



Type No. _____

Job Name _____

Catalog No. _____



Shown: LLP02422

LLP

Uninterruptible Power Supplies (UPS) for Emergency Lighting Applications 24,000 W Three Phase

Overall Characteristics

- UL 924 listed
- Free standing, NEMA 1 enclosure with hinged door and acid-resistant powder coat finish with top and bottom access for conduit entries.
- 208Y/120 VAC or 480Y/277 VAC, 3 phase, 4 wire plus ground input and output.¹
- 89% typical efficiency.
- Operating temperature range 32°F (0°C) to 104°F (40°C).²
- Internal maintenance by-pass, main input breaker and battery cabinet disconnect breaker are standard.
- Double conversion, no interruption with a standard backup time of 90 minutes.
- Output circuit breakers optional.
- Factory installed batteries.

Application

- Operates incandescent, fluorescent, LED and HID type luminaires.
- Includes factory start up and system check by a certified technician.
- Consult factory for compatibility and performance with non-lighting and switched lighting loads.

Electronics - Inverter

- Transient response < 4%, recovery time one cycle (100% load step).
- 3:1 crest factor capability.
- Inverter output distortion < 4% THD (100% non-linear), inverter output distortion < 1% THD (linear loads).
- Output voltage regulation $\pm 1\%$ of nominal at full load.
- Frequency: 60 Hz.
- Load power factor capability is 0.7 lagging to 0.95 leading.
- Automatic low battery voltage disconnect (LVD).

Electronics - Rectifier

- Input voltage range +15%, -20% of nominal.
- Input power factor corrected to 0.98 or greater (at full load).
- Input current THD < 4% (at full load).
- Voltage regulation $\pm 1\%$ maximum for input voltage and DC variations.
- Ripple voltage < 1% rms float voltage.
- Triple mode battery charger for fast recharge.

Electronics - Static Transfer Switch

- Overload rating 150% for 1 minute.

Metering/Controls

- A multilingual, alphanumeric display provides convenient user operation and access to a real time clock and alarm history with time and date stamp along with system parameter metering: voltage, current, frequency, power, battery time remaining.

Communication Options

- The remote alarm panel (RAP) is housed in a surface or flush mount NEMA 1 enclosure with LED indicators and audible alarm. Provides visual and audible indication of: load on UPS, load on bypass, battery discharging, low battery warning and UPS alarm.
- The IntelliSlot Relay Board (ISRB) is five sets of isolated contacts to provide change of status for: load on UPS, load on battery, low battery warning, load on bypass, and summary alarm.
- The IntelliSlot Web Card (ISWEBLB) provides UPS change of status indication through: SNMP, HTML and network management systems.

Battery

- Maintenance free, sealed lead calcium battery with an expected life up to 10 years, and optimum operating range of 65°F (19°C) to 85°F (30°C).²

Warranty

- If factory start up is conducted within 120 days of shipment, LightGuard will warrant parts and on-site labor for 12 months from date of factory start up.
- If factory start up is not conducted within 120 days of shipment, LightGuard warrants parts for 12 months from date of shipment.
- See LightGuard Limited Warranty for details.

Ordering Information

LLP	024		
SERIES	WATTAGE RATING	INPUT/OUTPUT	OPTIONS
LLP = Three Phase UPS System	024 = 24,000 W	22 = 208Y/120 Input, 208Y/120 Output 42 = 480Y/277 Input, 208Y/120 Output 44 = 480Y/277 Input, 480Y/277 Output	OCB () = Output Circuit Breakers (qty) ³ RAP = Remote Alarm Panel ISRB = IntelliSlot Relay Board ISWEBLB = IntelliSlot Web Card

Note

1) Voltage must be specified when ordering.

2) Increases or decreases in temperature will affect battery performance. Optimum battery performance realized at 77°F (25°C). Batteries are rated at 100% capacity at 77°F (25°C).

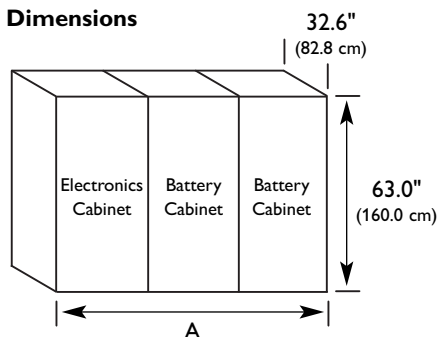
3) Requires separate wall mount enclosure.

System Input/Output

SYSTEM RATING	INPUT VOLTAGE	INPUT AMPS ¹	OUTPUT MAX. LOAD		MAXIMUM HEAT REJECTION
			120 V	277 V	
24,000 W	208Y/120 480Y/277	83 37	120 V	277 V	8,646 Btu/hr
			67 A	29 A	

Note 1) Continuous Duty

Dimensions

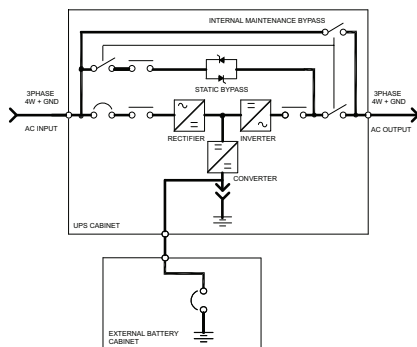


24 kW system	voltage configuration		
	22	42	44
System Width (A)	141.6" (359.7 cm)	168.8" (428.8 cm)	168.8" (428.8 cm)
Electronics Cabinet Weight	621 lbs (282 kg)	1,455 lbs (661 kg)	1,771 lbs (805 kg)
Battery Cabinet Weight (90 min)*	5,800 lbs (3,636 kg)	5,800 lbs (3,636 kg)	5,800 lbs (3,636 kg)
Total System	6,421 lbs (2,918 kg)	7,255 lbs (3,298 kg)	7,571 lbs (3,441 kg)

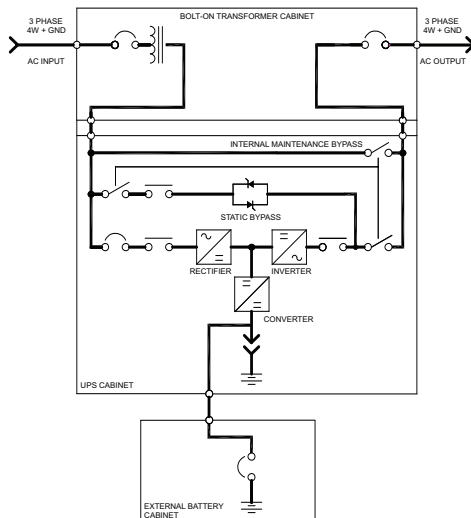
*Net weight of two cabinets with batteries.

System One-Line Diagrams

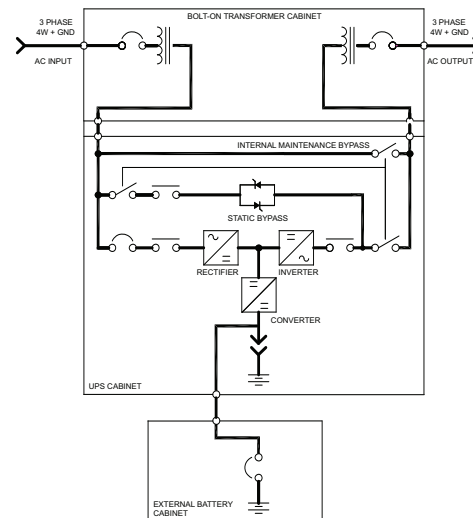
24 kW (22)



24 kW (42)



24 kW (44)



Unit Check List

Catalog No: _____

Rating: 24,000 W/30,000 VA

Battery Type: VRLA

Operating Time: 90 Min.

Input: _____ VAC, Three Phase, 4 Wires plus Ground

Output: _____ VAC, Three Phase, 4 Wires plus Ground

Options: ☐ OCB(##) ☐ RAP ☐ ISRB ☐ ISWECLB

REMARKS: _____

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE