

## RES-D3-CS20 ELECTRIC VEHICLE (EV) DC FAST CHARGER DISPENSER DATASHEET

### The Next Generation of EV Charging Dispenser

Our “Gen 3” DC Fast Charge dispenser advances our rugged Gen 2 EV dispenser by integrating a variety of new cutting-edge market features into a smaller package, enabling enhanced scalability of large fleet charging deployments. The dispenser is compatible with both “Charge Only” and “Bi-Directional / V2G” products and applications.



### Sequential Power Switching (SPS) Capability With One Cable, NO EXTERNAL SWITCH BOX

Rhombus' SPS feature enables one Rhombus PCS (Smart Inverter) to sequentially connect with up to 5 EV's with a single power feed. This approach reduces the amount of trenching required to install the dispensers, and eliminates the need for an external switching box which many competitive designs require.

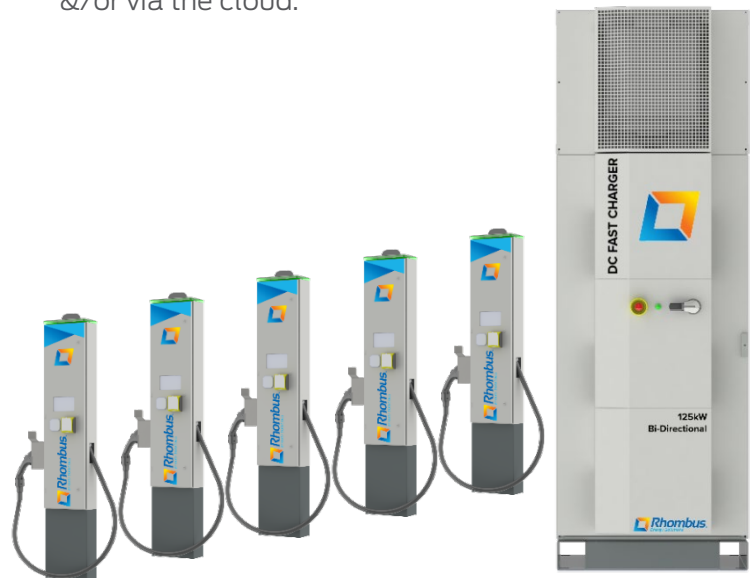
Rhombus also simplifies the sequential charging process through automation. As each EV reaches its target charge level, the dispenser disconnects and connects to the next dispenser until all connected vehicles reach their target charge level. Sequential charging priorities can be configured both locally &/or via the cloud.

### Low Profile Design With Wall Mount Option

Space available to install EV charging stations is often a challenge for customers but especially for heavy duty fleet operators. Our new dispenser footprint is ~ 50% smaller to minimize the area required for new EV charging dispenser installation.

### Vehicle to Everything (V2X) Technology

The utility grid's resilience is constantly being challenged, from both weather event and peak loads. Vehicle to grid (V2G) provides the ability to offset peak loads by selling excess vehicle power back to the grid, reducing total energy costs. Rhombus charging solutions are UL 1741-SA certified, simplifying fleet operator deployment of V2X-capable charging systems for the M/HD EV fleets.



<b>V2G/Bi-Directional Model #</b>		<b>Rhombus RES-D3-CS20-V2G</b>	
Compatible Rhombus Inverters	RES-DCVC60-480-V2G (60kW)	RES-DCVC125-480-V2G (125kW)	
<b>Charge Only Model #</b>		<b>Rhombus RES-D3-CS20</b>	
Compatible Rhombus Inverters	RES-DCVC60-480 (60kW)	RES-DCVC125-480 (125kW)	
<b>DC Output/Input (Dispenser)</b>			
Rated Power (kW)	60kW	125kW	
Rated Operating Voltage Range: Vdc)	270 - 870	530 - 920	
Rated Current: (Adc)	+200Adc (Charging Only), +/-200ADC (V2G)		
Sequential Power Switching Capable	Yes		
Max Dispenser to Inverter Ratio <sup>1</sup>	5:1	5:1	
Connector and Cable	CCS 1, Up to 20ft (standard)		
<b>Mechanical</b>			
Dispenser Envelope Dimensions	~8"D x ~12"W x 50" H (Wall Mount) or 69" H (Pedestal Mount)		
Dispenser Weight	~150 lbs. (configuration dependent)		
<b>Environmental</b>			
Environmental Rating	NEMA 3R		
Operating Ambient Temp.	-30 °C to 50 °C (-22 to 122°F)		
Storage Temperature Range	-30 °C to 60 °C (-22 to 140°F)		
Humidity	0 to 95% (non-condensing)		
Altitude	De-rated over 2,000m above sea level		
<b>Communication &amp; Control</b>			
EV Communication	SAE J1772 & ISO 15118-2 <sup>2</sup>		
External Control & Management	OCPP1.6 J Rhombus VectorStat® for enhanced diagnostics and energy management.		
User Interface / HMI	Standard: Multi-color LED Status Indicator Option: 7" touchscreen Option: RFID Reader Option: Credit Card Reader Option: Cord Management		
Network Interface	Standard: Cellular (4G/LTE) + WiFi + Ethernet w/ configurable fallback redundancy. Option: Ethernet only.		
<b>Certification, Safety, Compliance</b>			
Dispenser Certifications	UL 2202 and UL 2231 w/ compatible Rhombus PCS.		

<sup>1</sup> One power inverter can support multiple dispenser/vehicle connections sequentially. Only one dispenser is actively charging/discharging at a time. The system automatically switches between active dispensers as required. Sequential switching dispenser option is required to enable this capability.

<sup>2</sup>ISO 15118-2 EV to EVSE communication standard is limited to "Charge Only". Pending updates to the ISO 15118 standard are expected to expand support for V2G communication and capabilities. Early V2G demonstrations require custom communication and control development. Please talk with your sales representative to discuss your application.

**All specifications are configuration dependent and subject to change**  
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# Dispenser Dimensions

