



# LIGHTING

## EMERGENCY BATTERY SYSTEM – INTRODUCTION



EBS Battery Unit Only

### HOSTILE/ITE® EBS EMERGENCY

#### FEATURES-SPECIFICATIONS

##### Applications

Where required by the NEC (or local “Life Safety” code) for safe egress (over doors, aisleways, stairs, walkways, exit paths, and outer perimeter walls) to provide illumination during interruption of normal power to area lighting.

In indoor or outdoor locations made hazardous by the presence of flammable gas, vapors, or dusts. Includes refinery/chemical production and storage, grain processing, waste water treatment facilities and any area requiring heavy-duty dependable emergency lighting.

##### Exclusive Features

- LED Heads provide clear crisp illumination at 5000° Kelvin
- LED Head L70 value 100,000 hours for minimal maintenance
- Two head models up to 500% brighter than competitive non-LED units
- Enclosure Type 4 (Type 4) for wet and harsh locations
- Group B is standard when using EBSHK type heads
- Automatic Safety Disconnect – Removing main cover disconnects battery power
- Ambient Suitability 0°C to 45°C Battery Unit; Heads to 55°
- Compact unit requires only two mounting points
- World Voltage 120-277 VAC 50/60Hz input

##### Other Features

- High % of lumens maintained during 90 minute egress cycle
- EBSHK type heads are fully adjustable on unit or remote when ordered with RFSL Factory Sealed mounting kits

- EBSEL type heads are factory sealed on their EZ type mounting boxes
- Heads can be remote mounted over 300' from battery unit
- Ni-Cad sealed batteries provide 90 minutes of illumination
- Integral base unit LED pilot light indicates AC power is present
- Choice of Integral or Remote Push-To-Test station to verify system operation
- Vapor Capsule to inhibit corrosion is standard with main enclosure unit
- Terminal Blocks identified for incoming and outgoing connections

##### Compliances

- UL 1598 Standard for Luminaires
- UL 8750 for LED Lighting
- UL 844 Luminaires for Hazardous Locations
- UL 1203 Explosion-Proof/Dust-Ignition-Proof Electrical Enclosures
- UL 924 Emergency Lighting
- CSA C22.2 no. 137-M1981 Luminaires for Hazardous Locations
- CSA C22.2 no. 30-M1986 C1D1 Enclosures
- CSA 22.2 no. 25-1066 C2D1 EFG Enclosures
- Enclosure Type 4
- Type 4, 7BCD, 9EFG

##### Materials

- Main Enclosure and Heads Copper Free Aluminum alloy with Baked Powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- Attachment fittings copper-free aluminum
- External hardware 316 Stainless Steel
- EBSEL reflectors EXIT accessory aluminum with white paint

Class I, Div. 1&2, Groups B,C,D  
Class I, Zone 1&2, Groups IIB+H2, IIA  
Class II, Div. 1&2, Groups EFG  
Class III  
Enclosure Type 4 (Type 4, 7B CD, 9EFG)

SP US File LR11713

##### Notes

- Main EBS unit is CID1 Grp B (Suitable Zone 1 IIB+H2) with attached EBSHK heads or no heads; with attached EBSEL heads unit is CID1 Groups CD (Suitable Zone 1 IIB, IIA)



EBS Unit with HK Type Heads and Integral Push-To-Test



EBS Unit with EL Type Heads and Integral Push-To-Test



EBS Unit with EL Type Head and Exit plus HK Head with remote Push-To-Test



## EMERGENCY BATTERY SYSTEM – LOGIC & COMPONENTS

### Catalog Number Logic

**EBS23DH - P T A D**

**EBS23DH** Series Constant 120-277V 50/60Hz 23W  
Dual-Head (Remote or Attached)

#### Test Options

- P** – Push-To-Test on Enclosure
- R** – Remote Push-To-Test Station (EBS-PTT shipped separately)
- N** – None - ordered separately or breaker controlled

#### Time Delay Option

- T** – Power Resumption Emergency Time-delay (Factory set approx. 15 min.) 120 thru 277V
- N** – No Time-Delay

#### Luminaire Head Options

- N** – No heads - For Remote Heads Ordered Separately
- A** – 2 EBSHK1030 Heads Factory Attached
- B** – 2 EBSEL1030 Heads (Less Guards) and Fittings for Attachment
- BG** – 2 EBSEL1030 Heads with Guards and Fittings for Attachment
- BE** – 2 EBSEL1030 Heads with 1 Guard and 1 HEXA-100 EXIT and Fittings for Attachment
- C** – 1 EBSHK1030 Head Attached and 1 EBSEL1030 Head (Less Guard) and Fittings for Attachment
- CG** – 1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head with Guard and Fittings for Attachment
- CE** – 1 EBSHK1030 Heads Attached and 1 EBSEL1030 Head with HEXA-100 EXIT and Fittings for Attachment
- D** – 1 EBSHK1030 Only (2nd Head Remote - Ordered Separately)
- E** – 1 EBSEL1030 Only Less Guard and Fittings for Attachment (2nd Head Remote - Ordered Separately)
- EG** – 1 EBSEL1030 Only with Guard and Fittings for Attachment (2nd Head Remote - Ordered Separately)
- EE** – 1 EBSEL1030 Only with HEXA100 EXIT and Fittings for Attachment (2nd Head Remote - Ordered Separately)

#### Drain

- D** – Group B Drain for Wet Applications including condensation from heat <> cold cycling
- Blank** – Not included



Factory Sealed Remote LED Spot Light - Bottom Feed



Factory Sealed Remote LED Spot Light - Side Feed



Remote Push-To-Test Station



Remote LED Luminaire

### EBS UNIT - BOTTOM DETAIL



- A** Optional Push-To-Test
- B** Optional Group B Drain
- C** Standard Pilot Light
- D** Entry for Remote P-T-T Station
- E** Power Entry (also on top)

The EBS23 System is designed to power 2 Heads for operation (total attached or remote); each Head is approximately 10 Watts.

# LIGHTING

EBS SERIES



## EMERGENCY BATTERY SYSTEM – PRE-CONFIGURED UNITS



Class I, Div. 1&2, Groups B,C,D  
 Class I, Zone 1&2, Groups IIB+H2, IIA  
 Class II, Div. 1&2, Groups EFG  
 Class III  
 Enclosure Type 4 (Type 4, 7B CD, 9EFG)

File LR11713

### ORDERING INFORMATION

INTEGRAL PUSH-TO-TEST		REMOTE PUSH-TO-TEST		
<b>EBS SYSTEM WITH TWO EBSHK HEADS</b>				<b>CID1BCD</b>
Integral PTT, Two EBSHK	Integral PTT, <b>TDR</b> , Two EBSHK	Remote PTT, Two EBSHK	Remote PTT, <b>TDR</b> , Two EBSHK	
<b>EBS23DH-PNA</b>	<b>EBS23DH-PTA</b>	<b>EBS23DH-RNA</b>	<b>EBS23DH-RTA</b>	
<b>EBS SYSTEM WITH TWO EBSEL HEADS WITH GUARDS</b>				<b>CID1CD</b>
Integral PTT, Two EBSEL Heads w/ Guards	Integral PTT, <b>TDR</b> , Two EBSEL Heads w/ Guards	Remote PTT, Two EBSEL Heads w/ Guards	Remote PTT, <b>TDR</b> , Two EBSEL Heads w/ Guards	
<b>EBS23DH-PN8G</b>	<b>EBS23DH-PT8G</b>	<b>EBS23DH-RN8G</b>	<b>EBS23DH-RT8G</b>	
<b>EBS SYSTEM WITH ONE EBSHK HEAD &amp; 1 EBSEL HEAD WITH GUARD</b>				<b>CID1CD</b>
Integral PTT, One EBSHK & One EBSEL Head w/ Guard	Integral PTT, <b>TDR</b> , One EBSHK & One EBSEL Head w/ Guard	Remote PTT, One EBSHK & One EBSEL Head w/ Guard	Remote PTT, <b>TDR</b> , One EBSHK & One EBSEL Head w/ Guard	
<b>EBS23DH-PNCG</b>	<b>EBS23DH-PTCG</b>	<b>EBS23DH-RNCG</b>	<b>EBS23DH-RTCG</b>	
<b>EBS SYSTEM WITH TWO EBSEL HEADS ONE WITH EXIT</b>				<b>CID1CD</b>
Integral PTT, Two EBSEL Heads, One w/ EXIT, One w/ Guard	Integral PTT, <b>TDR</b> , Two EBSEL Heads One w/ EXIT, One w/ Guard	Remote PTT, Two EBSEL Heads, One w/ EXIT, One w/ Guard	Remote PTT, <b>TDR</b> , Two EBSEL Heads, One w/ EXIT, One w/ Guard	
<b>EBS23DH-PNBE</b>	<b>EBS23DH-PTBE</b>	<b>EBS23DH-RNBE</b>	<b>EBS23DH-RTBE</b>	
<b>EBS SYSTEM WITH ONE EBSHK HEAD &amp; ONE EBSEL HEAD WITH EXIT</b>				<b>CID1CD</b>
Integral PTT, One EBSHK Head, One EBSEL w/ EXIT	Integral PTT, <b>TDR</b> , One EBSHK Head, One EBSEL w/ EXIT	Remote PTT, One EBSHK Head, One EBSEL w/ EXIT	Remote PTT, <b>TDR</b> , One EBSHK Head, One EBSEL w/ EXIT	
<b>EBS23DH-PNCE</b>	<b>EBS23DH-PTCE</b>	<b>EBS23DH-RNCE</b>	<b>EBS23DH-RTCE</b>	
<b>EBS SYSTEM ONLY FOR REMOTE HEADS (ORDER TWO SEPARATELY)</b>				<b>CID1BCD</b>
Integral PTT, No Heads	Integral PTT, <b>TDR</b> , No Heads	Remote PTT, No Heads	Remote PTT, <b>TDR</b> , No Heads	
<b>EBS23DH-PNN</b>	<b>EBS23DH-PTN</b>	<b>EBS23DH-RNN</b>	<b>EBS23DH-RTN</b>	





## EMERGENCY BATTERY SYSTEM – REMOTE HEADS & ACCESSORIES



EBSEL1030 COMPONENTS & ACCESSORIES – DESCRIPTION	CATALOG NUMBER
EBSEL 10W Head Only with LED's, Less Mount and Guard	EBSEL1030
Guard	EMG1
Red Guard – used to signify remote fixture is for Emergency	EMG1-R
EXIT Accessory – 3-sided white painted aluminum	HEXA-100
Dome Reflector	ERSD15
Angle Reflector	ERA15
Sealed Fittings Set for attachment of Pendant EBSEL to EBS23HD-xxx	EBS-AHFS
Replacement Globe and Support Assembly	EMGS1



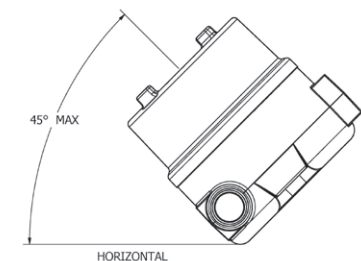
EBSEL Shown with Exit Accessory



MOUNTING BOXES				
PENDANT	CATALOG NUMBER			HUB SIZE
	CEILING	BRACKET	STANCHION	
EZA2	EZX2	EZB2	-	3/4"
EZA3	EZX3	EZB3	-	1"
-	-	-	EZD4	1-1/4" / 1-1/2"



EBS23DH SERIES ACCESSORIES – DESCRIPTION	CATALOG NUMBER
Remote Push-To-Test Station Group B 3/4" Feed-Thru w/Close Up Plug	EBS-PTT
Remote Push-To-Test Station with Lock Off, Group B 3/4" Feed-Thru	EBS-PTT-LO
Lock-Off for Integral Push-To-Test	GO10502
Sealed Fittings Set for attachment of EBSHK to GEBC-2 or GEBL-2	EBS-AHFS
Replacement Battery Pack and Electronics	KLBP01
Replacement Vapor Capsule for corrosion protection	EBS-VC



EBSHK Heads can be aimed up to 45 above horizontal – if flush on wall will require spacing out.





# LIGHTING

## EMERGENCY BATTERY SYSTEM – ELECTRICAL & TEMPERATURE DATA

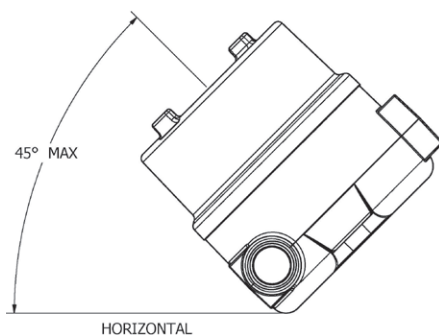


EBS23DH ELECTRICAL DATA						
CATALOG NUMBER	INPUT**			OUTPUT**		
	VOLTAGE	WATTS	CURRENT	VOLTAGE	WATTS	CURRENT
EBS23DH	120-277VAC	7.5	.1 A	33VDC	23	700mA

\*\* Figures nominal. Current is 350mA to each of 2 heads (2 heads are required for proper operation, remote or attached).

THERMAL PERFORMANCE DATA					
CATALOG NUMBER	AMBIENT	CID1	CHD1	SUITABILITY	SUPPLY WIRE
EBS23DH	45°C	T6	EFG	0-45°C	75°C
EBSEL1030	55°C	T6	EFG	-40 to 40°C	75°C
EBSHK1030	55°C	T6	EFG	-40 to 40°C	75°C

\* Heads are NOT certified for use without EBS Battery Unit

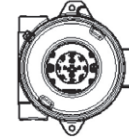


EBSHK Heads can be aimed up to 45 above horizontal – if flush on wall will require spacing out.

### 4 Head EBS option:

EBS units are designed for 2 head operation and will provide the lumens noted at right. However, 4 heads can be connected and will operate for 90 minutes at half the published lumen values. The EBSHK1030 would provide 456 lumens; the EVSEL1030 540 lumens. Instructions for wiring are included with the main EBS unit.

### LED 10W EBSHK1030

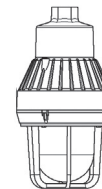


ZONAL LUMEN SUMMARY		
ZONE	LUMENS	FIXT%
0-30	254	27.9%
0-40	423	46.3%
0-60	781	85.5%
0-90	913	100.0%
90-120	0	0.0%
90-130	0	0.0%
90-150	0	0.0%
90-180	0	0.0%
0-180	913	100.0%

Absolute Photometry  
Total Luminaire Efficiency = N.A.%  
Spacing to Mounting Height Ratio 2.1

EMERGENCY MODE LUMENS		
5 Min.	99.1%	905 Lumens
45 Min.	99.4%	871 Lumens
90 Min.	95.3%	871 Lumens

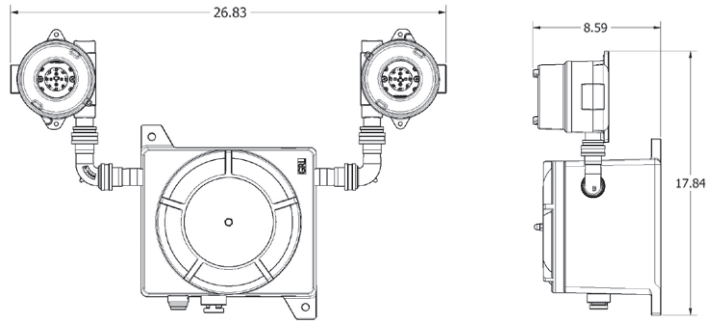
### LED 10W EBSEL1030



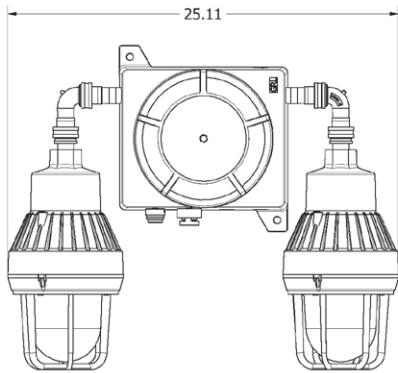
ZONAL LUMEN SUMMARY		
ZONE	LUMENS	FIXT%
0-30	180	16.7%
0-40	344	31.8%
0-60	758	70.1%
0-90	1067	98.7%
90-120	11	1.0%
90-130	13	1.2%
90-150	14	1.3%
90-180	14	1.3%
0-180	1081	100%

Absolute Photometry  
Total Luminaire Efficiency = N.A.%  
Spacing to Mounting Height Ratio 2.1

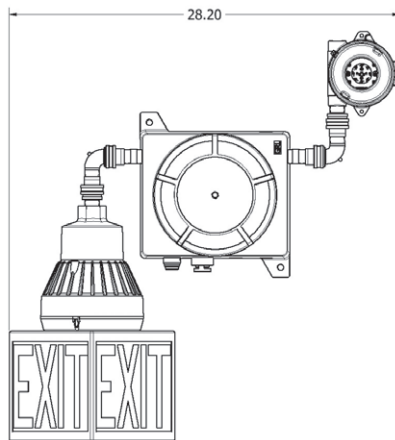
EMERGENCY MODE LUMENS		
5 Min.	94.4%	102 Lumens
45 Min.	91.3%	987 Lumens
90 Min.	89.3%	966 Lumens



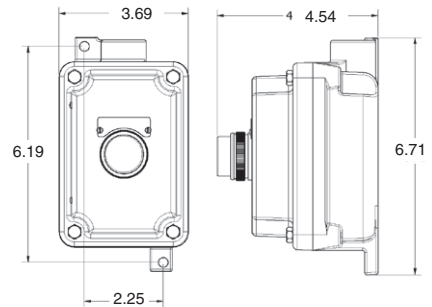
Dimensions - EBS with HK Heads



Dimensions - EBS with EL Heads

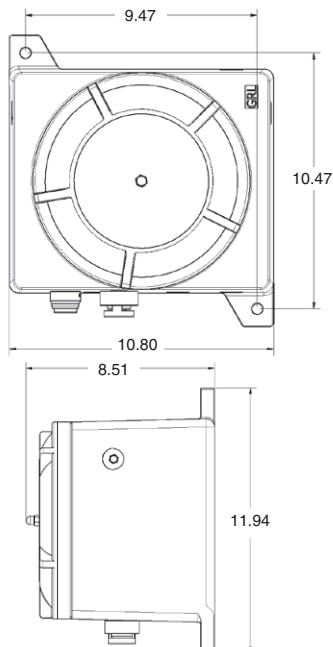


Dimensions - EBS with EL-EXIT & HK Heads

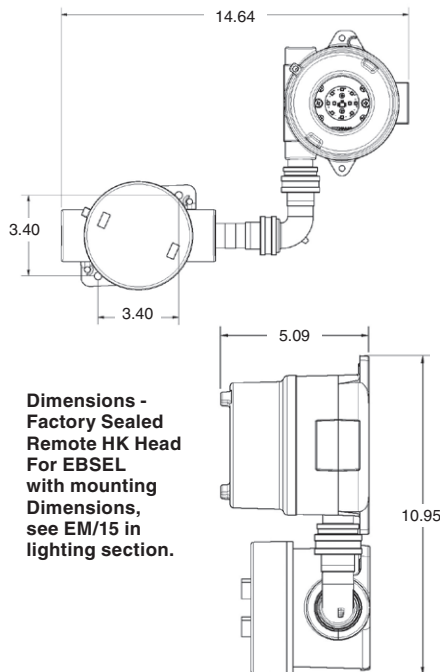


Dimensions - Remote Test Station

Y BATTERY SYSTEM - DIMENSIONS & WEIGHTS



Dimensions - EBS Main Unit



Dimensions -  
Factory Sealed  
Remote HK Head  
For EBSEL  
with mounting  
Dimensions,  
see EM/15 in  
lighting section.

WEIGHTS (SHIPPING) INDIVIDUAL AND COMBINATIONS	LBS.
EGS23DH Main Unit Only	36.6
EBSEL1030 Pendant Head Only w/ Fittings Set	12.3
EBSHK1030 Head Only w/ Fittings Set	5.0
EBSHK1030-RFSC (or RFSL)	11.0
EBS-PTT	3.0
EBS-AHFS Factory Sealed Fittings Set	0.6
EBS23DH & 1 EBSHK w/ Fittings	41.6
EBS23DH & 2 EBSHK w/ Fittings	46.6
EBS23DH & 1 EBSEL w/ Fittings	48.9
EBS23DH & 2 EBSEL w/ Fittings	61.2
EBS23DH & 1 EBSEL & 1 EBSHK w/ Fittings	53.9