

Type No. _____
 Job Name _____
 Catalog No. _____



A DIVISION OF **CONDUIT THOMAS** GROUP, LLC

F100/F85



Shown: F1002H126BOTAL



Listed to 924

○ **LEC-361 or LC-310 Powered Industrial Duty Emergency**

○ **6 Volt, 87 or 85 Watt Capacity**

○ **Heavy Industrial, Sealed Lead Calcium Batteries by Lightguard**

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 (±.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).

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

Power Consumption

120 VAC - 0.22 amps, 45 watts
 277 VAC - 0.16 amps, 45 watts

Code Compliance

- UL 924 listed
- NFPA 101
- NEC, BOCA and OSHA illumination standard
- 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

Self-Diagnostics (optional)

- OnmiTest 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

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

Operation

Model	Suggested Lamp Head	AC Input		DC Voltage	Watts to 87% 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

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Ordering Information

MODEL	# OF HEADS	LAMP HEAD TYPE	OPTIONS ¹
F100 = 6 Volt, 87 Watt Unit F85 = 6 Volt, 85 Watt Unit	3 = Three 2 = Two 1 = One blank = No lamp heads	See lamp head selection chart below -- for additional heads	EX = Special Input Transformer (Specify voltage & frequency) LC = Line Cord (6', 120 VAC field installed) OT = OmniTest Self-Diagnostics OTAL = OmniTest with Alarm OTTD = OmniTest with Time Delay ³ RT = Remote Test ² TD1 = 120 VAC Time Delay ^{2, 3} TD2 = 277 VAC Time Delay ^{2, 3}

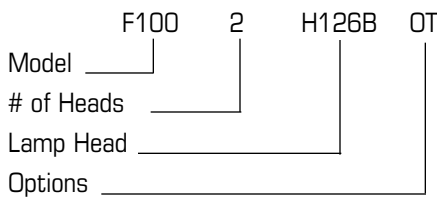
ACCESSORIES (Ordered Separately)

MBF = Mounting Plate for Side Stud
WG9 = Wire Guard
URT612 = Universal Remote Test (URT) ²

NOTES:

- 1) Some option combinations may impact UL listing. Consult factory for specifics.
- 2) Not available with OT, OTAL, or OTTD options.
- 3) 15 minute delay.

Ordering Example

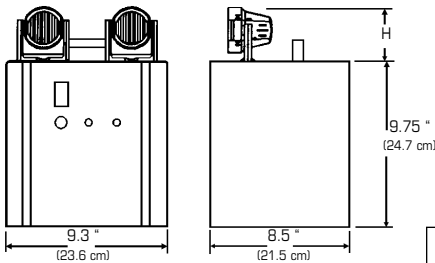


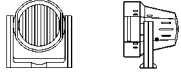
Lamp Head Selection

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.

Dimensions



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

Model	Weight
F100	42 lbs. (19.1 kg)
F85	30 lbs. (13.6 kg)

Lamp Head	Height (H)
H	3.5" (8.9 cm)
X or Z	6.25" (15.9 cm)
PRL(H)	6.25" (15.9 cm)

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

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