



Shown with ELF3 heads and LED Lamps



## MC SERIES

**Steel Housing**  
**6V up to 36W & 12V up to 50W Capacities**  
**Lead-Calcium or Nickel-Cadmium battery**

### FEATURES

#### Housing

- 20 gauge steel housing with hinged front access panel
- Corrosion-resistant baked enamel mist white finish standard, black optional
- Provision for mounting up to 2 lighting heads
- Various choices of lighting head styles and lamp types

#### Mounting

- Ceiling or Wall Mount
- 1/2" conduit knock-outs, rear keyhole slots and universal knock-outs to mount to any standard 4" junction box

#### Electronics

- Automatic, temperature compensated, pulse-type charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection is provided
- Battery lock-out prevents battery discharge during installation
- Fused output circuit

#### Improved Diagnostics option

- Units equipped with Improved Diagnostics shall self-test, by simulating a power failure, in accordance with NFPA101, Life Safety Code one minute monthly, 30 minutes every six months and 90 minutes annually. For complete information refer to page 8.

#### NEXUS® option

- Units equipped with NEXUS® self-testing monitoring system circuitry shall self-test, in accordance with NFPA101 Life Safety Code for a minimum of 30 seconds monthly, 30 minutes every six months and 90 minutes annually as well as keep a history of all testing logs, plus feature real-time diagnoses, and provide the exact fixture location while notifying service personnel of the status of the fixture via email. For complete information refer to page 4-5.

#### Controls

- Red charger monitor LED indicates charging of the battery
- Amber AC-ON LED indicates AC power is on
- Momentary test switch allows for quick operational check of entire system

#### Choice of Sealed Maintenance-Free Battery

- 6V or 12V Lead-Calcium battery
- 6V or 12V volt, Nickel-Cadmium battery

#### Approvals

- UL 924 Standard

#### Warranty (subject to proper installation and maintenance)

- Unit has a three year full warranty (excluding lamps and fuses)<sup>1</sup>
- Lead-Calcium battery has a three year full, plus three year pro-rata warranty
- Nickel-Cadmium battery has a five year full, plus five year pro-rata warranty

<sup>1</sup> For LED lamps warranty, refer to page 168 paragraph 3.2

### HEAD STYLE WITH LAMP TYPE CHOICES

LAMP TYPE	HEAD STYLE				
	ELF645 (pg.134)	ELF2 (pg.129)	ELF3 (pg.130)	DR1130 (pg.128)	ELF623 (pg.132)
Wedge Based Incandescent	X	X			X
BI-Pin Halogen	X	X			X
PAR36 Sealed Beam Incand.	X				
PAR36 Sealed Beam Halogen	X				
MR16 Halogen			X	X	
MR16 LED			X	X	

### SPECIFICATIONS

Supply and install Lightalarms® MC Series.

The emergency lighting unit shall be a self-contained fixture including a sealed maintenance-free Lead-Calcium or Nickel-Cadmium battery of 6V or 12V, of wattage as specified on the unit rating chart. The unit shall supply the rated wattage load for a minimum of 90 minutes to 87-1/2% of rated battery voltage.

The unit shall be rated 120/277VAC, 60Hz and be UL 924 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 protection circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 87-1/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL 924 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 20 gauge steel with a front hinged panel. Unit shall have 1/2" conduit knock-outs, rear keyhole slots and universal knock-outs to mount to any standard 4" junction box with provision for mounting up to 2 heads on top of cabinet.

Units specified with Improved Diagnostics (audible or non-audible) will continuously monitor every critical function of the unit, attached remote lighting heads and/or attached AC/DC Exit Signs. Operational status of the battery, charger and lamps are indicated by individual LED status indicators. Once a malfunction is detected, if audible, a high-pitch audible alarm will sound, and the appropriate LED status indicator will illuminate alerting of the unit malfunction. If non-audible, only LED status indicator illuminate alerting of the unit malfunction. The microcontroller shall automatic self-test, by simulating a power failure in accordance with NFPA101 Life Safety Code for one minute monthly, 30 minutes every six months and 90 minutes annually

Every MC Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

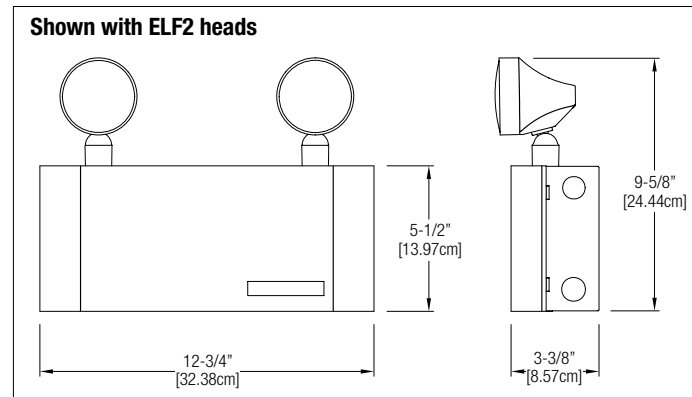
Unit shall be Lightalarms® catalog number \_\_\_\_\_.

### ACCESSORIES (Order as a separate item)

Wire Guard (ELF2, ELF3 and DR1130 Heads)	<b>WG1</b>
Wire Guard (ELF623 and ELF645 Heads)	<b>WG2</b>

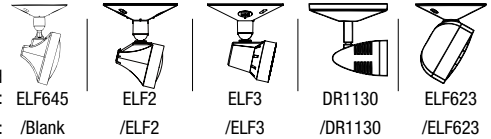
### DIMENSIONS

Dimensions are approximate and subject to change.



TYPE \_\_\_\_\_  
 CATALOG # \_\_\_\_\_  
 \_\_\_\_\_  
 NOTES \_\_\_\_\_  
 \_\_\_\_\_

Incorporates maximum versatility in head style and lamp choices with performance, ease of installation, all into a compact unit



Available Head Style Choices: ELF645    ELF2    ELF3    DR1130    ELF623  
 Head Style Suffix: /Blank    /ELF2    /ELF3    /DR1130    /ELF623

**POWER CONSUMPTION / UNIT RATING CHART**

SERIES	BATTERY TYPE	DC VOLTAGE	87.5% BATTERY CAPACITY (IN WATTS) <sup>1</sup>				AC SPECS		
			90 MIN.	2 HRS.	3 HRS.	4 HRS.	UNITS DUAL VOLTAGE <sup>2</sup>	CURRENT MAXIMUM	POWER MAXIMUM
MCG	Lead-Calcium	6V	18	12	0	0	120VAC 277VAC	.2A .08A	24W
MCG1		6V	20	15	12	0			
MCG2		6V	27	18	15	9			
MCG3		6V	30	20	18	10			
MCG4		6V	36	27	20	12			
MCG5		6V	40	30	24	15			
MC12G1	Nickel-Cadmium	12V	36	27	20	12	120/277VAC	.10A .22A	30W
MCN1		6V	20	18	12	0	120/277VAC	.2A/.08A	24W
MC12N1		12V	36	24	15	12	120VAC	.24A	30W
MC12N2		12V	50	36	24	18	277VAC	.12A	

<sup>1</sup> National Electrical Code Specification  
<sup>2</sup> All units 120/277 dual voltage, information based on wiring to specific voltage type

**ORDERING FORMAT**

# OF HEADS	SERIES/CAPACITY	HEAD STYLE	LAMP TYPE	HOUSING COLOR	OPTIONS
0= No Heads 1= One Head 2= Two Heads	<b>Lead-Calcium battery</b> MCG= 6V-18W MCG1= 6V-20W MCG2= 6V-27W MCG3= 6V-30W MCG4= 6V-36W MCG5= 6V-40W <sup>1</sup> MC12G1= 12V-36W  <b>Nickel-Cadmium battery<sup>1,2</sup></b> MCN1= 6V-20W <sup>1</sup> MC12N1= 12V-36W <sup>1</sup> MC12N2= 12V-50W <sup>1</sup>	/Blank= ELF645 (PAR36, Plastic) /ELF2= ELF2 (PAR18, Plastic) /ELF3= ELF3 (MR16, Plastic) /DR1130= DR1130 (MR16, Metal) /ELF623= ELF623 (Square, Plastic)	<b>Add lamp suffix to indicate lamp type, voltage and wattage.</b>  For available Lamp Types within a specified Head Style, refer to that Head Style page for proper lamp suffix with <b>Blank (ELF645)</b> , page 108 with <b>ELF2</b> , page 105 with <b>ELF3</b> , page 106 with <b>DR1130</b> , page 104 with <b>ELF623</b> , page 107  <b>Lamp Type MUST:</b> 1) Match Battery Voltage 2) Total of all lamps wattage must not exceed battery watt capacity for 90 min.	-M= Mist White -B= Black	<b>Blank= No Options</b> -ID= Improved Diagnostics (audible) <sup>1</sup> -IDNA= Improved Diagnostics (non audible) <sup>1</sup> -NEX= Nexus® Wired Compatible <sup>2</sup> -NEXRF= Nexus® Wireless Compatible <sup>2</sup> -T1= Time Delay (5 minute) -T2= Time Delay (10 minute) -T3= Time Delay (15 minute) -DS= Lamp Disconnect Switch -VS= Vandal-Resistant Screws -FM= Front Mounted heads -3CP= 120V Cord & Plug, 3 wire, 3ft long <sup>3</sup>  <sup>1</sup> -ID & -IDNA include a time delay feature that can be enabled/disabled in the field or set by the factory by including -ID-TD* or -IDNA-TD* <sup>2</sup> Consult your sales representative <sup>3</sup> -3CP custom lengths available. Consult your sales representative

EXAMPLE: 2MCG4/ELF3-M6-M-ID