

## Eaton UL924 Addendum (8-15kVA, 10-15kVA and 20-30kVA UPS)

In addition to the standard installation guides and manuals supplied with the Eaton 9155 and 9355 Series UPS please review this addendum; which contains a listing of specific changes made to meet all UL924 Emergency Lighting System requirements.

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### IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

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These systems are designed and tested as a set and require both the inverter (UPS) and added battery cabinet(s) as listed to supply a minimum 90 minutes of on-battery runtime in the event of a power outage for EMERGENCY EGRESS LIGHTING. These systems are designed for dedicated egress lighting only.

These systems have been specifically modified to require mechanical means to shut off or turn to bypass mode (or otherwise disable) as required by Life Safety Codes within the UL924 standard. All modifications done to achieve UL924 listings do not interfere with standard accessories typically available for use with these 8-30kVA Eaton products. Examples include Seismic Kits and Options Cabinets.\*

\* This is true for some 8-30kVA 480V Models. The UL approved 20-30kVA system is used accompanied with an Options Cabinet (part number BHKBT004200 for 20-30kVA and BHKBT001200 10kVA for 277VAC) added to the line up to meet 480V requirements.



### IMPORTANT

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When using electrical equipment, basic safety precautions should always be practiced including the following:

- Do not let power supply cords touch hot surfaces.
  - Do not mount near gas or electric heaters.
  - Use caution when servicing batteries. If acid is spilled or spread on the skin or eyes, flush with fresh water and contact a physician immediately.
  - Do not use this equipment for other than its intended purpose.
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### For More Information

Refer to the *Eaton 9155 UPS 8-15kVA User's Guide*, *Eaton 9355 UPS 10-15kVA User's Guide* or the *Eaton 9355 UPS 20-30kVA Installation and Operation Manual* for the following additional information:

- Installation instructions, including site preparation, planning for installation, wiring and safety information, and detailed illustrations of cabinets with dimensional and connection point drawings

Visit [www.eaton.com/powerquality](http://www.eaton.com/powerquality) or contact an Eaton service representative for information on how to obtain copies of these manuals.

### Getting Help

If help is needed with any of these instructions, please call the **Customer Reliability Center** at:

United States:	<b>1-800-843-9433</b>
Canada:	<b>1-800-461-9166 ext 260</b>
All other countries:	<b>Call your local service representative</b>

Please use the following e-mail address for comments, suggestions, or to report an error in these instructions:  
**E-ESSDocumentation@eaton.com**



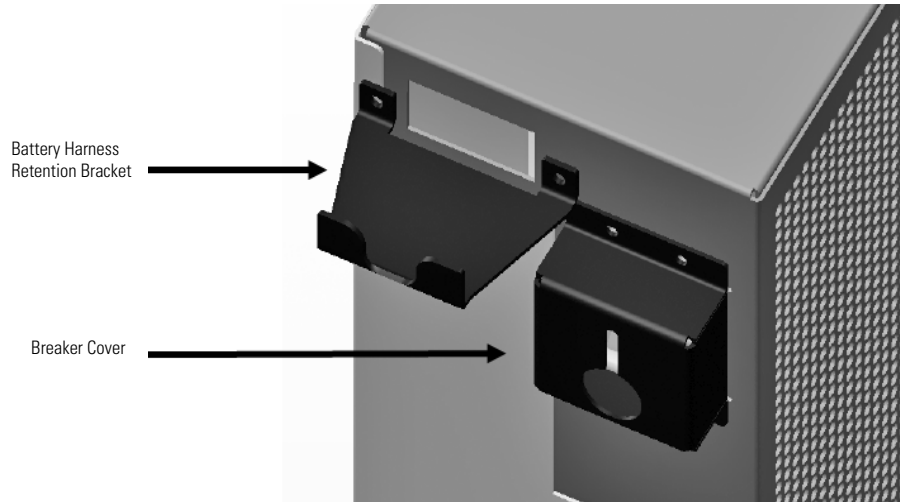
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## UL924 Mechanical Configuration

### UL924 Specifications for 15kVA UPS and Below

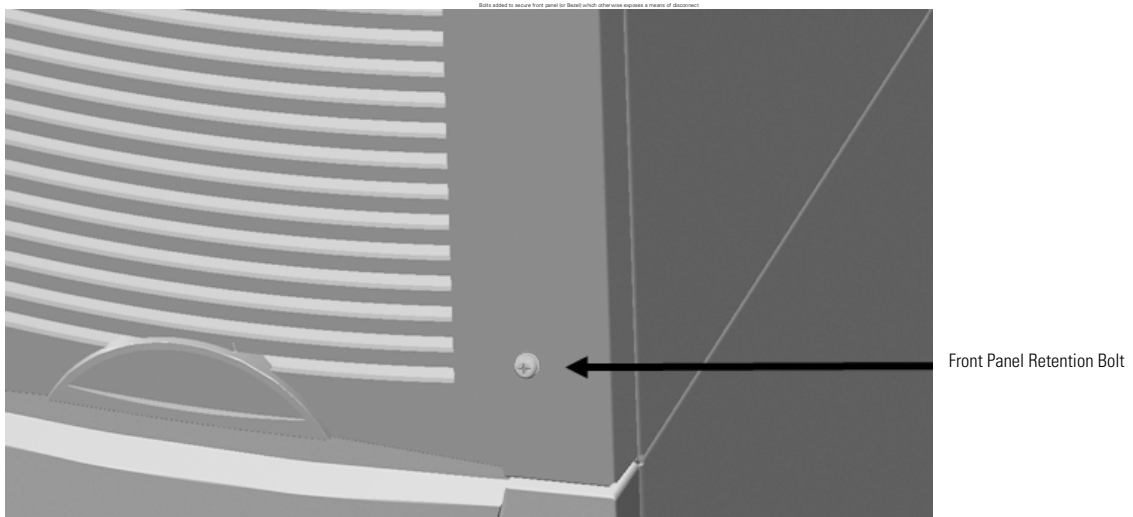
Summary of mechanical changes for inverter and matching Battery Cabinet(s)

- Battery Harness Retention Brackets are also added on all 15KVA and below systems to DC Battery connectors which are supplied and are required to be re-installed before system activation is complete.
- Breaker Covers are applied over any exposed circuit breakers requiring a small tool to disconnect (open) but can be switched on by a finger.



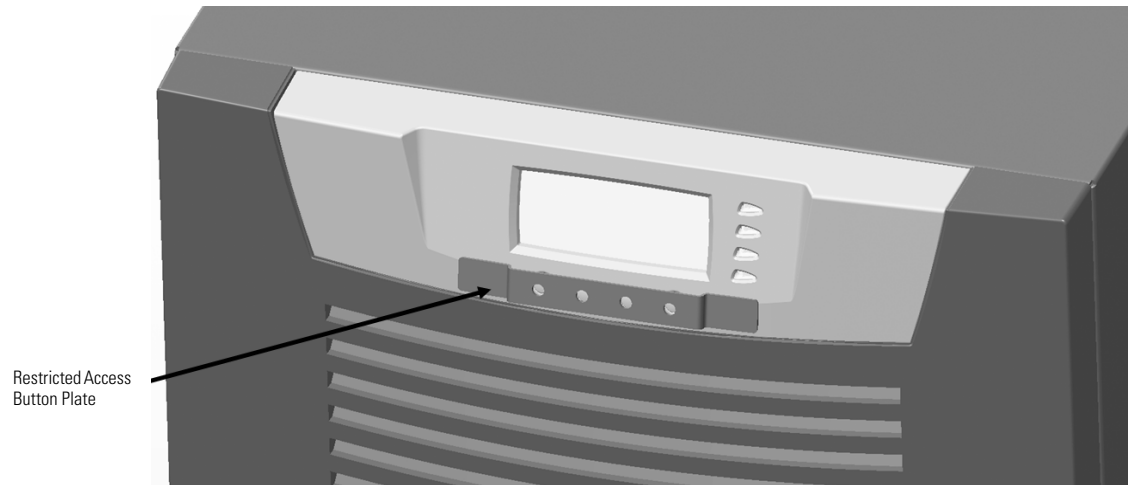
**Figure 1. Battery Harness Retention Bracket and Breaker Cover**

- Bolts added to secure front panel (or Bezel) which otherwise exposes a means of disconnect.



**Figure 2. Front Panel Retention Bolt**

- Restricted Access Button Plate may be installed over front panel display buttons which require a pen tip or other small tool to activate.



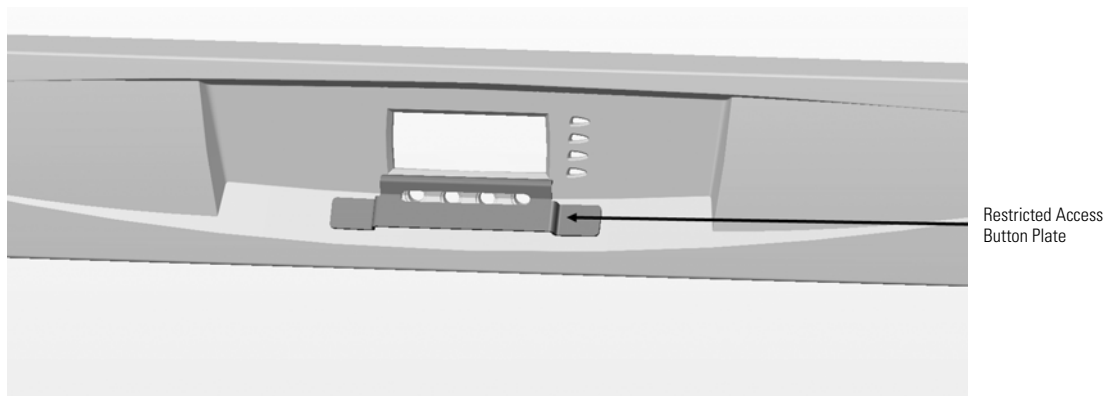
**Figure 3. Restricted Access Button Plate**

#### **UL924 Specifications for 20kVA UPS and Above**

Summary of mechanical changes for inverter and matching Battery Cabinet(s)

Modifications include:

- Restricted Access Button Plate may be over front panel display buttons, or recessed buttons, either of which require a pen tip or other small tool to activate.
- Front panel is secured with locking latches which require a tool to access.



**Figure 4. Restricted Access Button Plate**

## UL924 Configuration Specifications

**Table 1. Single Phase 277VAC 15kVA UPS Chassis Models UL Listed UL924 Configurations**

kVA Rating	Output Rating	Controller Module	External Battery Module and Quantity	Options Cabinet and Quantity
6.8kVA 1PH	6.8kW*	BH10KEL2081P100	BHEBM96EL600 (Qty 2)	BHKBT001200 (Qty 1)
9kVA 1PH	9kW*	BH15KEL2081P10T	BHEBM96EL600 (Qty 3)	BHKBT001200 (Qty 1)

\*The UL approved 10-15KVA system is used accompanied with an Options Cabinet (part number BHKBT001200) 9kW Max Output Rated added to the line up to meet 277V requirement. NOTE this cabinet can be used for any single phase 277VAC application up to 9KW max output.

- NOTE 1** The preferred interconnection scheme for 277VAC systems is to supply the upper output transformer in an L-L fashion without UPS output neutral to substantially reduce leakage currents.
- NOTE 2**
- Circuit breaker recommendations service side (lower input transformer) full load current at 45A and breaker at 60A.
  - Circuit breaker recommendations load side (upper input transformer) full load current at 40A and breaker at 55A

**Table 2. Single Phase 208/240VAC 15kVA UPS Chassis Models UL Listed UL924 Configurations**

kVA Rating	Output Rating	Controller Module	External Battery Module and Quantity
5.7kVA 1PH	5.7kW	BH8KEL2081P100	BHEBM96EL600 (Qty 1)
6.8kVA 1PH	6.8kW	BH10KEL2081P100	BHEBM96EL600 (Qty 2)
10.7kVA 1PH	10.7kW	BH15KEL2081P100	BHEBM96EL600 (Qty 3)

**Table 3. Three Phase 208VAC 15kVA UPS Chassis Models UL Listed UL924 Configurations**

kVA Rating	Output Rating	Controller Module	External Battery Module and Quantity
8.5kVA 3PH	8.5kW	BH10KEL2083P100	BHEBM96EL600 (Qty 2)
13.1kVA 3PH	13.1kW	BH15KEL2083P100	BHEBM96EL600 (Qty 3)

**Table 4. Three Phase 208VAC 30kVA UPS Chassis Models UL Listed UL924 Configurations**

kVA Rating	Output Rating	Controller Module	External Battery Cabinet and Quantity
18kVA 3PH	18kW*	BH20KEL2083P100	BH EBC72EL600 (Qty 2)
24kVA 3PH	24kW*	BH30KEL208SF100	BH EBC72EL600 (Qty 2)
27kVA 3PH	27kW*	BH30KEL2083P100	BH EBC72EL600 (Qty 3)

\*The optional UPS Accessory Module BHKBT004200 can be used with the 20/30kVA 208V solution to allow for 480V input/480V output to the UL924 UPS/Battery system.

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