

# Emergency Lighting UPS



20 kVA 208V pictured

## Product Snapshot

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<b>Power Rating:</b>	10 to 30 kVA
<b>Topology:</b>	Double-conversion online UPS
<b>Battery Runtime:</b>	Minimum 90 minutes at full load
<b>Frequency:</b>	50/60 Hz auto-sensing
<b>Voltage:</b>	208/208, 277/277, 480/277

Emergency lighting requirements and related building codes are vital in commercial structures to facilitate occupant egress during a building fire or other emergency situation. Eaton's emergency lighting UPSs are UL 924 tested and certified, providing the industry's highest capacity and smallest footprint solution.

### Eaton's Emergency Lighting UPS solutions are perfect for:

- Hospitals
- Schools
- Government buildings
- Office buildings
- Manufacturing facilities
- Hotels
- Commercial buildings

## Eaton meets the strict standards for UL 924 Compliance

### Providing you confidence in your emergency lighting solution

#### 90 minutes of backup

- All Eaton emergency lighting UPS solutions are configured with external line and match battery cabinets to provide 90 minutes of backup time, which is required by the UL 924 standard.

#### Manually operated test switch

- The emergency lighting product line features manually operated test switches for conducting the mandated standard equipment tests.

#### Protected test switch and interface

- In accordance with the standard, the manually operated test switch and interface are protected from accidental operation and protected from non-authorized users.

In order to avoid building/safety code inspection delays during the commissioning of new facilities or retrofits of existing facilities, emergency lighting systems must be UL 924 listed. Remember only systems supplied from one manufacturer that are tested and approved by UL can carry the UL 924 listing.

Eaton's UPSs are backed by an extensive service network of over 240 field technicians, providing prompt service, full maintenance and stocked replacement parts not available from other vendors or providers.



*Powering Business Worldwide*

# Connectivity & manageability

## Enhanced communication capabilities

UL 924 UPSs are equipped with a variety of standard communications features for network connectivity and remote management applications, including:

- RS-232 serial port
- Two X-Slot® communication bays
- Relay output contacts
- Two programmable signal inputs

## Centralized control and visibility

### Intelligent Power Manager software for monitoring

Eaton's Intelligent Power Manager (IPM) software allows the consolidation of monitoring and management of your emergency lighting UPSs. Any PC with an Internet browser and network connection can access status and power conditions of Eaton's emergency lighting UPSs, providing you the comfort that your systems are operating correctly.

IPM software is free for monitoring up to 10 devices. For locations with more than 10 devices, licenses can be purchased based on the number of units to be monitored.

Download from the Power Quality website:

[www.eaton.com/intelligentpower](http://www.eaton.com/intelligentpower)

# Service

## Proven warranty and support services

Customers consistently rank Eaton number one in providing quality service; our comprehensive, world-class solutions are designed to improve costs, uptime, reliability, power quality and safety. With 240 field service technicians in North America and 1,200 international authorized service providers, Eaton has more service personnel than any other UPS manufacturer, coverage that ensures your emergency lighting and egress solutions are addressed in a timely fashion.

The standard factory warranty covers:

- System warranty: One year parts / 90 days labor
- Battery warranty: Two years parts / 90 days labor

## Extensive service options for enhanced reliability

For support beyond the warranty period, Eaton offers enhanced service options including onsite startup, corrective and preventive maintenance, battery solutions, training, remote monitoring and factory spare parts and upgrades. Customizable three-phase UPS services packages allow customers to select the plan that provides the right combination of system uptime, convenience and value.

## eNotify Remote Monitoring

Eaton's optional eNotify Remote Monitoring Service provides 24x7 real-time monitoring of the UPS and battery systems and alerts both service technicians and the customer when a problem is detected. Proactive monitoring enables technical experts to respond immediately to more than 40 alarm conditions and, in many cases, resolve issues remotely with minimal or no downtime. Additional eNotify benefits include:

- One-way outbound status and event e-mails for security and reliability
- Fast diagnosis and notification of critical alarms
- Monthly customer reports including power event logs and overall UPS and battery health summaries

For more information on Eaton's emergency lighting UPS solutions, visit [www.eaton.com/UL924UPS](http://www.eaton.com/UL924UPS)

# TECHNICAL SPECIFICATIONS

## 208V Three-phase

Ratings (kVA/kW)	10 kVA / 8.5 kW	15 kVA / 13.1 kW	20 kVA / 18 kW	30 kVA / 24 kW	30 kVA / 27 kW
<b>UPS Part Number</b>	KA1012100000010	KA1512100000010	KB2013100000010	KB3013100000010	KB3013100000010
<b>UPS UL 924 Upgrade Part Number</b>	BH10KEL2083P-100	BH15KEL2083P-100	BH20KEL2083P-100	BH30KEL208SF-100	BH30KEL2083P-100
<b>Extended Battery Module Part Number</b>	103004193-5501	103004193-5501	103004868	103004868	103004868
<b>EBM UL 924 Upgrade Part Number</b>	BH-EBM96EL-600	BH-EBM96EL-600	BH-EBC72EL-600	BH-EBC72EL-600	BH-EBC72EL-600
<b># of Extended Battery Modules</b>	2	3	2	2	3
<b>Topology</b>	Double-conversion Online UPS				
<b>Operating Frequency</b>	50/60 Hz (45 to 65 Hz)				
<b>Input Power Factor</b>	>0.99 typical, >0.96 frequency converter				
<b>Input Current Distortion</b>	5% THD				
<b>Output Voltage</b>	208 VAC 3P				
<b>Input Voltage</b>	208 VAC 3P				
<b>Output Voltage Regulation</b>	±1% Static; ±5% dynamic at 100% resistive load change, <1 ms response time				
<b>Actual Runtime (min)</b>	124	113	114	108	90
<b>Overload</b>	150% for 5 sec / 125% for 1 min (online), 110% for 10 min (Normal Operation)				
<b>Communication Ports</b>	(1) RS-232, (1) Relay Contact, (1) REPO, (2) Environmental Input				
<b>Communication Slot</b>	(2) X-Slot communication bays				
<b>Operating Temperature</b>	10°C to +40°C, +45°C with 7.5% derating; Batteries recommended max. +25°C				
<b>Storage Temperature</b>	-15°C to +25°C				
<b>Relative Humidity</b>	0-95%, non-condensing				
<b>Audible Noise</b>	<53 dBA @ 1 meter, typical				
<b>Altitude</b>	<1000m at +40°C, <3000m at +25°C				
<b>Safety Certifications</b>	UL 924, UL 1778, NOM-0190SCFI-1993, CSA C22.2, IEC 60950, IEC 62040-1-1, No. 107.3;EN 5502 Class A (CISPR22 Class A)				
<b>EMC Compliance</b>	IEC 62040-2, FCC Part 15, ICES-003, VCCI				
<b>Quality</b>	ISO 9001: 2000 and ISO 14001:1996				
<b>Markings</b>	UL, cUL, CSA, CE and NOM-NYCE				
<b>Dimensions H x W x D (in)*</b>	47.8 x 36.0 x 33.7	47.8 x 48.0 x 33.7	66.0 x 60.0 x 34.1	66.0 x 60.0 x 34.1	66.0 x 80.0 x 34.1
<b>Weight (lb)*</b>	2,029	2,739	5,280	5,280	7,340

\* Dimensions and weights include all battery cabinets and batteries.

# TECHNICAL SPECIFICATIONS

Ratings (kVA/kW)	277V Single-phase		480/277V Three-phase		
	10 kVA / 7.2 kW	15 kVA / 9 kW	20 kVA / 18 kW*	30 kVA / 24 kW*	30 kVA / 27 kW*
<b>UPS Part Number</b>	K4101300000000	K4151300000000	KB2013100000010	KB3013100000010	KB3013100000010
<b>UL 924 UPS Upgrade Part Number</b>	BH08KEL277-100	BH10KEL277-100	BH20KEL2083P-100	BH30KEL208SF-100	BH30KEL2083P-100
<b>Extended Battery Module Part Number</b>	103004193-5501	103004193-5501	103004868	103004868	103004868
<b>EBM UL 924 Upgrade Part Number</b>	BH-EBM96EL-600	BH-EBM96EL-600	BH-EBC72EL-600	BH-EBC72EL-600	BH-EBC72EL-600
<b># of Extended Battery Modules</b>	2	2	2	2	3
<b>Options Cabinet Part Number</b>	N/A	N/A	KBT004200000010	KBT004200000010	KBT004200000010
<b>Options Cabinet UL 924 Upgrade Part Number</b>	N/A	N/A	BH-KBT004-200	BH-KBT004-200	BH-KBT004-200
<b>Topology</b>	Double-conversion Online UPS				
<b>Operating Frequency</b>	50/60 Hz (45 to 65 Hz)				
<b>Input Power Factor</b>	>0.99 typical, >0.96 frequency converter				
<b>Input Current Distortion</b>	5% THD				
<b>Output Voltage</b>	277 VAC	277 VAC	480/277 VAC	480/277 VAC	480/277 VAC
<b>Input Voltage</b>	277 VAC	277 VAC	480 VAC 3P	480 VAC 3P	480 VAC 3P
<b>Output Voltage Regulation</b>	±1% Static; ±5% dynamic at 100% resistive load change, <1 ms response time				
<b>Actual Runtime (min)</b>	134	120	114	108	90
<b>Overload</b>	150% for 5 sec / 125% for 1 min (online), 110% for 10 min (Normal Operation)				
<b>Communication Ports</b>	(1) RS-232, (1) Relay Contact, (1) REPO, (2) Environmental Input				
<b>Communication Slot</b>	(2) X-Slot communication bays				
<b>Operating Temperature</b>	10°C to + 40°C, +45°C with 7.5% derating; Batteries recommended max. +25°C				
<b>Storage Temperature</b>	-15°C to +25°C				
<b>Relative Humidity</b>	0-95%, non-condensing				
<b>Audible Noise</b>	<53 dBA @ 1 meter, typical				
<b>Altitude</b>	<1000m at +40°C, <3000m at +25°C				
<b>Safety Certifications</b>	UL 924, UL 1778**, NOM-0190SCFI-1993, CSA C22.2, IEC 60950, IEC 62040-1-1, No. 107.3;EN 5502 Class A (CISPR22 Class A)				
<b>EMC Compliance</b>	IEC 62040-2, FCC Part 15, ICES-003, VCCI				
<b>Quality</b>	ISO 9001: 2000 and ISO 14001:1996				
<b>Markings</b>	UL, cUL, CSA, CE and NOM-NYCE				
<b>Dimensions H x W x D (in)***</b>	47.8 x 36.0 x 33.7		66.0 x 80.0 x 34.1	66.0 x 80.0 x 34.1	66.0 x 100.0 x 34.1
<b>Weight (lb)***</b>	1,978	1,978	6,072	6,072	8,132

\* Options Cabinet BH-KBT004-200 required

\*\* 277V models are not UL1778

\*\*\* Dimensions and weights include all battery cabinets and batteries

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