CHLORIDE SYSTEMS
A DIVISION OF GENLYTE THOMAS GROUP LLC

TYPE: _____

CATALOG NO.: _____

Steel-Lite Series

Class I, Division 2 Emergency Lighting Units

6 and 12 Volt, 25 to 125 Watts

Lead Calcium, Nickel Cadmium or Pure Lead Battery

General Description

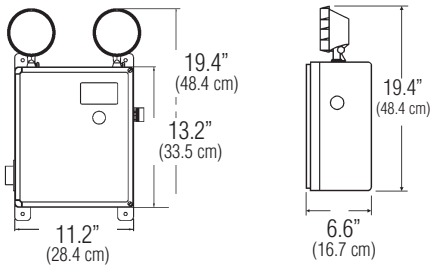
The Steel-Lite Series is ideal for use in hazardous locations where explosive materials may be present. The Steel-Lite Series is suitable for use in Class I, Division 2, Groups A, B, C & D, Zone 2, Groups IIA, IIB + H_2 & IIC.

Illumination

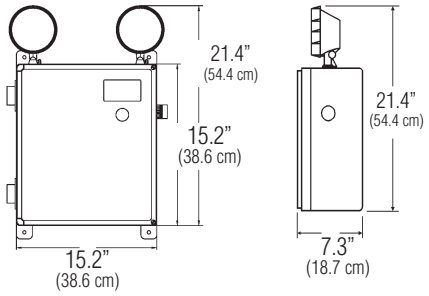
Illumination is accomplished with lamp heads mounted on the top of the unit. The Class I, Div. 2 rated "Z" Series lamp head is available in a variety of wattages, and is constructed of gray polycarbonate to match the Steel-Lite Series' housing.

Dimensions

25 Watt to 75 Watt Units



100 Watt to 125 Watt Unit



Housing

Constructed of impact resistant, fiberglass reinforced polyester. Housing color is gray and includes stainless steel hardware.

Housing is suitable for use NEMA 3, 4x, and 12 areas, and in Class I, Division 2, Groups A, B, C & D, Zone 2, Groups IIA, IIB + H_2 & IIC areas.

View-through window allows easy monitoring of AC indicator and optional voltmeter and ammeter.

Available with Class I, Div. 2 rated polycarbonate sealed beam Par 36 tungsten or halogen lamp heads. Optional shatter-resistant shield for lamp heads is available.

Electronics

120/277 VAC dual voltage input with surge-protected, solid-state circuitry provides for a reliable charging system. Select units are available with an optional high performance, temperature compensated charger that restores the battery to a full charge within UL 924 requirements.

Charging system is complete with low voltage disconnect, AC lockout, brownout protection, AC indicator lamp and test switch.

Optional ACCU-TEST Self Diagnostics includes an automatic 3 minute discharge test every 30 days. A manual test is available from 1 to 90 minutes.

Battery

Maintenance free, sealed lead calcium or pure lead battery has an estimated service life of 5 years, and an operating temperature range of 65°F (19°C) to 85°F (30°C)

Maintenance free, sealed nickel cadmium battery has an estimated service life of 10 years, and an operating temperature range of 20°F (-7°C) to 95°F (35°C)

Batteries supply 90 minutes of emergency power

SHOWN: STC50ZE2

Code Compliance

UL 924 listed, select units additionally listed to UL 844 and 1604.

Nickel cadmium units additionally UL listed for Class II, Division 2, Groups F & G applications.

NFPA 101

NEC, BOCA and OSHA illumination standard

Performance

Input power requirements
120 VAC - 0.58 amps max., 65 watts max.
277 VAC - 0.27 amps max., 68 watts max.

Warranty

Three year full electronics warranty

One year full plus four year prorated lead calcium and pure lead battery warranty

Five year full plus five year prorated nickel cadmium battery warranty

Ordering Information

STC50	ZE	2	—	TD1
SERIES/ BATTERY	LAMP HEADS	# OF HEADS		FACTORY INSTALLED OPTIONS [1]

SERIES/ BATTERY

6 Volt, Lead Calcium
SC25 = 25 Watt Unit [3]
SC50 = 50 Watt Unit [3]
SC100 = 100 Watt Unit [2]
SC125 = 125 Watt Unit [2]

6 Volt, Nickel Cadmium
SN25 = 25 Watt Unit [3, 4]
SN50 = 50 Watt Unit [3, 4]

6 Volt, Pure Lead
SL60 = 60 Watt Unit

12 Volt,Lead Calcium
STC25 = 25 Watt Unit [3]
STC50 = 50 Watt Unit [3]

12 Volt, Nickel Cadmium
STN25 = 25 Watt Unit [3, 4]
STN50 = 50 Watt Unit [3, 4]
STN75 = 75 Watt Unit [3, 4]
STN100 = 100 Watt Unit [3, 4]
STN125 = 125 Watt Unit [3, 4]

12 Volt, Pure Lead
STL120 = 120 Watt Unit [2]

LAMP HEADS

6 Volt, Tungsten
ZA = 8 Watts
ZB = 18 Watts
ZC = 25 Watts
ZD = 30 Watts

6 Volt, Halogen
ZI = 8 Watts
ZJ = 12 Watts

12 Volt, Tungsten
ZE = 12 Watts
ZF = 18 Watts
ZG = 25 Watts
ZH = 30 Watts

12 Volt, Halogen
ZK = 8 Watts
ZL = 12 Watts

 # OF HEADS

3 = Three
2 = Two
1 = One
Blank = No lamp heads

FACTORY INSTALLED OPTIONS [1]

A = Ammeter [2]
AD = ACCU-TEST Self-Diagnostics
ADAL = ACCU-TEST with Alarm
ADTD = ACCU-TEST with Time Delay [5]
EX = Special Input Transformer (Specify voltage & frequency) [1]
TD1 = 120 VAC Time Delay [5]
TD2 = 277 VAC Time Delay [5]
V = Voltmeter [2]

NOTES:

1) Some option combinations may impact UL listing. Consult factory for specifics.
2) Not available with AD, ADAL, or ADTD options.
3) In addition to UL listing to standards 844 and 1604.
4) Additional listing Class II, Division II groups F & G.
5) 15 minute delay.

Specification Data for Steel-Lite Series Class I, Div. 2 Emergency Lighting Units

Housing

Impact resistant, fiberglass reinforced polyester is suitable for NEMA 3, 4x, and 12 areas. Housing color is gray.

One-piece formed gasket eliminates potential for seal failure.

Standard internal mounting or external mounting feet for installation flexibility.

View-through window enables easy monitoring of AC indicator and optional metering.

Polycarbonate sealed beam Par 36 lamp heads are Class I, Div. 2 rated and come in a variety of wattages.

Electronics

120/277 VAC dual voltage input with surge-protected, solid-state charging circuitry provides for a reliable charging system. The charging system is furnished with low voltage disconnect, AC lockout, brownout protection, AC indicator lamp and test switch.

The low voltage disconnect (LVD) feature will disconnect the battery prior to an unacceptable deep discharge, but not before the required 90 minute emergency operation.

The AC lockout feature prevents battery drain prior to the initial energizing of utility power, and allows the installer to complete all wiring and electrical connections without energizing the emergency circuit.

The brownout protection circuitry will automatically switch the unit into the emergency mode if the utility voltage sags below 20% of nominal.

Battery charging circuitry is entirely solid-state, and utilizes a constant current charger for nickel cadmium battery units. A fully automatic, voltage regulated charger is used for lead calcium battery units. Battery recharge time after full discharge is less than the required UL 924 standard.

Line sensitive electronics cause an instantaneous transfer to battery power if utility power is lost, or a brownout condition is detected. When line voltage is present and stabilized, the transfer circuitry switches back to normal operation and begins recharging the battery. The transfer circuitry can be tested via a momentary test switch located on the housing.

Code Compliance

The Steel-Lite Series meets or exceeds all performance standards as required by UL 924, NFPA 101, NEC and OSHA. Nickel cadmium units additionally UL listed for Class II, Division 2, Groups F & G applications.

Self-Diagnostics

The ACCU-TEST Self-Diagnostics option conducts automatic and manual tests, and indicates real time status of the lamp, battery and charger via LED indicator lamps. Automatic tests include: Systems analysis every 10 seconds, with actual load tests performed for a 3 minute duration every 30 days. A manual test is available from 1 to 90 minutes.

Battery

Maintenance free, sealed nickel cadmium or lead calcium batteries are available.

Standard sustained emergency operation is for 90 minutes with the illumination source providing full light output.

The suggested operating temperature range for nickel cadmium batteries is 20°F (-7°C) to 95°F (35°C), and the battery has an estimated service life of 10 years. The suggested operating temperature range for lead calcium batteries is 65°F (19°C) to 85°F (30°C), and the battery has an expected service life of 5 years.

Performance

Input power requirements

120 VAC - 0.58 amps max., 65 watts max.
277 VAC - 0.27 amps max., 68 watts max.

Warranty

Operation

DC Voltage	Unit	Suggested Lamp Head	Watts to 87½ of Rated Voltage*			
			1½ hrs.	2 hrs.	4 hrs.	8 hrs.
6	SC25	ZA	25	19	12	—
	SC50	ZA	50	37.5	24	8.5
	SC100	ZB	100	75	48	17
	SC125	ZC	125	94	60	21.5
	SN25	ZA	25	19	12	—
	SN50	ZA	50	37.5	24	8.5
	SL60	ZA	60	45	29	10
12	STC25	ZE	25	19	12	—
	STC50	ZE	50	37.5	24	8.5
	STN25	ZE	25	19	12	—
	STN50	ZE	50	37.5	24	8.5
	STN75	ZE	75	56.5	28.5	15
	STN100	ZF	100	75	48	17
	STN125	ZG	125	94	60	21.5
	STL120	ZG	120	90	58	20

Suggested Specification

Furnish and install Chloride Systems emergency lighting unit model _____. The unit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and the National Electrical Code (NEC).

INSTALLATION AND OPERATION - Unit shall be easily field connected to a 120 or 277 VAC, 60 hertz, unswitched power source. Installation must comply with the NEC 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 level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

CHARGER - Product shall utilize either a constant current (nickel cadmium) or fully automatic, voltage regulated (lead calcium) charging system. The charging system shall maintain the battery at full capacity without the need for periodic exercising or equalization. The following features shall be standard: Low voltage disconnect (LVD), brownout protection and AC lockout.

BATTERY - The battery shall be either a maintenance free, sealed nickel cadmium, lead calcium, or pure lead battery. The nickel cadmium battery shall utilize sintered plate construction and polypropylene separators for trouble-free operation in ambient temperatures up to 95°F (35°C). The lead calcium battery shall provide trouble-free operation in temperatures up to 85°F (30°C). Nickel cadmium batteries shall be supplied with a five year full warranty, lead calcium and pure lead batteries shall be supplied with a one year full warranty.

HOUSING - The unit housing shall be impact resistant, fiberglass reinforced polyester gray enclosure suitable for NEMA 4, 4x, and 12 areas, and for Class I, Division 2, Groups A, B, C & D, Zone 2, Groups IIA, IIB +H_2 & IIC hazardous location areas. A one-piece formed gasket shall be included to eliminate potential for seal failure.