# **COOPER LIGHTING - SURE-LITES®**

#### DESCRIPTION

Sure-Lites' HZU1254 Series self-contained, explosion-proof, emergency lighting unit is intended for operation in NEC Class I, Division 1, Groups C, D, and Class II, Division 1, Groups E, F, G environments. The unit provides a solid-state, emergency lighting system for application in industrial and heavy duty commercial facilities like petrochemical plants, drilling rigs, offshore platforms, coal mines and preparation facilities, textile mills, lumber yards, painting booths and gasoline stations.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

## SPECIFICATION FEATURES

#### Electronic

- Dual Voltage Input 120/277 VAC, 60 Hz
- Line-latching
- Solid-state Voltage
- Limited Charger
- Solid-state Switching
- Low-Voltage Disconnect
- Brownout Circuit
- Overload/Short Circuit Protection
- -Test Switch/Pilot Light

## Battery

- Sealed Lead Calcium, Recombination
- Maintenance-Free, Long-Life
- Full Recharge Time, 24 hrs. (max.)
- Polarized Battery Terminals

## **Housing Construction**

- NEMA 4 Copper-free Aluminum
- Hinged Cover for Inspection
- and Maintenance
- Watertight Neoprene Gasketing
- One Way Breather and Drain
- Natural, Textured
  Die-Cast Aluminum
  Finish Enclosure

### Code Compliance

- UL 924 Listed
- Life Safety NFPA 101
- NEC Class I, Division 1 Groups C, D and Class II, Division 1, Groups E, F, G
- OSHA
- Most State and Local Codes

## Warranty

- Unit: 1-year
- Battery: 5-year pro-rata

## Head/Lamp Data

- Each head (two head standard) contains one 12V, 25W DC medium base A-lamp
- Copper-free Aluminum Lamp Housing and Guard
- Explosion Proof
- Grey Epoxy Powder Coat Finish
- -Two Heads Standard
- Remote Capability
- Heat, and Impact Resistant Glass Globe



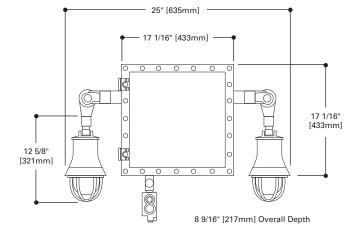
## HZU1254 SERIES

HAZARDOUS LOCATIONS

SEALED LEAD CALCIUM BATTERY

**EMERGENCY LIGHTING** 

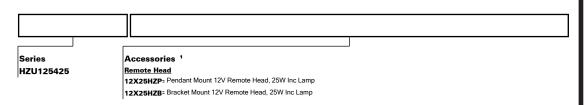
TOTALLY PREDICTABLE RELIABILITY



## **ELECTRICAL RATINGS**

	Rated Wattage to 87 1/2% of Rated D.C. Voltage					Lamp Information		
Model	DC Voltage	1 1/2 Hours	2 Hours	3 Hours	4 Hours	Туре	Wattage	Number
HZU125425	12	54	-	-	-	Incandescent	25	ZZ13

## ORDERING INFORMATION



**ENERGY DATA** 

Input Current (Max.): 120V= .32A 277V= .15A



#### **TECHNICAL DATA**

#### Lamp Heads

The lamp housing and guard are constructed of copper-free aluminum with a grey epoxy powder coat finish. 15W or 25W incandescent lamp provides optimum light.

#### Housing

Cast, copper-free aluminum, one-piece NEMA4 cabinet is designed for use in Class I and Class II Division 1 areas. It can withstand the pressure of internal, arc-generated explosions without causing a chain-reaction of secondary more dangerous explosions. Neoprene gasket provides watertight seal. Hinges make access easy.

## Line-Latched

Sure-Lites' line-latched electronic circuitry makes installation easy and economical. A labor efficient AC-activated load switch prevents the lamps from turning on during installation to a non-energized AC circuit. Linelatching eliminates the need for a contractor's return to a job site to connect the batteries when the building's main power is permanently turned on.

#### Solid-State charger

Unit is supplied with a 120/277 VAC, voltage regulated solidstate charger. The charge circuit reacts to the condition of the battery and alters the rate of charge in order to maintain peak battery capacity and maximize battery life. Solidstate construction recharges the battery following a power failure and prevents over and under charging.

#### Overload and Short-Circuit Protection

The solid-state overload monitoring device in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short circuit is removed. This overload current protective feature eliminates the need for fuses or circuit breakers for the DC load.

#### **Brownout Circuit**

The brownout circuit in Sure- Lites' units monitors the flow of AC current to the unit and activates the emergency lighting system when a predetermined reduction of AC power occurs. This dip in voltage will cause most ballasted fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

#### Solid-State Transfer

The unit incorporates a solidstate switching transistor which eliminates corroded and pitted contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC voltage and automatically energizes the lamps. Upon restoration of the AC power, the emergency lamps will switch off and the charger will automatically recharge the battery.

#### Low Voltage Disconnect

When the battery 's terminal voltage falls below 80% of the rated voltage, the lowvoltage circuitry disconnects the lighting load. The disconnect remains in effect until normal utility power is restored, preventing deep battery discharge.

#### Test Switch/Power Indicator Light

Conveniently located Test Switch allows for manual verification of proper operation of the transfer circuit and emergency lamps. The Power Indicator Light provides visual assurance that the AC power is on.

## Sealed Lead Calcium Battery

The fully sealed, long life, maintenance free lead calcium battery is ideal for emergency lighting applications. These recombinant cycle batteries provide eight to ten years of life and may be operated in any position.

#### Warranty

All Sure-Lites ' units are backed by a firm oneyear warranty against defect in material and workmanship (excluding lamps). Maintenancefree, long-life, sealed lead calcium batteries carry a five-year pro-rata warranty.

