



Lumasource

120VDC Central Single Source Emergency Lighting System

Type: _____

Project/Location: _____

Contractor: _____

Prepared By: _____

Date: _____

Model No.: _____

Time and labour saver only one conduit required!

In an existing or new installation where exit signs and emergency lighting may be supplied by a single 120VDC source using a common negative wire, one normally on positive and one normally off positive. 3 wire output from the system reduces the number of conductors by up to 40%. It also eliminates 50% of the conduit, EMT or BX runs by using a single common conduit for LED exits and emergency lighting remotes.

FEATURES

- Single-source 120VDC supply for both exit and emergency lights
- Reduced number of conductors
- Eliminates 50% of conduit, BX or EMT runs for exit and emergency lighting
- Control and supervision functions on single modular board
- Complete package of full supervisory functions and alarms included in standard unit
- Floor-mount cabinet
- Battery is sealed maintenance free lead calcium
- All Lumasource systems are designed and manufactured in Canada
- CSA and Ontario Hydro approved
- BMEC (Building Materials Evaluation Commission) approved for compliance to the Ontario Building Code
- Overall reduction on power consumption using LED Exit Signs

ENCLOSURES

LUMASOURCE Central Emergency Lighting Systems are available in free-standing cabinet style enclosures.

- Heavy duty, sheet-steel cabinet.
- Cabinets are painted ASA No. 61 grey electrolyte resistant enamel.
- Locking and hinged front door.
- Front access to battery charger for ease of inspection and servicing.

CHARGER CONTROLS

Lumacell®'s solid state fully automatic charger features single module control board design. This feature provides cost effective superior performing equipment, with ease of maintenance and service ability.

DISTRIBUTION OPTIONS

A separate distribution panel is available for all systems. A choice of fuses or circuit breakers is available. Fuse Distribution Panel Select -DPF () for separate distribution fuse panel. Select -DPFF () for separate distribution fuse panel with visual and audible alarm on main console for failure of any fuse.

Note: "()" indicates the number of circuits required.

Circuit Breaker Distribution Panel Specify -DPCB () for separate circuit breaker panel. Specify -DPCAB () for separate circuit breaker panel with visual and audible alarm on main console for tripping or opening of any breaker.



STANDARD FEATURES AND CONTROLS

- LVD at 91% of nominal
- Temperature Compensation
- Ground Fault Alarm (Audible & Visual)
- DC Volt & Ammeter (2% Accuracy)
- AC present LED indicator
- Float level Charge LED indicator
- Equalize level Charge LED indicator
- Charger Failure Alarm
- AC Failure Alarm
- AC Input Breaker
- High Battery Voltage Alarm
- Test Switch
- Remote Monitor Alarm Panel
- Brownout Protection
- Dry Contacts
- BMEC - Ontario Building Materials Evaluation Commission Approved
- SPF - sprinkler-proof cabinet comes with drip shield

OPTIONAL FEATURES CODE

- 15 minutes Time Delay TD
- 3 Phase Sensing 3PH
- 12 Hour Recharge 12HR
- Battery exerciser CYC
- Input battery circuit breaker BCB
- Common Zone sensing ZSC
- Individual Zone sensing ZSI

APPLICATION

New construction or retro-fit, the **LUMASOURCE** utilizes the latest technology and engineering to reduce the cost of emergency lighting installations. The unique 3 wire design allows for the use of just one conduit. With one positive dc normally energized conductor and a common negative conductor the LED exits are supplied constant power. With the same common negative conductor and another positive DC conductor the remote emergency lights are powered on demand. Available in sizes from 4120W to 22520W for 30 minutes. Other runtimes available. Please consult factory.

ELECTRICAL

Input: 120V, 208V, 240V, 277V, 347V, 600VAC 60HZ Single Phase

Output: 120VDC (3 wire (normally on positive, common and normally off positive)).

Systems have been designed for minimum 1/2 hour operation time and are capable of full recharge in 24 hours. For systems rating chart and ordering guide please see next page. Other discharge times are available upon request.

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WARRANTY

The complete system is guaranteed for a period of one (1) year against defects in workmanship and materials. The battery portion of the equipment carries a ten (10) year pro-rata warranty during its useful service life against defects in workmanship and materials. The battery warranty is subject to the provision of normal testing and inspection as specified in the Canadian Electrical Code, Section 46-102, and National Fire Code of Canada. Limit room ambient temperature between 0°C to 35°C (32°F to 95°F). Optimum system performance occurs at 25°C (77°F). A battery service life is defined as the period which the battery could still provide at least 80% of its rated capacity.

APPROVALS

- CSA Certified
- Ontario Hydro: Rule 46-108 (3)

ENCLOSURE DIMENSIONS

SYSTEM SERIES	H X W X D
LS 4120	38" (96.5 cm) x 38" (96.5 cm) x 18" (45.7 cm)
LS 6400-11260	38" (96.5 cm) x 38" (96.5 cm) x 28" (71.1 cm)
LS 13140-22520	56" (142.2 cm) x 38" (96.5 cm) x 28" (71.1 cm)

UNIT RATING

UNI Series batteries: maintenance free, sealed Lead-Calcium. Watts at 91% of nominal voltage.

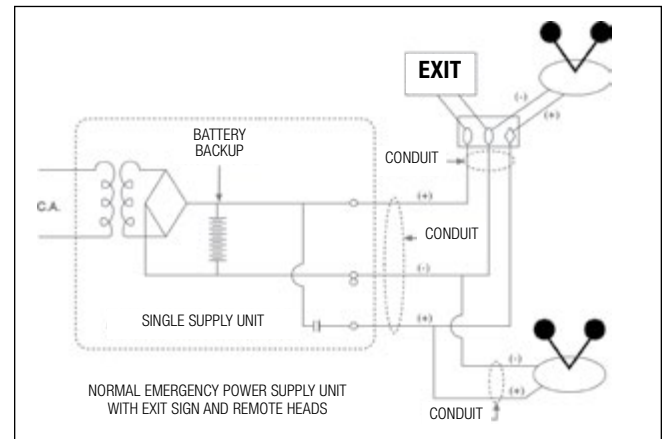
CAPACITY IN WATTS	30 MIN	1H00	1H30	2H00
4120	4120	2450	1790	1440
9390	9390	5590	4080	3290
11260	11260	6700	4890	3940
13140	13140	7820	5710	4600
18780	18780	11180	8160	6580
22520	22520	13480	9780	7880

ORDERING INFORMATION

SYSTEM DESIGNATION	A.C. INPUT VOLTAGE (1 PH)	BATTERY TYPE	CAPACITY IN WATTS	QTY OF EXIT SIGNS	MOUNTING	D.C. OUTPUT VOLTAGE	OPERATING TIME	OPTIONS
LS= Series	120= 120VAC 208= 208VAC 240= 240VAC 277= 277VAC 347= 347VAC 600= 600VAC	SL= sealed Lead-Calcium	_____*	100E= 100 Exit signs	C= console	120= 120VDC	30= 30 minutes 60= 60 minutes 90= 90 minutes 120= 120 minutes	TD= Time delay (15 minutes) 3PH= 3 phase sensing 12HR= 12 hour recharge CYC= Battery exerciser BCB= Battery circuit breaker ZSC= Common zone sensing

EXAMPLE: LS120SL-4120-100EC12030

TYPICAL INTERCONNECTION WIRING DIAGRAM



CAD Drawing illustrates how the LUMASOURCE Series is applied, saving time, material and money. Call your local Lumacell® Representative for further information, or application assistance.

