

Type No. _____
Job Name _____
Catalog No. _____



A DIVISION OF CONDUIT THOMAS GROUP, LLC



Listed to
924, 844,
1203, 1604

ESBS Series

Class I, II, and III, Division 1 Explosion Proof Emergency Power Unit

- ESBSPN14: 4.8V, 14W Nickel Cadmium**
- ESBS30: 6V, 28W Nickel Cadmium**
- ESBS50: 12V, 50W Nickel Cadmium**
- ESBS100: 6V, 85W Pure Lead**

Shown: ESBS30

Electronics

- ESBSPN14 power unit operates 7 watt compact fluorescent hazardous fixtures in both AC and emergency modes
- ESBS30, ESBS50 and ESBS100 power units operate 6 and 12 volt DC incandescent hazardous fixtures in emergency mode only
- 120/277 VAC selectable input
- External AC indicator light and press-to-test switch
- ESBSPN14, ESBS30 and ESBS50 feature solid-state, constant current charger
- ESBS100 features temperature compensated, solid-state charger with low voltage disconnect (LVD), brownout protection and AC lockout protection

Power Consumption

120 VAC - 0.50 amps, 60 watts
277 VAC - 0.22 amps, 60 watts

Housing

- Copper-free cast aluminum enclosure designed to withstand the pressure of internal arc generated explosions without propagating them into the hazardous atmosphere
- Enclosure and cover are each single piece construction, and cover is threaded to allow easy attachment and removal
- Enclosure includes three threaded openings for 3/4" rigid conduit — one for AC input and two for mounting hazardous fixtures

Warranty

Electronics: 3 years
Battery: 5 years full, 5 years pro-rata (nickel cadmium)
1 year full, 4 years pro-rata (pure lead)

UL Listed For Use In Hazardous Areas

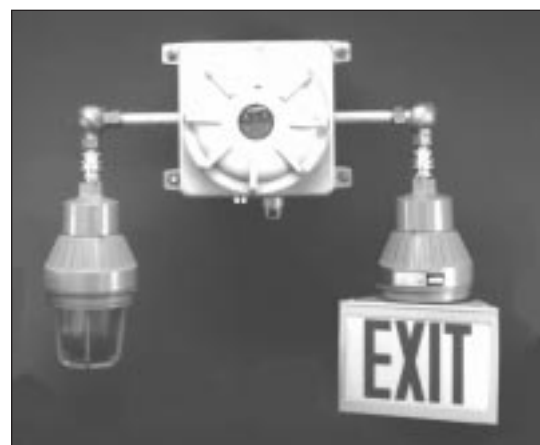
Battery

- ESBSPN14, ESBS30 and ESBS50 include sealed nickel cadmium batteries
- ESBS100 includes sealed pure lead battery

Code Compliance

- UL listed to 924, 844, 1203 and 1604
- UL listed for use in :
 - **Class I:** Div. 1, Groups C & D, Zones 0, 1 & 2, Groups IIA, IIB + H₂ & IIC
 - **Class I:** Div. 2, Groups C & D, Zone 2, Groups IIA, IIB + H₂ & IIC
 - **Class II:** Div. 1, Groups E, F & G
 - **Class II:** Div. 2, Groups F & G
 - **Class III**

Application



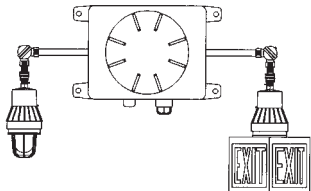
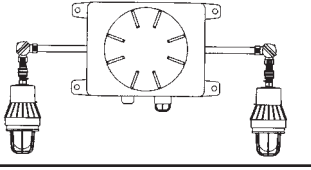
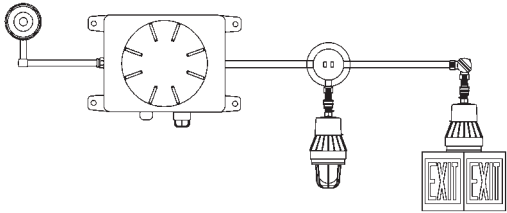
ESBS Power Unit shown powering HAZP126 luminaire and HAZP126 with Exit Accessory Kit.

Ordering Information

6 VOLT	CATALOG NO.	TOTAL UNIT OUTPUT WATTAGE FOR 90 MINUTES	LAMP OPERATION	OPERATION MODE
Sealed Nickel Cadmium	ESBS30 ²	28	Incandescent	Emergency Only
	ESBSPN14 ¹	14	Compact Fluorescent (1) OR (2) 7 Watt	AC & Emergency
Pure Lead	ESBS100 ²	85	Incandescent	Emergency Only
12 VOLT	CATALOG NO.	TOTAL UNIT OUTPUT WATTAGE FOR 90 MINUTES	LAMP OPERATION	OPERATION MODE
Sealed Nickel Cadmium	ESBS50 ³	50	Incandescent	Emergency Only

NOTES: 1) For "Normally On" use exclusively with HAZWP7, HAZCP7, and HAZPP7 remotes. Maximum remote distance is 8 feet. 2) For "Normally Off" use exclusively with HAZ Series 6 VDC remotes. 3) For "Normally Off" use exclusively with HAZ Series 12 VDC remotes. 4) 15 minute delay.

Sample Applications

Compact Fluorescent	CATALOG NO.	DESCRIPTION
	(1) ESBSPN14 (2) SEA (2) HAZPP7 (1) EFK	14W battery pack for exclusive use with compact fluorescent fixtures Elbow Arm 7W Compact Fluorescent Lamp Fixture+ Exit Accessory
	(1) ESBS30 (2) SEA (2) HAZP106	6V, 28W battery pack Elbow Arm 6V, 10W halogen lamp fixture
	(1) ESBS50 (1) SEA (1) OB3 (2) HAZP1212 (1) EFK (1) EVLA12	12V, 50W battery pack Elbow Arm 3-way junction box 12V, 12W halogen lamp fixture Exit Accessory 12V, 12W directional halogen fixture

Suggested Specification

Furnish and install Lightguard explosion proof emergency lighting model _____. The unit shall be listed to Underwriters Laboratories, Inc. (UL) Standard #924, 844, 1203 and 1604. The unit shall also be UL listed for use in Class I, Division 1, Groups C & D, Zones 1, 1 & 2, Groups IIA, IIB + H₂ & IIC; Class II, Division 2, Groups C & D, Zone 2, Groups IIA, IIB + H₂ & IIC; Class II, Division 1, Groups E, F & G; and Class III.

INSTALLATION /OPERATION - Unit shall operate two unswitched compact fluorescent lamp fixtures continuously in both AC and emergency mode (ESBSPN14) or incandescent DC lamp fixtures in emergency mode only (ESBS30, ESBS50, ESBS100). 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 24 hours following a rated discharge of not more than 90 minutes.

CHARGER - The charger shall provide a controlled constant current charge rate (ESBS30, ESBS50, ESBS100) or shall be temperature compensated (ESBS100) capable of recharging the battery per U.L. 924 standards. Unit shall be furnished with a 120/277 dual input transformer.

BATTERY - The battery shall be sealed nickel cadmium (ESBS30, ESBS50, ESBSPN14) or pure lead (ESBS100).

HOUSING - The enclosure shall be constructed of copper-free cast aluminum, suitable for hazardous areas. Enclosure dimensions and specifications shall prevent propagation of internal explosions into hazardous atmospheres.

CONTROLS - The unit shall include a "Press-to-Test" switch and an AC monitor light.

Options

- EX** Special Input Transformer (Specify voltage & frequency)
- KL** Key Lock 2 Way, Battery Disconnect for Servicing
- TD1** 120 VAC Time Delay⁴
- TD2** 277 VAC Time Delay⁴

Ordering Example

Model _____ ESBS30 _____ TD1 _____
Options _____

Dimensions

