

Type No. \_\_\_\_\_  
 Job Name \_\_\_\_\_  
 Catalog No. \_\_\_\_\_



Shown: F1002H126B0TAL



### Housing

- Steel 20 gauge housing and 18 gauge hinged cover with hammertone gray epoxy powder coat finish
- Heavy duty top mounted handle for easy transport up ladders
- LightGuard's mounting plate (MBF option) is recommended for mounting

### Electronics

- 120/277 VAC dual voltage input capability
- LightGuard's high performance, temperature compensated, solid-state charger restores battery to full charge within 12 hours
- Brownout protection activates lights when AC voltage drops 20% below nominal
- Labor saving AC lockout feature
- Low voltage disconnect prevents deep battery discharge
- Controls include integral Ready/Standby switch; "Press-to-Test" switch; Voltmeter; AC "On" and Fast Charge Rate indicator lights

### Electrical Specifications

120 VAC - 0.38 amps, 45 watts  
 277 VAC - 0.16 amps, 45 watts

### Code Compliance

- UL 924 listed
- NFPA 101, NEC, BOCA, OSHA, and IBC illumination standards
- F100 with two H126B lamp heads meets NRC requirements for an eight-hour run time

### Warranty

Electronics: 3 years  
 LEC-361: 5 years full, 10 years pro-rata  
 LC-310: 3 years full, 7 years pro-rata

### Application

- Industrial locations where a high capacity unit is required and where remote fixture capability is desired
- Remote test option enables unit operation testing up to 20 feet away with an ordinary flashlight or laser pointer

# F100/F85

LEC-361 or LC-310 Powered Industrial Duty Emergency

6 Volt, 87 or 85 Watt Capacity

Heavy Industrial, Sealed Lead Calcium Batteries

### Batteries

#### LEC-361 (used with F100)

- Extra long-life, heavy industrial grade, sealed lead calcium battery
- 6 volt, 36 ampere hour (AH) minimum capacity
- Cell design protects against deep discharge and requires no addition of water
- Low specific gravity 1.25 ( $\pm$ .10) reduces corrosion rates and lowers electrode sulphation
- Expected life up to 20 years
- Optimum operating range of 65°F (19°C) to 90°F (32°C)

#### LC-310 (used with F85)

- Extra long-life, industrial grade, sealed lead calcium battery
- 6 volt, 36 ampere hour (AH) capacity
- Immobilized electrolyte design
- Operates at low internal pressure
- Low self-discharge rate
- Expected life up to 10 years
- Optimum operating range of 65°F (19°C) to 90°F (32°C)\*\*

Increases or decreases in temperature will affect battery performance and/or capacity. Optimum battery performance realized at 77°F (25°C).

### Self-Diagnostics (optional)

- OmniTest Self-Diagnostics option includes automatic and manual tests to ensure unit is operating properly, and assists user in meeting code requirements.
- Verifies battery voltage and lamp continuity every 10 seconds.
- Illuminates lamps and discharges battery for 3 minutes every 30 days. A manual test is available from 1 to 90 minutes

### Operation

Model	Suggested Lamp Head	AC Input		DC Voltage	Watts to 87½ of Rated Voltage++			
		Voltage	Wattage+		1½ hrs.	2 hrs.	4 hrs.	8 hrs.
F100	H126B	120/277	45	6	87	65	42	24
F85	H126B	120/277	45	6	85	65	28	14

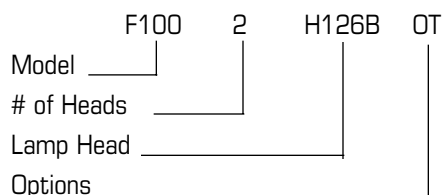
+ Based on high rate charge after power loss

++ Per NEC Specifications

## Ordering Information

MODEL	# OF HEADS	LAMP HEAD TYPE	OPTIONS <sup>1</sup>	ACCESSORIES (Ordered Separately)
<b>F100</b> = 6 Volt, 87 Watt Unit <b>F85</b> = 6 Volt, 85 Watt Unit	<b>3</b> = Three <b>2</b> = Two <b>1</b> = One <b>blank</b> = No lamp heads	See lamp head selection chart below -- for additional heads	<b>EX</b> = Special Input Transformer (Specify voltage & frequency) <b>OT</b> = OmniTest Self-Diagnostics <b>OTAL</b> = OmniTest with Alarm <b>OTTD</b> = OmniTest with Time Delay <sup>2</sup> <b>RT</b> = Remote Test <sup>2</sup> <b>TD1</b> = 120 VAC Time Delay <sup>2</sup> <b>TD2</b> = 277 VAC Time Delay <sup>2</sup>	<b>MBF</b> = Mounting Plate for Side Stud <b>WG9</b> = Wire Guard <b>URT612</b> = Universal Remote Test (URT) <sup>2</sup> <b>PVS</b> = Polycarbonate Vandal Shield  <b>NOTES:</b> 1) Some option combinations may impact UL listing. Consult factory for specifics. 2) 15 minute delay.

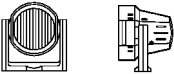
## Ordering Example



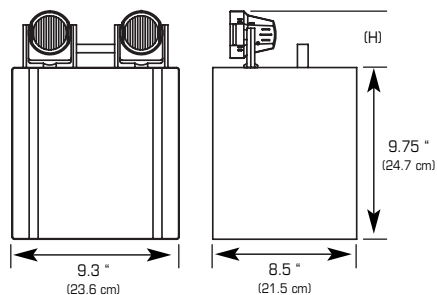
## Lamp Head Selection

LightGuard's H-Head is the suggested head for the F100 and F85. The H-Head is constructed of high impact polycarbonate, and is offered in black to complement the unit's gray housing. The H-Head features dual-axis swivel mount and is available with 6 volt halogen lamps. Two H126B lamp heads mounted on the F100 meets NRC requirements for an eight-hour run time.

LightGuard offers many other lamp heads that can be used with the F100 and F85. For lamp head details, please refer to the Accessories section of the LightGuard specification binder.

HEAD TYPE	DC VOLTAGE	DC WATTAGE	ORDER CODE
H-Head, Thermoplastic 	6 VOLT HALOGEN	7 watt 12 watt	<b>H76B</b> <b>H126B</b>

## Dimensions



LAMP HEAD	HEIGHT (H)	MODEL	WEIGHT
H	3.5" (8.9 cm)	F100	42 lbs. (19.1 kg)
X or Z	6.25" (15.9 cm)	F85	30 lbs. (13.6 kg)
PRL(H)	6.25" (15.9 cm)		

Dimensions are approximate and subject to change.

## Suggested Specification

Furnish and install LightGuard emergency lighting model \_\_\_\_\_. The unit shall be listed to Underwriters Laboratories, Inc. Standard #924 and shall meet the standards of the National Electrical Code (NEC).

**INSTALLATION /OPERATION** - Unit shall be easily field connected to a 120 or 277 volt, 60 hertz, unswitched power source. Installation must comply with the NEC Code as well as other applicable codes. Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within 12 hours following a rated discharge of not more than 90 minutes.

**CHARGER** - The charger shall be solid-state, SCR controlled, full wave and current limited, and shall utilize a pulse current charge to extend battery life. It shall include temperature compensation for temperature variations from 77°F. Components shall operate at less than 50% of their rating to ensure reliability and long life. The charger shall maintain the battery at full capacity without the need for periodic exercising or equalizing. The following features shall be standard: Low Voltage Disconnect; Brownout Protection; AC Lockout.

**BATTERY (LEC-361)** - The battery shall be Lightguard's LEC-361 (F100 model) battery, and shall be capable of a 32.4 watt discharge at 10 hours, with a minimum AH rating of 36 AH. The LEC-361 battery shall be a completely sealed, extra long-life, lead calcium type with plates constructed of calcium tin alloy lead grids. The LEC-361 battery shall never need addition of water or electrolyte, and shall operate completely unattended for up to 20 years. The battery shall consist of three cells for a total of six volts with a specific gravity of 1.25 (±.10) at 77°F at the eight-hour rate to a final voltage of 1.75 per cell. The battery casing shall be constructed of polycarbonate with a permanently sealed cover and self-sealing vents to permit the escape of undue pressure build-up. The plates shall be constructed of calcium tin alloy grids and separated by microporous rubber, which enables the electrolyte to circulate freely during charging and discharging. The battery shall be warranted for 15 years (5 full, 10 prorated) with a written, full disclosure warranty.

**HOUSING** - The cabinet shall be constructed of 20 gauge steel and the door shall be constructed of 18 gauge steel with hammertone gray epoxy powder coat finish. The door shall include a hinged access and two view ports for quick battery inspection.

**SELF-DIAGNOSTICS (optional)** - The unit shall include OmniTest self-diagnostics. OmniTest shall conduct the following automatic tests: battery voltage and lamp continuity every 10 seconds, a 3 minute battery discharge and lamp illumination test every 30 days, and a 30 minute battery discharge and lamp illumination test every 6 months. OmniTest shall also conduct the following manual tests: three minute, 30 minute and 90 minute battery discharge and lamp illumination tests and optional audible alarm test.

**CONTROLS** - The unit shall include a "Press-to-Test" switch, AC "On" and Fast Charge Rate indicator lights.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



272 West Stag Park Service Road • Burgaw, NC 28425  
 (910) 259-1131 • FAX (800) 403-6927  
 www.lightguard.com

L2034R16  
 5/09 IH