR AND OUTDOOR LOADS

Patented as an industrial load controller, the DCC can be connected to:

- resistive loads up to 48A (breaker: up to 60A)
- inductive loads up to 40A (breaker: up to 50A)

As long as applicable electrical codes are respected and the system is installed by a certified professional, the **DCC can be used for any power-heavy, non-essential or non-critical loads, with continuous or non-continuous draws** that fall within the amperage range indicated in our documentation.



INDOOR LOAD EXAMPLES

- HVAC/AC/Heat pump
- Sauna
- Steam shower*
- Induction cooktop/Dual compressor refrigerator/ Double ovens*

OUTDOOR LOAD EXAMPLES

- Electrical patio heater
- Snow melting systems
- Generator
- Pool
- Hot tub
- Solar panel

Other scenarios not pictured or mentioned here might also benefit from a DCC installation. Learn more about the DCC's other applications on our blog by scanning the following QR code:



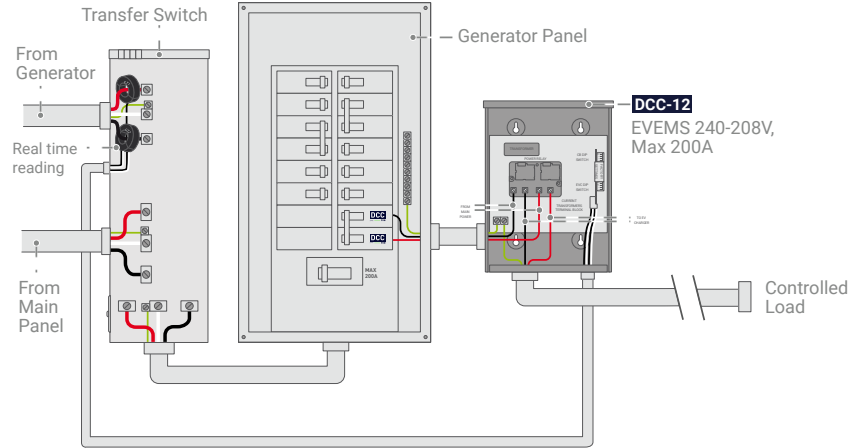
*While the DCC won't be connected directly to these appliances, adding such loads to the electrical panel might require a DCC to be installed for managing another non priority load such as an EV charging station or HVAC unit.

It is the installer's responsibility to make sure that the electric power source is adequate for the use of the DCC. RVE assumes no responsibility for the configuration of any DCC model installation.

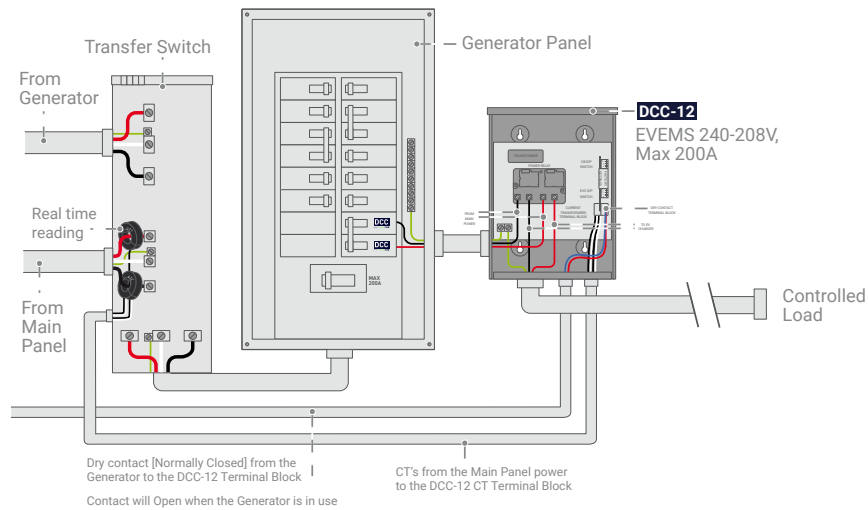
with a GENERATOR PANEL

DCC-12

Example A

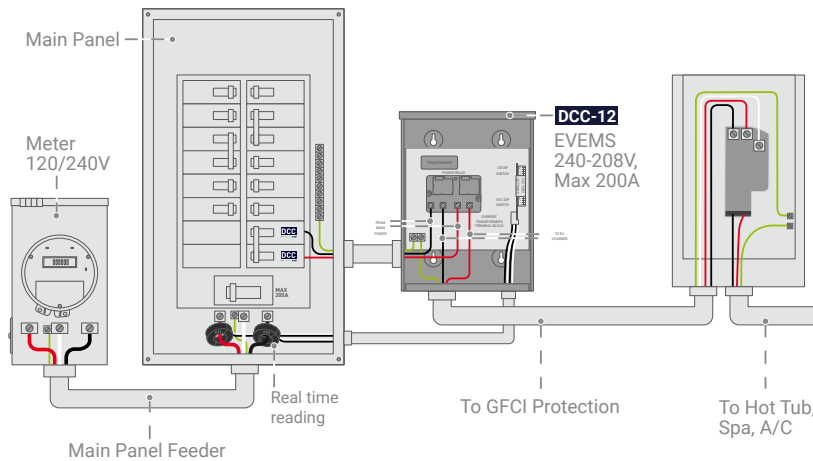


Example B



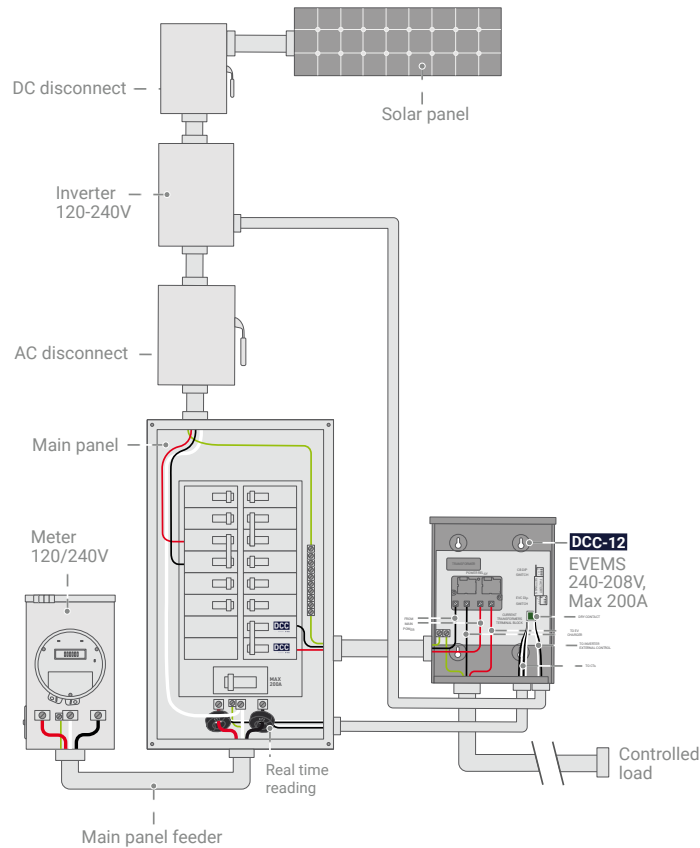
with HOT TUB OR A/C

DCC-12

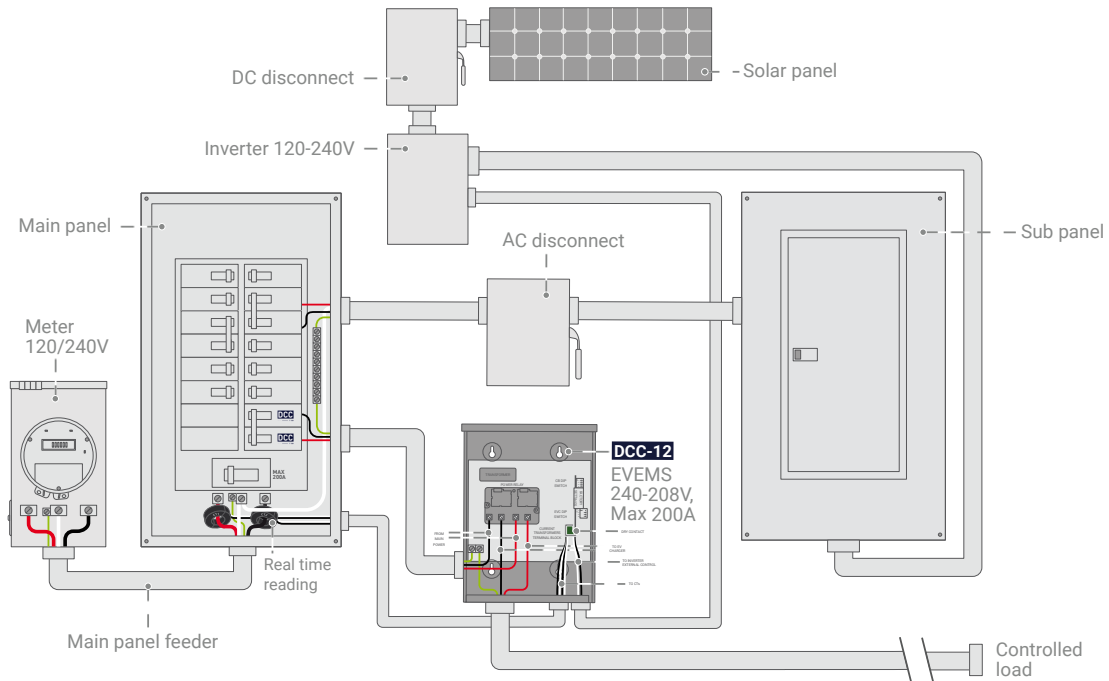


These schemas are designed with the consultation of an electrician and are to be used for educational purposes only and are not to be used for the purpose of installation. It is the installer's responsibility to make sure that the electric power source is adequate for the use of the DCC. RVE assumes no responsibility for the configuration of any DCC model installation.

Example with main panel



Example with sub panel



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Recharge Véhicule Électrique (RVE) is the founding company behind the DCC product line. Designed and engineered in North America.