

CABATTERY DC Power System



Product Data



The Carrier DC Power System is a grid-interactive energy asset designed to provide direct electrical power to the 27VPA9 Performance™ Series, variable speed heat pump (HP) system in response to utility or Carrier Virtual Power Plant (VPP) load reduction signals. The system is engineered to support short duration demand response, peak shifting, and other grid services. Note that this product in combination with the 27VPA9 Performance™ Series Heat pump is referred to as the "EnerSync Energy System"

Designed to maintain homeowner comfort, the battery charges during periods of low demand or lower electricity pricing and can supply power to the outdoor unit during periods of peak demand and higher pricing.

It is important to note that the battery does not provide backup power during a utility outage and does not discharge energy back to the grid.

Industry leading Features / Benefits

Energy Efficiency

- The DC Power System accessory does not negatively impact the 27VPA9 performance and capacity ratings.

Grid Resiliency

- The DC Power system helps reduce strain on the grid by shifting energy use away from peak demand hours. Paired with the 27VPA9 Performance™ Series variable speed heat pump, it delivers energy-saving comfort through advanced VFD (Variable Frequency Drive) technology and five stages of true variable-speed performance—all compatible with any 24V thermostat (3H/2C).

Sound

- Sound ratings remain unchanged for the 27VPA9 with the DC power system added.

Reliability

- DC Power system has been validated for steady operation under varying ambient load conditions and is suitable for outdoor applications.

Durability

WeatherArmor Ultra™ Protection Package:

- Solid, durable sheet metal construction
- Baked-on, complete outer coverage, powder coat paint

Applications

- Currently, the DC Power System is only compatible with the 27VPA9 Performance™ Series Heat Pump.
- DC Power system is not designed to back-feed to the grid.
- DC Power system does not provide backup power to the HVAC system. It is designed to shift the ODU load from the grid.
- Battery output adjusts to meet the performance needs of different outdoor operating stages.

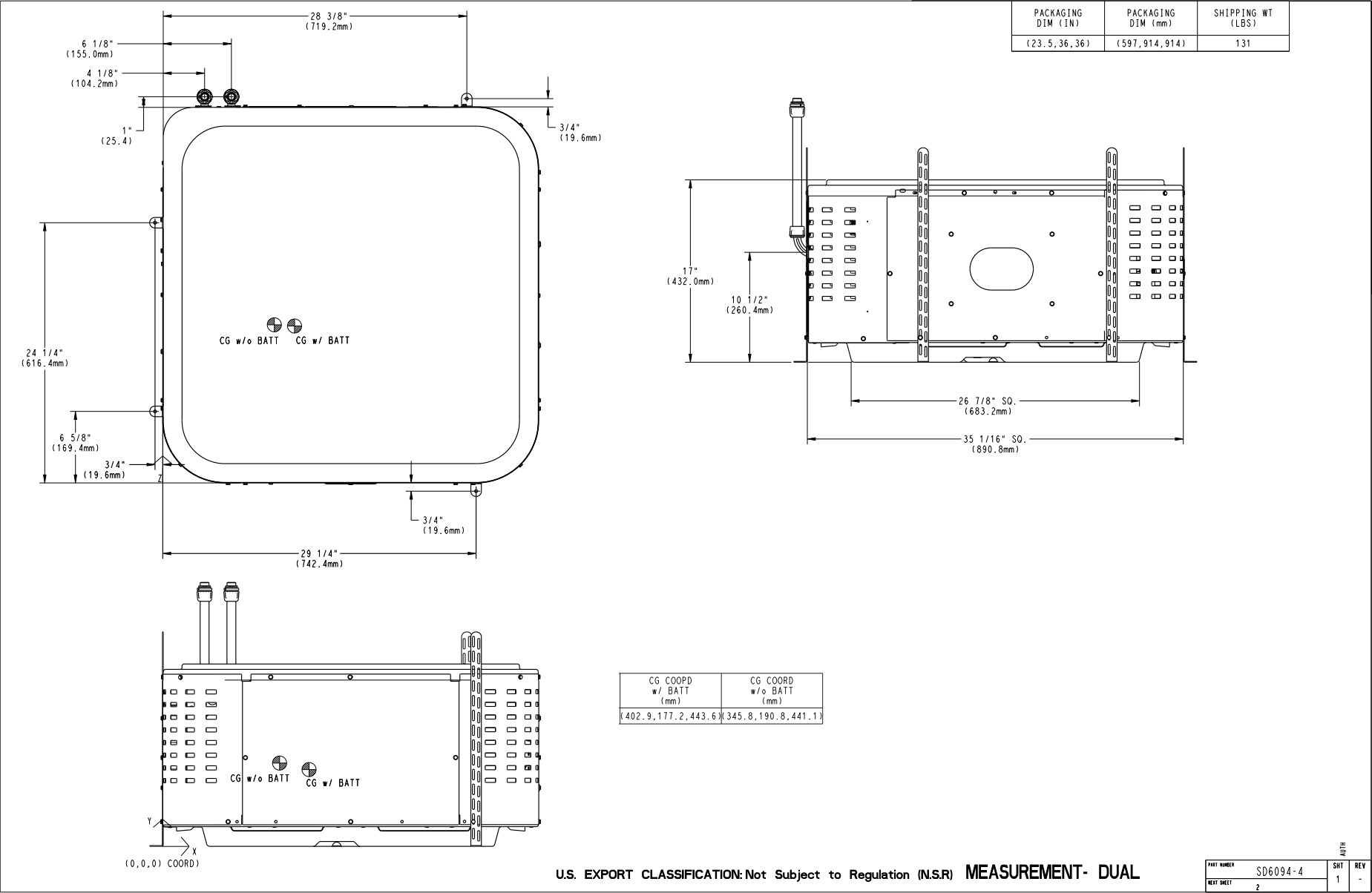
Integrated Telemetry Compatibility

- Supports system-level monitoring for cloud, diagnostics, and performance analytics.

Technical Specifications

	Model Number	CABATTERY
System Technical Specifications	HVAC Nominal Grid Voltage (Input)	208V-230 VAC
	HVAC Grid Type	Split Phase
	HVAC Grid Frequency	60Hz
	HVAC Overcurrent Protection Device	AC Disconnect (MCA) rating
	HVAC Refrigerant Type	R-454B
	Grid Interface	Non Exporting
	DC Power System Connectivity	Cellular, Wi-Fi
	DC Power System Protections	DC Disconnect, DC Reverse Polarity
	Customer Interface	Carrier SmartHome App
Battery Pack Technical Specifications	Battery Type	LiFePO4 (LFP)
	Nominal Battery Energy	5kWh DC
	Maximum Continuous Discharge Power	5kW
	Maximum Continuous Charge Power	5kW
	Battery Operating Voltage	95.7V - 120.5V
	Maximum Continuous Current	50A
Environmental Specifications	Operating Temperature	-10 - 125°F (-23.3 - 51.6°C)
	Operating Humidity	5 - 95%
	Storage Temperature	-10 - 125°F (-23.3 - 51.6°C)
	Maximum Elevation	6,561 ft. (2,000 m)
	Environment	Outdoor Rated
	DC Power Ingress Rating	IP24
	Battery Ingress Rating	IP65
Compliance Information	Grid Connection	United States
	Certification	Battery - UL 1973, UL 9540A (Tested), DC Converter – UL 60730-1 DC Power System - UL 9540 Heat Pump - UL 60335-2-40 (UL/CSA)
Mechanical Specifications	Dimensions (H x W x D)	17" x 35-1/16" x 35-1/16"
	Weight of Enclosure	131 lb (59.4 kg)
	Weight of Battery Pack	110 lb (50 kg)
	Total Weight of Installed System	241 lb (109.1 kg)
	Mounting Options	Ground Mounted to cement or composite HVAC Pad

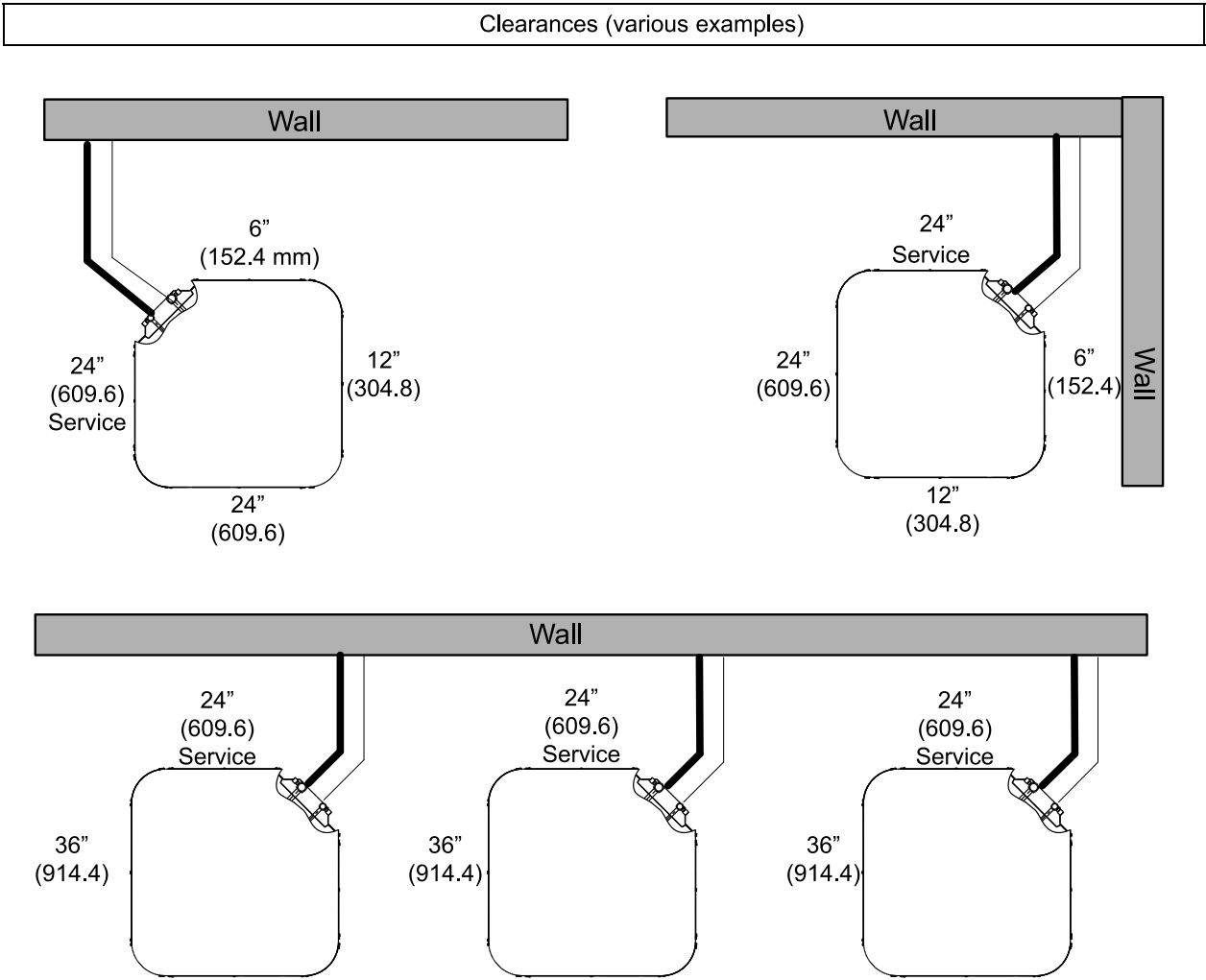
DIMENSIONS



Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Clearance Requirements

NOTE: The following image is an example image. 6 inches is allowed on one side of the unit adjacent to the control box. The remaining side adjacent to the control box should be 24 inches.



Note: Numbers in () = mm

Battery Handling, Decommissioning, and Disposal

For the decommissioning and recycling of the LFP battery pack for Carrier's Battery enabled heat pump, you must contact Carrier Support to initiate the process. Only qualified, trained professionals can handle the complex, potentially hazardous LFP battery pack. The decommissioning process includes system shutdown, disconnection, removal and shipment by Carrier authorized partners, in accordance with DOT guidelines, to specialized recycling facilities, ensuring 100% of materials are recovered and never landfilled.

