Vertiv™ Liebert® APM2 UPS UL **Modular EBC**



Quick Installation Guide

IMPORTANT: Before installing, connecting to supply or operating your Vertiv™ Liebert® APM2 UPS, refer the Safety and Regulatory Statements sheet. For detailed installation, operation, maintenance, and troubleshooting information, visit the Liebert® APM2 UPS product page for the SL-71373 Vertiv[™] Liebert® APM2 Modular EBC User Manual available

at www.Vertiv.com or use the QR code below.

Mechanical Installation

Vertiv™ Liebert® APM2 Modular EBC is designed to be compatible with 60 kVA 208 V/120 kVA 480 V UPS Frame.

Inspecting the Modular EBC

Inspect the Liebert® APM2 Modular EBC for damage. If you find any damage, document and photograph the damages and notify your local Vertiv representative.

Choosing the Location

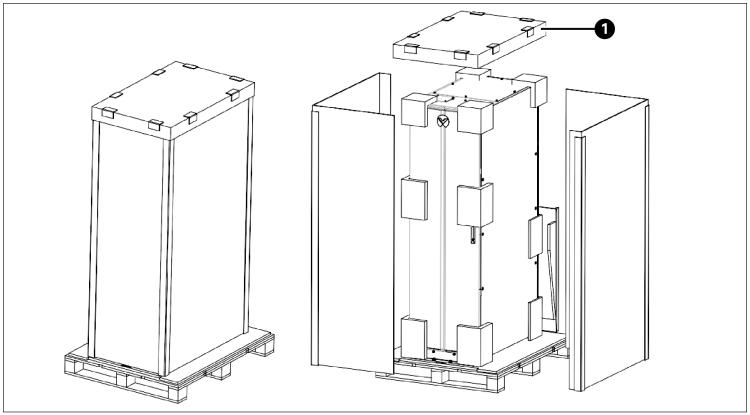
The Liebert® APM2 Modular EBC measures 51.96 in. x 40.94 in. x 86.61 in. (1320 mm x 1040 mm x 2200 mm). Install the Liebert® APM2 Modular EBC in a clean, well-ventilated environment with the ambient temperature range of 32 °F to 104 °F (0 °C to 40 °C). For installation and maintenance, minimum 3 ft. (914 mm) clearance is required in the front of the unit. For standard unit UPS configuration with top fans. rear clearance is not required.

If the following options are selected, the rear clearance is modified by the higher of the two values.

- Seismic anchoring selection: Up to 5 in. (127 mm) may be required in the rear of the Liebert® APM2 Modular EBC.
- UPS front to rear airflow option configuration selection: At least 20 in. (500 mm) in the rear.

NOTE: For UPS front to rear airflow configuration to permit proper air flow and prevent overheating, do not block or cover the ventilation openings (perforated panels) or blow air down onto the unit.

Figure 1. Removing the Packaging Material



Item	Description
1	Top cover

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Handling and Unpacking the Unit

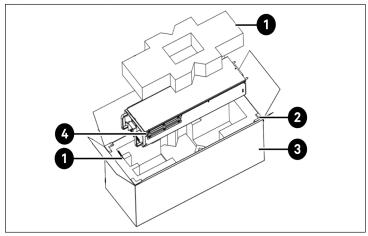
The unit weighs up to 771.61 lbs (350 kg), depending on the options selected. The Vertiv™ Liebert® APM2 Modular EBC is shipped on a pallet and is equipped with casters that permit two or more people to roll it off the pallet for installation. Use a forklift or pallet jack to move the palleted Liebert® APM2 Modular EBC as close as possible to the installation location before removing packing material or loosening shipping brackets.

For removing packaging materials, follow the below procedure:

- 1. Remove the protective packaging, shown in Figure 1. Locate the accessories package on top of the Liebert® APM2 Modular EBC and set aside.
 - 2. Use a 5/8 in. (16 mm) wrench or socket to remove the shipping brackets from the pallet.
 - 3. Remove the shipping brackets from the front and rear of the Liebert® APM2 Modular EBC.
 - 4. Ensure that the leveling feet are raised to prevent interference when rolling the unit on the casters.
 - 5. Roll the unit down the ramp to the installation location then lower the leveling feet to fit the Liebert® APM2 Modular FBC at the installation location.

Unpacking of Battery Module

Figure 2. Unpacking of Battery Module



Item	Description
1	EPE cushion
2	Wooden conner
3	Carboard box
4	Plastic bag and desiccant

The installation steps of the built-in battery module are as follows:

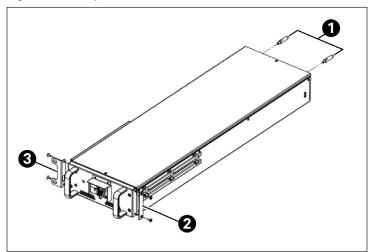
- 1. Open the box and remove the plastic bag.
- 2. Remove the battery module from the case.
- 3. Figure 2 shows the material inside the battery cabinets packing case.

NOTE: At least two peoples are required to disassemble and install the battery module. Pay attention to safety and avoid injury.

Preparing the Battery Module for Installing into the Cabinet

1. If the module needs to be installed on the left side of the cabinet, secure the L-shaped mounting ears from the accessory bag to the left side of the module using two M4x8 screws. Fit the baffle from the accessory bag to the right side of the module using two M4x8 screws. Install the pin from the accessory bag to the back panel of the module, as shown in Figure 3.

Figure 3. Battery Module—Left Side

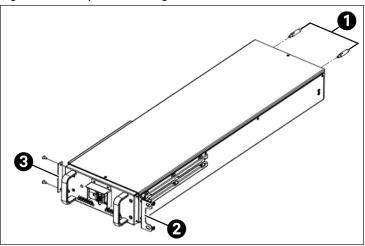


Item	Description
1	Pin
2	Baffle
3	L-shaped mounting ears

2. If the module needs to be installed on the right side of the cabinet, secure the L-shaped mounting ears from the accessory bag to the right side of the module using two M4x8 screws. Fit the baffle from the accessory bag to the left side of the module using two M4x8 screws. Install the pin from the accessory bag to the back panel of the module, as shown in Figure 4.



Figure 4. Battery Module—Right Side



Item	Description
1	Pin
2	L-shaped mounting ears Baffle
3	Baffle

Figure 5. Battery Module—Left Side and Right Side

- 3. Take out the module connector from the battery attachment and secure it using four M6x12 screws.
- 4. Install all the battery modules from bottom to top.

Installation of Battery Module in the Cabinet

- 1. Remove the module baffle installed..
- 2. Push the preinstalled module as shown in Figure 5 to the far left side of the cabinet. Secure it using two M6x12 screws from the accessory bag.
- 3. Push the preinstalled module as shown in Figure 5 to the far right side of the cabinet. Secure it using two M6x12 screws from the accessory bag.

Step for Combination of Battery Cabinet and UPS Cabinet

- 1. Remove the right panel of the battery cabinet.
- 2. Remove the left panel of the UPS power cabinet.
- 3. After the battery cabinet and the UPS power cabinet are aligned, open the front panel of the UPS power cabinet. Secure the battery cabinet to the power cabinet at the top and bottom using two M10x30 screws, as shown in Figure 6.

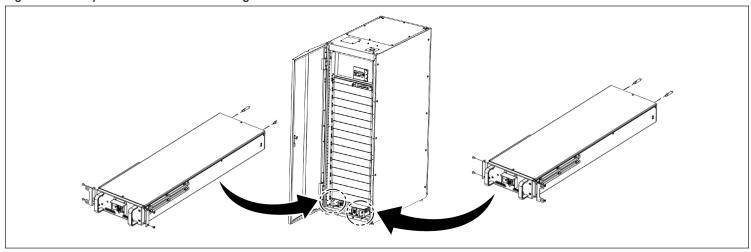
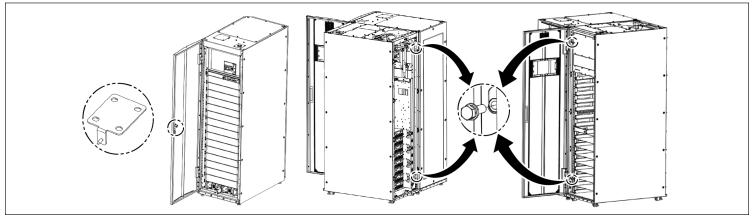


Figure 6. Battery Cabinet



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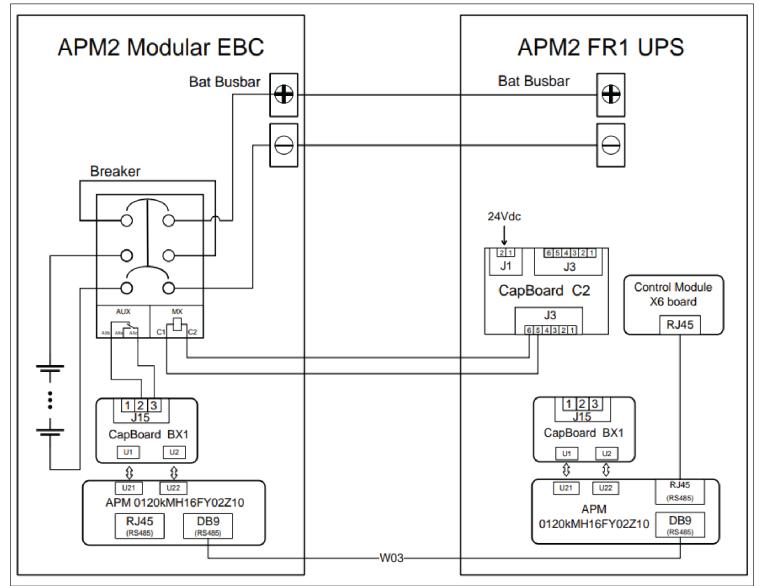
- 4. Remove the rear panel of the FR1 power cabinet, and secure the battery cabinet to the power cabinet at the top and bottom using two M10x30 screws.
- 5. Install the rear panel of the FR1 power cabinet and close the front panel.

Cables Connection of Vertiv™ Liebert® APM2 Modular EBC and Vertiv™ Liebert® APM2 FR1 UPS

Cables from Liebert® APM2 Modular EBC to Liebert® APM2 UPS are as follows. See Figure 7 for more details.

- 1. Liebert® APM2 Modular EBC Battery Busbar (+, -) to Liebert® APM2 UPS Bat Busbar (+, -).
- 2. Liebert® APM2 Modular EBC Breaker MX (C1 and C2) to Liebert® APM2 UPS CapBoard C2 (Pin 5 and 6) respectively.
- 3. Liebert® APM2 Modular EBC D89 to Liebert® APM2 UPS D89.

Figure 7. Cable Connection of Liebert® APM2 Modular EBC and FR1 UPS



To contact Vertiv Technical Support: visit www.Vertiv.com



