



LS, LSE & LC Series

6 and 12 Volt Steel

Emergency Lighting Unit

Listed to UL 924 Standard

Sealed Maintenance-Free Batteries

- Lead Calcium (Immobilized Electrolyte)
- Lead Calcium
- Nickel Cadmium
- Long Life Lead



General Information

The **LS** and **LC Series** is offered where an attractive conventional emergency lighting unit is required. The series offers a wide selection of battery capacities for use when large numbers of remote fixtures are desired.

Each unit is self-contained and furnished standard with a fully automatic charger and sealed relay, sealed maintenance-free battery, dual voltage transformer, low voltage battery disconnect, lockout, brownout, test switch, LED pilot light supervision and highly efficient emergency lights.

Standard Features

Reliability

The **LS** and **LC Series** carry a 3-year full warranty. Each unit is fully computer tested.

Unit Data

Housing: All steel construction with an off-white, baked enamel finish. Removable front panel. Light Source: Standard with two off-white EF-18 heads with a 9 watt High Intensity Incandescent lamp per head.

PulsePlus Charger

PulsePlus Circuitry offers 120/277 volt input standard, fused output circuits, diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lockout (Automatic Battery Connect).

Self-Diagnostic Models (Optional)

Advanced Diagnostics (audible and non-audible versions)

Our Advanced Diagnostic circuitry was designed to continuously monitor every critical function of the unit, attached, remote lighting heads and exit signs. Operational status is indicated by colored LED lamps. A high-pitch audible alarm is selected and an LED status indicator alert maintenance personnel to a unit malfunction. This option saves the time spent on testing and trouble shooting by maintenance personnel. This new generation of Emergi-Lite diagnostics is perfect for any application.

The self test will test the unit for a minimum 30 seconds every 30 days, 30 minutes every six months and 90 minutes annually.

Electrical

Power Requirements: 120/277 Vac, 60 Hz., 0.3/0.15 A (other inputs available) Output: 6 or 12 volt, fused output circuit.

Transfer: dust-tight, sealed relay automatically and instantly energizes lamp load upon failure of AC supply. **LVD:** low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when battery reaches 87-1/2% discharge, preventing deep discharge and permanent damage to the battery. **Lockout:** labor saving electronic circuit automatically connects battery when AC circuit is activated. **Brownout:** close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. **Charger:** the PulsePlus charging circuit utilizes an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger is current limited, temperature compensated, short-circuit proof and reverse polarity protected. The equipment is capable of full recharge in compliance with Underwriters Laboratories 924 specifications. **Transformer:** 120/277 volt. **Controls:** test switch, long-life LED pilot indicator lights.

Optional Features

Description	Add Prefix
Black .....	..B
Chicago .....	..CC
Description	Add Suffix
Advanced diagnostics (Lead-Calcium only) .....	..AD
Advanced diagnostics, non-audible .....	..ADNA
Ammeter or voltmeter (A cabinet units, choose only one) ..	..A* or ..V*
Lamp disconnect switch .....	..K
Time delay (specify 5, 10 or 15 minutes) .....	..D1, D2, D3**
Cord set - 120 Volt .....	..C***
Special-voltage CP (specify plug type) .....	..E***
EF9 lamp heads (2 9-watt heads) .....	..9
EF10 lamp heads .....	..10
EF150 decorative heads (white) .....	..150

*Not available with diagnostics options **Not required with the AD/ADNA option.

***Standard 15 minutes with AD/ADNA option.

***Standard cord is 3 ft. custom lengths available.

NOTE: Certain option combinations may affect the listing.

Please contact the factory for specifics.

Accessories (order as a separate item)

Mounting bracket (cabinet A) .....	..B1
Mounting bracket (cabinet B) .....	..B2
Mounting shelves (cabinet B) .....	..MP3
Mounting shelves (cabinet C) .....	..MP6
Mounting shelves (cabinet D) .....	..MP12
Wire Guard (cabinet A) .....	..WG2-E
Wire Guard (cabinet B & cabinet C) .....	..WG3-E
Wire Guard (cabinet D) .....	..WG4-E

Suggested Specification

Supply and install EMERGI-LITE Series **LSC** _____, **LSE** _____, **LSM** _____ or **LC** _____ in 6 or 12 volt, single or double heads, with electrically compatible remote fixtures or exit signs as indicated on the plans.

The emergency lighting unit shall be an architecturally designed, self-contained fixture including sealed, maintenance-free battery. TYPE LSC to be supplied with Long Life Nickel-Cadmium battery. TYPE LSE to be supplied with Long Life Pure Lead battery. TYPE LSM to be supplied with Lead Calcium battery. TYPE LC to be supplied with Lead Calcium (Immobilized Electrolyte) battery.

The unit shall supply the rated load for a minimum of 90 minutes or to 871/2% of rated battery voltage. The unit shall be rated 120/277Vac, 60 Hz and be UL924 listed.

The unit charger shall utilize an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery disconnect circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 871/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dust-tight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The cabinet shall be constructed of steel (see dimension chart for gauge) in off-white baked enamel color. A removable front panel shall be furnished to provide full access for ease of installation and servicing. A and B cabinet units shall have a universal mounting cluster. All cabinets shall be furnished with 1/2" conduit knock-out, rear keyhole mounting slots (bracket or shelf available as an option) and provisions for mounting up to 3 heads on cabinet. Unit will be furnished with two EF18 lighting heads constructed of impact resistant, flame retardant thermoplastic material complete with 9 watt high intensity incandescent lamps. Fused output terminals shall be provided for ease of remote lamp connection. Every **LS** and **LC Series** unit shall be fully warranted for three years, subject to proper installation and maintenance.

Unit shall be EMERGI-LITE catalog number _____.

*Unit Warranty

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

*Battery Warranty

Unit batteries are warranted as follows:

Sealed Nickel Cadmium: 12LSC – 10year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Long Life Lead: 12LSE – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium (Free Electrolyte): 12LC – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium: 12LSM – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenance.

How To Order

For standard units without options only order Series, Battery, Watts, Heads.

Example: LSE18-2IA-V

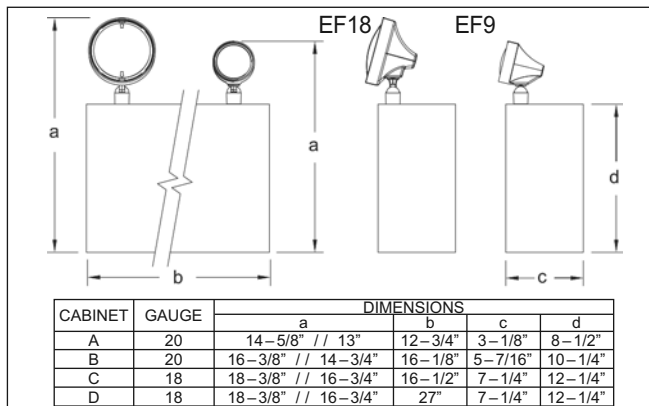
Options are added to units by listing suffix at end of model #

Series	Battery Type	Watts for 90 min.	Heads on unit	Lamp Option*	Option
LS	C= Nickel-Cadmium	18	2= 2 heads	IA= 6V 9W HIT	V= Voltmeter
	E= Long Life Lead	36			
	M= Lead Calcium	*See Unit Rating Chart for other options.			
				*See lamp data sheet for other lamp wattages.	

Includes Standard Lamp

Outline and Dimensions

Dimensions are approximate and subject to change.



Unit Rating Chart

Furnished standard with two 9 watt High Intensity Incandescent lamps.

UNIT EQUIPMENT - NO REMOTE CAPABILITY										
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	*Watts to 871/2% of rated battery voltage				# of Load Fuses	Cab. Size		
			1 1/2 hrs.	2 hrs.	3 hrs.	4 hrs.				
Nickel-Cadmium	Δ	6	LSC18-2	18	12	9	6	1	A	
Long Life Lead	Δ	6	LSE18-2	18	11	8	6	1	A	
Lead-Calcium	Δ	6	LSM18-2	18	12	10	7	1	A	
UNIT EQUIPMENT - WITH REMOTE CAPABILITY										
Nickel-Cadmium	Δ	6	LSC25-2	25	18	9	-	1	A	
			12	12LSC36-2	36	21	15	12	1	A
			12	12LSC50-2	50	36	25	18	1	A
Lead Calcium (Immobilized Electrolyte)	Δ	6	LC87-2	87	70	41	24	2	B	
			6	LC100-2	100	77	47	24	2	C
			6	LC175-2	175	140	82	48	2	C
Lead-Calcium	Δ	6	LSM27-2	27	18	10	6	1	A	
			6	LSM36-2	36	25	14	7	1	A
			6	LSM54-2	54	37	21	12	1	A
			6	LSM81-2	81	54	36	18	2	B
			6	LSM110-2	110	72	40	24	2	B
			6	LSM162-2	162	108	60	36	2	C
			6	LSM200-2	200	144	80	48	2	C
			12	12LSM36-2	36	25	14	7	1	A
			12	12LSM54-2	54	37	21	12	1	A
			12	12LSM110-2	110	72	40	24	2	B
			12	12LSM162-2	162	108	60	36	2	C
			12	12LSM220-2	220	144	80	48	2	C
Long Life Lead	Δ	6	LSE27-2	27	19	10	5	1	A	
			6	LSE36-2	36	24	13	7	1	A
			6	LSE54-2	54	36	20	11	1	A
			6	LSE80-2	80	65	35	19	2	B
			6	LSE110-2	110	74	43	21	2	B
			6	LSE160-2	160	130	70	38	2	C
			12	12LSE36-2	36	24	13	7	1	A
			12	12LSE54-2	54	37	21	10	2	A
			12	12LSE72-2	72	48	26	14	2	B
			12	12LSE110-2	110	74	43	21	2	B
			12	12LSE160-2	160	130	70	38	2	C
			Lead Calcium (Immobilized electrolyte)	Δ	12	12LC150-2	150	120	66	36	2	C
12	12LC175-2	175				140	85	48	2	C
12	12LC200-2	200				168	96	48	2	C
12	12LC300-2	300				240	132	72	2	D
12	12LC350-2	350				280	170	96	2	C
12	12LC400-2	400				336	192	95	2	D

*National Electrical Code Specification

□ = New York City Approved when using the -NYC option
 Δ = Advanced Diagnostics Available

EMERGI-LITE

www.emergi-lite.com

Thomas & Betts

LS, LSE & LC Series

How To Order - Full Version

Example: LSE18-2IA-V

For standard units without options only order Series, Battery, Watts, Heads.

Options are added to units by listing suffix at end of model #

Series	Volt/Capacity/Batt Type	# of heads	Lamp Head Style	Lamp Wattage	Option	A.C. Voltage
LS	C18= 6V - 18W Nicad C25= 6V - 25W Nicad E18= 6V - 18W Pure Lead E27= 6V - 27W Pure Lead E36= 6V - 36W Pure Lead E50= 6V - 50W Pure Lead E80= 6V - 80W Pure Lead E110= 6V - 110W Pure Lead E160= 6V - 160W Pure Lead M18= 6V - 18W Lead Acide M27= 6V - 27W Lead Acide M36= 6V - 36W Lead Acide M54= 6V - 54W Lead Acide M81= 6V - 81W Lead Acide M110= 6V - 110W Lead Acide M162= 6V - 162W Lead Acide M200= 6V - 200W Lead Acide	Blank= No head -1= 1 head -2= 2 heads -3= 3 heads	Blank= EF18 (par 36 plastic) 28= EF28 (par 36 Metal) 9= EF9 mini plastic 10= EF10 Mini plastic MR16 32= EF32 Cylinder lamp heads 150= EF150 MR16 lamp heads	(HA to HZ)= Halogen Bi-pin (IA to IZ)= Inc. DC-Bayonet (UA to UZ)**= Inc. Sld-Beam (XA to XZ)** = Halogen Sld-Beam (ZA to ZZ)= Inc. Wedge (MA to MZ)* = Halogen MR16	Blank= no option -A= ampmeter -AD= advanced diagnostics -ADNA= diagnostics Non-audible -CBKT= inverted pendant mounting -CW= cold weather -CP= cord and Plug 120V -FM= Front Mounted lampheads -PPD= Pulse plus diagnostic -TD**= Time delay circuit -V= Voltmeter -XP= Flexible cord with 120 or 277 Vac plug -KDS= Customer Special Identification -DSC= COSTCO "I" Beam mounting -CBKT= COSTCO Inverted pendant mounting -NYC= New York City Sld beam 12W lamps	-Blank= 120/277V ac input -1= 120V ac input -2= 277V ac input -3= 347V ac input (CSA only)
	12LS	C36= 12V - 36W Nicad C50= 12V - 50W Nicad E36= 12V - 36W Pure Lead E54= 12V - 54W Pure Lead E72= 12V - 72W Pure Lead E110= 12V - 110W Pure Lead E160= 12V - 160W Pure Lead E320= 12V - 320W Pure Lead M36= 12V - 36W Lead Acide M54= 12V - 54W Lead Acide M105= 12V - 105W Lead Acide M110= 12V - 110W Lead Acide M162= 12V - 162W Lead Acide M220= 12V - 220W Lead Acide		NOTE: See remote fixture section for max wattage available	* Available with EFL3 & DR130 only ** Available with EFL645 Only NOTE: See lamp data sheet for voltage/wattage details	** Available with AD or ADNA option