Signaling Devices - Visual and Audible

Section S

A comprehensive range of signaling products specifically designed for use in areas where harsh environmental conditions prevail and where there is a risk of explosion due to the presence of flammable atmospheres.
Table of Contents

Section S of the Eaton’s Crouse-Hinds Catalog contains the following product groupings:

Section 1S
Fire Alarm or Emergency Call Points and Heat Detectors
(for use in hazardous areas)
Call points are used for fire alarm activation, evacuation, and process shut-down. Heat detectors are used in turbine/generator skids, switchgear or motor control status rooms, and process tank areas or transmission lines
SM87PBL BG3
SM87BG HD1
PB
BG
BG2

Section 2S
Strobe Lights
(for use in hazardous and non-hazardous areas)
Strobe lights for condition signaling, security alerts, equipment obstruction warnings, and emergency evacuation signaling
XB15 XB12 VWL
XB16 UL XB13 OX2L
SM87 HXB EXFASC VX2L
XB11 EXR OAL
XB4 OWL VAL

Section 3S
Steady-On Beacons
(for use in hazardous areas)
For safety lighting, continuous communication sources, obstacle warnings, exit or entrance lights, and for identifying the location of safety equipment such as showers or emergency telephones
FB4
FL4
FB11 UL
FB12 UL
FB15
SM87 LU3
SM87 LU1
EXSO, EXDSO
VF

Section 4S
Status Lights
(for use in hazardous areas)
For process status, messaging, and alert or emergency condition indication
SM87 SL
XB11 SLUL
XB12 SL, FB12 SL

Section 5S
Speakers and Tone Generators
(for use in hazardous areas)
For plant-wide alarm notifications and audible process alarms
DB1 ETH855, ETH845
DB3 ETH840, ETH640
DB4 ETH
DB5 W2H
DB12 WH
DB15 ESR
DB16 UL

Section 6S
Visual and Audible Combination Units
(for use in hazardous areas)
Strobe light and audible tone generator in one package
DB3 / XB11
DB3 / SM87HX
DB12 / XB13
Visual and Audible Signaling Devices as tough as your environment
- The broadest line of harsh and hazardous signaling, alarm and communication products available in both IEC and NEC designs and certifications.
- Hazardous area call points (fire alarm or emergency notification devices) provide you a unique product offering unequalled by any other manufacturer of hazardous location signaling products.
- Worldwide listings with UL, cUL, ATEX, GOST, CSA and CQST (Chinese) approvals provide customer solutions that the competition can't match.
- Superior enclosure materials, providing unmatched ingress protection and corrosion resistance from the harshest conditions.
- A unique signaling product offering integral visual and audible signaling capability pre-wired for simultaneous output activation.
- Heat detectors for early indication of potential processing problems.

Applications:
- For use in hazardous and non-hazardous areas.
- As visual signals or warning lights.
- To identify the location of safety equipment such as emergency shower, eye wash stations, and emergency telephones, fire extinguishers and emergency stop switches.
- For status indication of machinery or processes.
- To indicate dangerous areas or areas requiring caution.
- To signal dangerous or hazardous conditions.
- Where a high-decibel sound is required for alert or evacuation.

Considerations for Selection:
Environmental:
- What is the hazardous area classification (NEC/CEC) of the location in which the luminaire will be installed?
Signaling Requirements:
- What will the visual signal be used for (communicating, alerting, warning)?
Physical Arrangements:
- Type of luminaire mounting needed.

What Types of Visual Signals are Available?
1. Strobe Lights — Used for signaling or warning of various conditions. Emits a powerful blast of bright light.
2. Rotating Beacons — Used to signal over a large area when the light must be seen from a long distance.
3. Steady-on Beacons — Typically used as a continuous source to warn, communicate or draw attention to an area, machine or process.
4. Stack Lights — Used for multiple indication in one signaling device. Compact and versatile, the three-color (red, amber and green) is most popular.

Lens Color and Their Applications
Most Eaton’s Crouse-Hinds strobes, steady, and flashing beacons come in six lens colors: amber, blue, clear, green, magenta and red. Eaton’s Crouse-Hinds LED signals come in amber, blue, green, red and, in some cases, white. The following are examples of how various lens colors are used in industrial and commercial signaling environments:
- Amber - Denotes caution
- Blue - Used for safety and security
- Clear (or White) and Green - Used to indicate normal run operation
- Magenta - Used for radiation alarms
- Red - Denotes emergency or warning
## Call Points and Heat Detectors

### Hazardous

<table>
<thead>
<tr>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fire Alarm or Emergency Call Points</strong></td>
<td></td>
</tr>
<tr>
<td>BG, BG2, BG3</td>
<td>see pages 1222–1228</td>
</tr>
<tr>
<td>PB</td>
<td>see pages 1222–1228</td>
</tr>
<tr>
<td>SM87</td>
<td>see pages 1222–1228</td>
</tr>
<tr>
<td><strong>Heat Detectors</strong></td>
<td></td>
</tr>
<tr>
<td>HD1</td>
<td>see pages 1229–1231</td>
</tr>
</tbody>
</table>
Fire Alarm or Emergency Call Points

MEDC Series

These manual fire alarm call points have been designed for use in hazardous locations and harsh environmental conditions. They offer:

- The broadest range of hazardous location manual fire alarm activation devices in the industry.
- The compact design, activation choices such as pushbutton or break glass, housing color choices and comprehensive worldwide certifications make this product family a project closer.
- Flexibility as all units accept metric cable or NPT conduit entries, and each unit can be custom designed for a specific fire alarm or emergency activation requirements.

Applications:
- Fire alarm activation
- Emergency evacuation
- Process shut-down

Industries:
- Liquid natural gas terminals
- Energy exploration
- Chemical
- Refinery
- Power generation

Features and Benefits:
- In-line and end-of-line resistors fitted for use in fire activation circuits
- Optional LED to indicate operation
- Plastic break glass element available—easy activation yet safe to touch
- Corrosion resistant GRP—ideal for marine applications
- Retained stainless steel cover screws—won’t corrode and never lose screws
- Optional lift flap for protection
MEDC Series

**SM87PBL**

**Push Button Fire Alarm Call Point—Explosionproof**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, CSA, Class I, Div. 1, Groups C, D, Zone 1</td>
<td>36200102</td>
<td>SM87PBLAUL3T3B3NNR</td>
<td>Explosion protected, 2 × ½” NPT entries, duty label “Fire—Press Here,” single pushbutton switch—latching, marine grade alloy, red finish</td>
</tr>
</tbody>
</table>

**SM87BG**

**Break Glass Call Point—Explosionproof**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Ex II 2GD</td>
<td>16200174</td>
<td>SM87BGLAD1B1NNR</td>
<td>Break glass call point, Ex II 2GD, Exd IIC T6, IP 66 &amp; 67, 1 × M20 bottom entries, duty label, “Fire Breakglass,” alloy material, red finish</td>
</tr>
</tbody>
</table>

**PB**

**Push Button Fire Alarm Call Point—Hazardous Locations**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, Class I, Div. 2, Groups A, B, C, D, Zone 1 &amp; 2</td>
<td>869105</td>
<td>PBUL4C6C0DSN7R</td>
<td>Explosion protected, 2 × ½” NPT bottom entries, no duty label, DC, single pushbutton switch latching, painted red GRP</td>
</tr>
<tr>
<td>ATEX Ex II 2GD</td>
<td>800010</td>
<td>PBE8480B0DSN6R</td>
<td>Explosion protected, Ex II 2GD, Exd, IEC, T6, Zone 1 &amp; 2, 2 × M20 entries, DC, single switch, red finish</td>
</tr>
</tbody>
</table>

**Certification**

- ATEX
- CSA
- GOST-R
- GOST-K
- GB

**UL Listed for:**

- Class I, Div. 1, Groups A, B, C, D
- Class I, Div. 1, Zones 1 & 2

**Ingress Protection:**

- NEMA 4X & 6
- IP66 & 67
- Stainless Steel (ATEX only)

**Material:**

- Marine Grade Alloy
- Stainless Steel (ATEX only)
- Corrosion-free GRP

**Entries:**

- Up to 4 × ½” or ¾” NPT
- Up to 4 × 1/2” or 3/4” NPT
- Up to 4 × 1/2” or 3/4” NPT

**Weight:**

- 3.8kg (Steel) 2.5kg (Alloy)
- 2.6lb/1.2kg

**Options:**

- Body color, certification
- Body color, 3 & 4 pole changeover switch, certification
- Body color, certification

**Certification**

- UL Listed for:
  - UL, ATEX
  - Class I, Div. 2, Groups A, B, C, D
  - Class I, Zones 1 & 2

- Certified Ambient Temperature:
  - –13°F to +158°F
  - –25°C to +70°C

- Ingress Protection:
  - NEMA 4X & 6
  - IP66 & 67

- Material:
  - Corrosion-free GRP

- Entries:
  - Up to 4 × ½” NPT, M20

- Weight:
  - 2.6lb/1.2kg

- Options:
  - Body color, certification
## BG Break Glass Fire Alarm Call Point—Hazardous Locations

<table>
<thead>
<tr>
<th>Certification</th>
<th>Type</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>Haz. Loc.</td>
<td>869101</td>
<td>BGUL4C6C1DSN7R</td>
<td>Explosion protected, 2 × 1/2&quot; NPT bottom entries, single break glass switch latching, painted red GRP finish</td>
</tr>
<tr>
<td>ATEX Ex II 1GD</td>
<td>Intrinsically Safe</td>
<td>800002</td>
<td>BGIB4B6B1DSN6R</td>
<td>Explosion protected, Zone 0, 1 &amp; 2, DC, 2 × M20 bottom entries, single break glass switch latching, single switch, red finish</td>
</tr>
<tr>
<td>ATEX Ex II 2GD</td>
<td>Increased Safety</td>
<td>800003</td>
<td>BGEB4B6B1DSN6R</td>
<td>Explosion protected Ex II 2GD, Exed, IIC, T6, Zone 1 &amp; 2, DC, 2 × M20 bottom entries, single break glass switch latching, red finish</td>
</tr>
<tr>
<td>IP66 &amp; 67</td>
<td>Waterproof</td>
<td>800001</td>
<td>BGWN4B6B1ASN6R</td>
<td>Dust-tight and weatherproof, uncertified AC, 2 × M20 bottom entries, single break glass switch latching, red finish</td>
</tr>
</tbody>
</table>

## BG2 Break Glass Call Point—Hazardous Locations

<table>
<thead>
<tr>
<th>Certification</th>
<th>Type</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Ex II 1GD</td>
<td>Intrinsically Safe</td>
<td>800005</td>
<td>BG2INN1N</td>
<td>Explosion protected, Zone 0, 1 &amp; 2, DC, 2 × M20 bottom entries, single break glass switch latching, red finish</td>
</tr>
<tr>
<td>Increased Safety</td>
<td>Increased Safety</td>
<td>800004</td>
<td>BG2EDC1N</td>
<td>Explosion protected, Zone 1 &amp; 2, DC, 2 × M20 bottom entries, single break glass switch latching, red finish</td>
</tr>
</tbody>
</table>

## BG3 Break Glass Call Point—Explosionproof & Weatherproof

<table>
<thead>
<tr>
<th>Certification</th>
<th>Type</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Ex II 1G</td>
<td>Intrinsically Safe</td>
<td>800007</td>
<td>BG311NBN</td>
<td>Explosion protected, Zone 0 / 1 &amp; 2 DC, standard models are surface mount version, have 2 × M20 bottom entries, single break glass switch latching, duty label &quot;Burning House,&quot; red GRP finish</td>
</tr>
<tr>
<td>ATEX Ex II 1G</td>
<td>Weatherproof</td>
<td>800006</td>
<td>BG3W1NBN</td>
<td>Uncertified, dust-tight &amp; weatherproof, 24V DC, single break glass switch latching, duty label &quot;Burning House,&quot; red finish</td>
</tr>
</tbody>
</table>
Fire Alarm or Emergency Call Points

MEDC Series

Specification—SM87PBL Unit

Certification: UL Listed: Class I, Div. 1, Groups C, D and Class I, Zone 1. Listing No: E186629.

CSA Certification: I.S. Version
Class I, Groups A, B, C, D
Exd Class I, Div. 2 / Group D
Enclosure type 4, Cert. No. 79120

ATEX approved:
EN50014, EN50018
Cert. No. Baseefa 03ATEX0075

Voltage: 24V AC/DC
Rating: 2 amp
Switches: 2 pole c/o, wired to terminals
Terminals: Will accept up to 14AWG cable
Entries: Up to 4 × 1/2" or 3/4" NPT, 20mm, 25mm
Optional Indicator: A red high intensity LED can be fitted for alarm indication

Material: LM 25 TF Marine Grade Alloy or Grade 316 ANCHB stainless steel

Weight: 5.5 lb/2.5kg (approx.)
Finish: Epoxy paint finish as standard or to customer’s specification

Certified Temperature:
Exd/Exi: –55°C to 70°C
–20°C to +55°C (LED version only)

UL:
–67°F to +158°F (–55°C to +70°C)
–4°F to +131°F (–20°C to +55°C) LED version only

CSA:
–58°F to +131°F (–50°C to +55°C) (Exd)
–58°F to +104°F (–50°C to +40°C) (Exi)

Ingress Protection:
NEMA 4X and 6, IP66 & 67

Protection: SM87 PB IP68 (40m for 8 hours)

Addressable: Consult MEDC for specification

Resistor Values: 470R minimum (DC & I.S. units only)

Field Installed Duty Labels

<table>
<thead>
<tr>
<th>Use with SM87 Call Points</th>
<th>Duty Label</th>
<th>Ordering Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM87PBL/SM87BGGL</td>
<td>Blank</td>
<td>869530</td>
</tr>
<tr>
<td>SM87PBL/SM87BGGL</td>
<td>Fire</td>
<td>869536</td>
</tr>
<tr>
<td>SM87PBL/SM87BGGL</td>
<td>Emergency Shut Down</td>
<td>869532</td>
</tr>
<tr>
<td>SM87PBL/SM87BGGL</td>
<td>Suppression Release</td>
<td>869534</td>
</tr>
</tbody>
</table>

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Model</th>
<th>Material</th>
<th>Certification</th>
<th>Entries</th>
<th>Duty Label</th>
<th>Tag Label</th>
<th>Features</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM87</td>
<td>PBL</td>
<td></td>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Material Code
Stainless Steel S
Alloy A

UL listed only available in Alloy.

Certification Code
EEExdICT6 D
UL Listed UL
CSA Certified C

Entries Code
20mm Left/Right 1L1R
20mm Top/Bottom 1T1B
20mm Bottom 1B
25mm Left/Right 2L2R
25mm Top/Bottom 2T2B
25mm Bottom 2B
1/2" NPT Left/Right 3L3R
1/2" NPT Top/Bottom 3T3B
1/2" NPT Bottom 3B
3/4" NPT Left/Right 4L4R
3/4" NPT Top/Bottom 4T4B
3/4" NPT Bottom 4B

Finish Code
Red R
Blue B
Yellow Y
Yellow/Black Stripes X

Crouse-Hinds by Eaton

Both the ExiaIICT4 units and the ExdIICT6 units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification.

**Specification—SM87BGL Unit**

**Break glass unit, latching**
- Type SM87BGL

**Lift flap, break glass, latching**
- Type SM87LBGL

**Voltage:**
- Exd 24V AC/DC Exia 28V

**Rating:**
- 2 amp

**Switches:**
- 2 pole c/o, wired to terminals
  - Optional up to 4 pole

**Terminals:**
- Will accept up to 2.5mm² cable

**Entries:**
- Up to 4 x 20mm or 25mm ISO EExd/EExia

**Optional Indicator:**
- A red high intensity LED can be fitted for alarm indication

**Material:**
- Grade 316 ANC4B Stainless Steel or LM 25 TF Marine Grade Alloy

**Weight:**
- 3.8 kg. steel (approx.) or 2.5 kg. alloy (approx.)

**Finish:**
- Epoxy paint finish as standard or to customer’s specification

**Certification:**
- CENELEC EN 50014, EN50018 (for Exd) and EN50020 (for Exi)
  - ExiaIICT4 Cert No. Baseefa 02 ATEX 0152X
  - ExdidIICT5/T6 Cert No. Baseefa 03 ATEX 0075
- CSA Certification:
  - Class I Groups A-D I.S. version (SM87 PBI only)
  - Class I, Div. 1 & 2, Group D (Exd – SM87 PB & SM87 BG)
- GOST ’R’ Certification:
  - Exib IIC T4, 1Exd IIC T4*
- GOST ’K’ Certification:
  - Exib IIC T4*
- Chinese Certification:
  - CQST – Exia IIC T4, Exd IIC T5/T6*
  - *Available upon request

**Certified Temperature:**
- Exd/Exia*:
  - –55°C to +70°C
  - –20°C to +55°C (LED version only)
- CSA:
  - –50°C to +55°C (Exd)
  - –50°C to +40°C (Exi)
  - *Note: includes ATEX, GOST & Chinese versions.

**Ingress Protection:**
- IP66 and IP67

**Resistor Values:**
- 470R minimum (DC & I.S. units only)

**Certification Code:**
- EExiaIICT4 D
- CSA C

**Entry Code:**
- 20mm Left/Right: 1L1R
- 20mm Top/Bottom: 1T1B
- 25mm Left/Right: 2L2R
- 25mm Top/Bottom: 2T2B
- 30mm Bottom: 3B
- ½” NPT Left/Right: 3L3R
- ½” NPT Top/Bottom: 3T3B
- ½” NPT Bottom: 3B
- ¼” NPT Left/Right: 4L4R
- ¼” NPT Top/Bottom: 4T4B
- ¼” NPT Bottom: 4B

**Field Installed Duty Labels**

<table>
<thead>
<tr>
<th>Use with SM87 Call Points</th>
<th>Duty Label</th>
<th>Ordering Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM87PBL/SM87BGL</td>
<td>Blank</td>
<td>869530</td>
</tr>
<tr>
<td>SM87PBL/SM87BGL</td>
<td>Fire</td>
<td>869526</td>
</tr>
<tr>
<td>SM87PBL/SM87BGL</td>
<td>Emergency Shut Down</td>
<td>869532</td>
</tr>
<tr>
<td>SM87PBL/SM87BGL</td>
<td>Suppression Release</td>
<td>869534</td>
</tr>
</tbody>
</table>

**Ordering Requirements**

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

**Unit Type**
- SM87

**Model**
- BGL

**Material**
- Stainless Steel: S
- Alloy: A

**Certification**
- ExiaIICT4: D
- CSA: C

**Entries**
- 20mm Left/Right: 1L1R
- 20mm Top/Bottom: 1T1B
- 25mm Left/Right: 2L2R
- 25mm Top/Bottom: 2T2B
- 30mm Bottom: 3B
- ½” NPT Left/Right: 3L3R
- ½” NPT Top/Bottom: 3T3B
- ½” NPT Bottom: 3B
- ¼” NPT Left/Right: 4L4R
- ¼” NPT Top/Bottom: 4T4B
- ¼” NPT Bottom: 4B

**Finish**
- Red: R
- Blue: B
- Yellow: Y
- Yellow/Black Stripes: X

*Note: the units can be internally wired to suit customers’ specifications. Please discuss your requirements with us.*
Fire Alarm or Emergency Call Points

MEDC Series

Field Installed Duty Labels

Use with PB Call Points: | Duty Label | Ordering Code |
---|---|---|
PB | Blank | 869530 |
PB | Fire | 869526 |
PB | Emergency Shut Down | 869532 |
PB | Suppression Release | 869534 |

Specification—PB Unit

Certification:
- UL Listed — Hazardous locations: Class I, Div. 2, Groups A, B, C, D and Class I, Zone 2
- UL Listing No. E186629
- Ordinary locations: Fire Alarm Boxes. UL Listing No. S8117
- CSA Certified to C22.2 (PB only), Nos. 0-M, 0.4-M, 14-M, 25,30-M, 94, 142-M 1987, 157M 1987, 157-92, Enclosure Type 4, 4A, Class I, Groups A, B, C, D. Cert. No. 79120
- ATEX Approved: EN50014, EN50018, EN50019, EN50028
- Cert. No. BAS02ATEX2105X (BG & PB), Exed II C T6 (switch only), Exedm IIC T4 (other versions)

Voltage: Up to 240V

Certified Temperature:
- BGUL/PBUL: 
  -13°F to +131°F (-25°C to + 55°C)
- PB (CSA):
  -58°F to +104°F (-50°C to +40°C)

Ingress Protection: NEMA 4X & 6, IP66 & 67

Terminals: 7 x 14 AWG standard

Switch Rating (1 or 2 changeover switches fitted):
Max Rating 240VAC, 3A

Cable Entries: Up to 4 entries 1/2" NPT or 20mm

Weight: 2.6 lb/1.2kg (varies with model & entries)

Material: Glass reinforced polyester

Finish: Red epoxy painted finish as standard or to customer’s specification

Resistors: Various configurations available on versions up to 24V, 470R minimum

LED Indication: A high intensity red LED can be fitted as an optional extra to indicate operation on versions up to 24V

Labeling: PB & BG duty label — worded to client’s requirements (riveted on)
PB & BG tag label — worded to client’s requirements (screwed on)

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Model</th>
<th>Certification</th>
<th>Entries</th>
<th>Labels</th>
<th>Switches</th>
<th>Features</th>
<th>Terminals</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB</td>
<td>ATEX/CE/ERC/EC – Exe</td>
<td>E</td>
<td>B</td>
<td>1 Bottom M20</td>
<td>5B</td>
<td>7</td>
<td>Red (Standard)</td>
</tr>
<tr>
<td></td>
<td>ATEX/CE/ERC/EC – Exe</td>
<td>E</td>
<td>B</td>
<td>2 Bottom M20</td>
<td>4B 6B</td>
<td>7</td>
<td>Natural Black</td>
</tr>
<tr>
<td></td>
<td>CSA – Exi (PB only)</td>
<td>E</td>
<td>B</td>
<td>1 Top, 1 Bottom M20</td>
<td>2B 5B</td>
<td>7</td>
<td>Red</td>
</tr>
<tr>
<td></td>
<td>UL – Class I, Div. 2</td>
<td>E</td>
<td>B</td>
<td>1 Bottom // NPT</td>
<td>5C</td>
<td>7</td>
<td>Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>2 Bottom // NPT</td>
<td>4C 6C</td>
<td>7</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>1 Top, 1 Bottom // NPT</td>
<td>2C 5C</td>
<td>7</td>
<td>Gray</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>16 mm</td>
<td><strong>A</strong></td>
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<td></td>
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<td>B</td>
<td>20 mm</td>
<td><strong>B</strong></td>
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<td>Gray</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>/\ W1</td>
<td>7</td>
<td>Gray</td>
<td></td>
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<tr>
<td></td>
<td>UL &amp; CSA Versions only available with /\ NPT entries</td>
<td></td>
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</tr>
</tbody>
</table>

For versions containing in-line and end-of-line resistors, please specify your requirements.

Crouse-Hinds by J.T.N.

1S  Fire Alarm or Emergency Call Points

MEDC Series

Specification—BG Unit

Certification: UL Listed — Hazardous locations: Class I, Div. 2, Groups A, B, C, D and
Class I, Zone 2
UL Listing No. E186629
CSA Certified to C22.2 (PB only), Nos. 0-M, 0.4-M, 14-M, 25.30-M,
9A, 142-M 1987, 157M 1987, 157–92, Enclosure Type 4, 4A, Class I,
Groups A, B, C, D, Cert. No. 79120
ATEX Approved:
–58°F to +104°F (–50°C to +40°C)
Cert. No. BAS02ATEX2105X (BG & PB), Exed II C T6 (switch only),
Exedm IIC T4 (other versions)

Voltage: Up to 240V

Certified Temperature: BGUL/PBUL:
–13°F to +131°F (–25°C to + 55°C)
PB (CSA):
–58°F to +104°F (–50°C to +40°C)

Ingress Protection: NEMA 4X & 6, IP66 & 67

Terminals: 7 x 14 AWG standard

Switch Rating (1 or 2 changeover switches fitted): Max Rating 240VAC, 3A

Cable Entries: Up to 4 entries ½" NPT or 20mm

Weight: 2.6 lb/1.2kg (varies with model & entries)

Material: Glass reinforced polyester

Finish: Red epoxy painted finish as standard or to customer’s specification

Resistors: Various configurations available on versions up to 24V, 470R minimum

LED Indication: A high intensity red LED can be fitted as an optional extra to indicate
operation on versions up to 24V

Labeling:
BG glass label — reads either:
(1) Fire break glass — press here
(2) Break glass — press here
(3) Worded to client’s requirements
PB & BG tag label — worded to client’s requirements (screwed on)
PB & BG duty label — worded to client’s requirements (riveted on)

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Model</th>
<th>Certification</th>
<th>Code</th>
<th>Entries</th>
<th>Labels</th>
<th>Switches</th>
<th>Features</th>
<th>Terminals</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG</td>
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</table>

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Glass Label</td>
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<td></td>
<td>Glass —</td>
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<td></td>
<td></td>
<td>Press Here</td>
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<td>to client’s</td>
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</tbody>
</table>

Field Installed Duty Labels

Use with BG Call Points: Duty Label Ordering Code

BG Blank 869531
BG Fire 869525
BG Emergency Shut Down 869533
BG Suppression Release 869535

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Model</th>
<th>Certification</th>
<th>Code</th>
<th>Entries</th>
<th>Labels</th>
<th>Switches</th>
<th>Features</th>
<th>Terminals</th>
<th>Finish</th>
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<td>(riveted on)</td>
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</tr>
</tbody>
</table>

- **Switches Code**
  - DC double change over
  - AC single change over
  - AC double change over

- **Features Code**
  - DC double change over
  - AC single change over

- **Terminals Code**
  - DC double change over
  - AC single change over
  - AC double change over

- **Finish Code**
  - Red Standard R
  - Natural Black N
  - Blue B
  - Yellow Y
  - Gray G

For versions containing in-line and end-of-line resistors, please specify your requirements.
Heat Detectors

MEDC Series

The MEDC heat detector has been designed for use in hazardous environments. These units are suitable for fire alarm and/or suppression systems in offshore and onshore applications including paint spray booths, flammable material stores, turbine rooms, extract ductwork and other hazardous areas throughout the oil & gas, petrochemical and process industries.

Comprising a Fenwal rate-compensated detector with all-stainless steel external construction, mounted to either a type SM87 marine grade alloy enclosure (Exd version) or JB10 corrosion-free GRP enclosure (Exia, Exem/UL versions). The contact in the detector CLOSES at alarm temperature.

To select appropriate temperature setting, see specification on reverse.

Applications:
- Compressor turbine/generator skids
- Switchgear or motor control status rooms
- Process tank areas or transmission lines

Typical Industries:
- Power generation
- Nuclear plants
- Chemical processing
- Upstream/downstream oil and gas

Certifications and Compliances:
- Zone 0, Zone 1 and Zone 2
- Exia IIC T4/T6, Exd IIB T3/T6 or Exem II T6
- ATEX approved
  - Ex II 1G (Exia)
  - Ex II 2G (Exd/Exem)
- BASEEFA certified
- UL listed for USA and Canada
  - Class I, Div. 2, Groups A, B, C, D
- GOST ‘R’ & ‘K’ certified
- Chinese (CQST) certified
- IP66 & IP67
- Certified temperature:
  - -20°C to +125°C (Exd)*
  - -20°C to +55°C (Exem/UL)
  - -55°C to +55°C (Exia)
- Stainless steel probe
- Detector temperature settings:
  - 60°C to 385°C, (140°F to 725°F)
- Marine grade Alloy or GRP enclosure
- Optional guard

*Model dependent.
**Heat Detectors**

**MEDC Series**

**HD1**

**Heat Detector — Explosionproof & Intrinsically Safe**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Flameproof</th>
<th>Increased Safety</th>
<th>Intrinsically Safe</th>
</tr>
</thead>
<tbody>
<tr>
<td>cULus, ATEX, GOST-R, GOST-K, GB</td>
<td>ATEX Ex II 2G, Exd IIB T6</td>
<td>ATEX Ex II 2G, Exem II T6</td>
<td>ATEX Ex II 1G, Exia IIC T6</td>
</tr>
</tbody>
</table>

**Certified Ambient Temperature**

-20°C to +125°C Exd (T3) ATEX/GOST ‘R’
-20°C to +55°C Exd (T6)/Exem
-55°C to +55°C Exia

**Ingress Protection**

IP66 & 67

**Material**

- Marine Grade Alloy (Exd)
- Corrosion-free GRP (Exia/Exem)

**Temperature Settings**

140°F to 725°F (60°C to 385°C)

**Entries**

2 × M20

**Weight**

1.1–2.0kg (model dependent)

**Options:**

- Enclosures, color, tag and duty labels, temperature setting

**Certification**

- Standard Product Configuration

<table>
<thead>
<tr>
<th>Certification</th>
<th>Standard Product Configuration</th>
<th>Ordering Code</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Exd</td>
<td>140°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500152</td>
<td>HD1ULE140GN</td>
</tr>
<tr>
<td>ATEX Exd</td>
<td>160°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500153</td>
<td>HD1ULE160GN</td>
</tr>
<tr>
<td>ATEX Exd</td>
<td>190°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500154</td>
<td>HD1ULE190GN</td>
</tr>
<tr>
<td>ATEX Exd</td>
<td>225°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500155</td>
<td>HD1ULE225GN</td>
</tr>
<tr>
<td>ATEX Exd</td>
<td>275°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500156</td>
<td>HD1ULE275GN</td>
</tr>
<tr>
<td>ATEX Exd</td>
<td>325°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500157</td>
<td>HD1ULE325GN</td>
</tr>
<tr>
<td>ATEX Exd</td>
<td>360°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500158</td>
<td>HD1ULE360GN</td>
</tr>
<tr>
<td>ATEX Exd</td>
<td>450°F detector, marine grade alloy enclosure, painted gray</td>
<td>46500159</td>
<td>HD1ULE450GN</td>
</tr>
<tr>
<td>ATEX Exm</td>
<td>140°F detector, GRP enclosure, natural black</td>
<td>46500026</td>
<td>HD1BE140NN</td>
</tr>
<tr>
<td>ATEX Exm</td>
<td>160°F detector, GRP enclosure, natural black</td>
<td>46500031</td>
<td>HD1BE160NN</td>
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<tr>
<td>ATEX Exm</td>
<td>190°F detector, GRP enclosure, natural black</td>
<td>46500035</td>
<td>HD1BE190NN</td>
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<tr>
<td>ATEX Exm</td>
<td>225°F detector, GRP enclosure, natural black</td>
<td>46500034</td>
<td>HD1BE225NN</td>
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<td>ATEX Exm</td>
<td>275°F detector, GRP enclosure, natural black</td>
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<td>HD1BE275NN</td>
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<td>ATEX Exm</td>
<td>325°F detector, GRP enclosure, natural black</td>
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<td>ATEX Exm</td>
<td>360°F detector, GRP enclosure, natural black</td>
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<td>HD1BE360NN</td>
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<tr>
<td>ATEX Exm</td>
<td>450°F detector, GRP enclosure, natural black</td>
<td>46500043</td>
<td>HD1BE450NN</td>
</tr>
</tbody>
</table>

**Compensated Heat Detector with Guard Fitted Natural Black Finish**

To select appropriate temperature settings, choose detector at 56°C (100°F) above maximum ambient temperature.

<table>
<thead>
<tr>
<th>Temperature Setting</th>
<th>Tolerance</th>
<th>Color Code</th>
<th>Order Code</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>140 (60°F)</td>
<td>+7/-8</td>
<td>Black</td>
<td>46500152</td>
<td>HD1ULE140GN</td>
</tr>
<tr>
<td>160 (71°F)</td>
<td>+7/-8</td>
<td>Black</td>
<td>46500153</td>
<td>HD1ULE160GN</td>
</tr>
<tr>
<td>190 (88°F)</td>
<td>+7/-8</td>
<td>White</td>
<td>46500154</td>
<td>HD1ULE190GN</td>
</tr>
<tr>
<td>225 (107°F)</td>
<td>+7/-8</td>
<td>White</td>
<td>46500155</td>
<td>HD1ULE225GN</td>
</tr>
<tr>
<td>275 (135°F)</td>
<td>±10</td>
<td>Blue</td>
<td>46500156</td>
<td>HD1ULE275GN</td>
</tr>
<tr>
<td>325 (163°F)</td>
<td>±10</td>
<td>Red</td>
<td>46500157</td>
<td>HD1ULE325GN</td>
</tr>
<tr>
<td>360 (182°F)</td>
<td>±10</td>
<td>Red</td>
<td>46500158</td>
<td>HD1ULE360GN</td>
</tr>
<tr>
<td>450 (232°F)</td>
<td>±15</td>
<td>Green</td>
<td>46500159</td>
<td>HD1ULE450GN</td>
</tr>
</tbody>
</table>
Heat Detectors

MEDC Series

Specication—HD1 Unit

Certification:
CENELEC EN50014, 19 & 28
Exd IIB T6 (T3 at +125°C), Cert. No. Baseefa 03ATEX0447
Exia IIC T6 (T4 with diodes/resistors), Cert. No. Baseefa 03ATEX0427
Exem II T6, Cert. No. Baseefa 03ATEX0428
UL listed for USA and Canada
– Class I, Div 2, Groups A, B, C & D
– UL Listing No. E252920
GOST ‘R’ & ‘K’ Certification: Exd, Exi & Exem versions
Chinese Certification: Russian Fire Alarm (VNIIPO) approved

Material:
Detector: 316 stainless steel
Enclosures: Exd – LM25 marine grade alloy
Exia/Exem/UL – GRP (anti-static)
Stainless steel cover screws
Optional Guard: 316 stainless steel

Finish:
Detector: Sand blasted
Enclosures: Exd – Epoxy painted gray as standard or to customer’s specification Exia/Exem/UL – Self colored black or epoxy painted to customer’s specification

Weight:
Exd, 2kg.
Exia/Exem/UL, 1.1kg.

Certified Temperature:
-20°C to +125°C Exd (T3) ATEX & GOST ‘R’ only
-20°C to +65°C Exd (T6)/Exem/UL, -55°C to +55°C Exia

Ingress Protection:
IP66 & IP67

Operation:
The detector contact is normally open and CLOSES at alarm temperature

Listed Temperature Settings:
To select appropriate temperature settings, choose detector at 56°C (100°F) above maximum ambient temperature.

<table>
<thead>
<tr>
<th>Temperature Setting (°F)</th>
<th>Tolerance (°F)</th>
<th>Color Code Detector Tip</th>
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</thead>
<tbody>
<tr>
<td>140</td>
<td>+7/-8</td>
<td>±4</td>
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<tr>
<td>160</td>
<td>+7/-8</td>
<td>±4</td>
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<td>180</td>
<td>+7/-8</td>
<td>±4</td>
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<tr>
<td>225</td>
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<td>±4</td>
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<td>±6</td>
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<tr>
<td>325</td>
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<td>450</td>
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<tr>
<td>600</td>
<td>+20</td>
<td>±11</td>
</tr>
<tr>
<td>725</td>
<td>+25</td>
<td>±14</td>
</tr>
</tbody>
</table>

Contact Rating:
Exd/Exem/UL: 125V AC – 5A, 125V DC – 0.5A
48V DC – 1A. Exia: 30V – 300mA

Terminals:
6 x 4mm² (BK6)

Labels:
Optional stainless steel tag and duty labels

Cable Entries:
2 x M20 ISO (ATEX/Exd/Exi/Exem versions)
2 x 1/2” NPT via adaptors (UL version)

Resistor:
2 x M20 ISO (ATEX/Exd/Exi/Exem versions)
2 x 1/2” NPT via adaptors (UL version)

Diodes:
Up to 2 off available in Exd, Exi & UL versions—contact sales office

Ordering Requirements
The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

# Strobe Lights

## Hazardous and Non-hazardous

<table>
<thead>
<tr>
<th>Description</th>
<th>Page No.</th>
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<tbody>
<tr>
<td><strong>Strobe Lights - MEDC Series</strong></td>
<td></td>
</tr>
<tr>
<td>SM87 HXB</td>
<td>see pages 1239–1240</td>
</tr>
<tr>
<td>XB4</td>
<td>see pages 1242–1244</td>
</tr>
<tr>
<td>XB11</td>
<td>see pages 1239–1241</td>
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<tr>
<td>XB12</td>
<td>see pages 1242–1245</td>
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<td>see pages 1243–1246</td>
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<tr>
<td>XB15</td>
<td>see pages 1235–1238</td>
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<tr>
<td>XB16 UL</td>
<td>see pages 1236–1238</td>
</tr>
<tr>
<td><strong>Strobe Lights - Hazard•Gard EX Series</strong></td>
<td></td>
</tr>
<tr>
<td>EXFASC</td>
<td>see page 1247</td>
</tr>
<tr>
<td>EXR</td>
<td>see pages 1251–1253</td>
</tr>
<tr>
<td>EXS, EXDS</td>
<td>see pages 1248–1250</td>
</tr>
</tbody>
</table>
Strobe Lights

MEDC Series

These listed strobes have been designed for use in potentially explosive atmospheres and harsh environmental conditions. The enclosures are suitable for use offshore or onshore, where a lightweight product combined with corrosion resistance is required.

The housing is manufactured from a U.V. stable, glass reinforced polyester, with the lens manufactured from a U.V. stable polycarbonate. Stainless steel screws are used, ensuring a totally corrosion-free product.

The strobes contain supervisory diode and four wire leads for fire alarm applications. This strobe is also available UL 1971 (ADA) Listed for hearing impaired applications.

Units can be painted to customer specification and supplied with identification labels.

Applications:
- Condition signaling
- Security alert
- Equipment obstruction warning
- Emergency evacuation signaling

Features and Benefits:
- Pipe mount with 1/2” NPT entry
- Corrosion resistant GRP enclosure
- XB16 580,000 peak candlepower
- XB15 520,000 peak candlepower
- Polycarbonate lens, various colors available†
- 4 wire diode monitored board
- Optional relay initiate
- Optional lens guard

†UL 1971 version available with clear lens only (XB16 only).
*Conforms to UL regulated voltage.

Certifications and Compliances:
- UL Listed for USA and Canada
  - Hazardous locations for USA and Canada
    - Class I, Div. 2, Groups A, B, C, D*
    - UL 1971 compliant version available
  - Ordinary locations: Visual Signal Device
- NEMA 4X and 6, IP66 & 67
- Certified temperature
  - -67°F to +158°F
  - -55°C to +70°C

Typical Industries:
- Utility gas plants
- Wastewater treatment plants
- Mining
- Petroleum refineries
- Chemical and petrochemical
- Pulp and paper
## MEDC Series

### XB15

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Red</td>
<td>869400</td>
<td>XB15UL12006RWBNN</td>
<td>15 joules, direct mount with backstrap, x ½&quot; NPT side entries, wire guard, 60 flashes per minute, natural black finish</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Amber</td>
<td>869401</td>
<td>XB15UL12006AWBNN</td>
<td>15 joules, pipe mount, 1 x ½&quot; NPT entry, wire guard, 60 flashes per minute, natural black finish</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Red</td>
<td>869402</td>
<td>XB15UL12006RWPNN</td>
<td>15 joules, pipe mount, 1 x ½&quot; NPT entry, wire guard, 60 flashes per minute, natural black finish</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Amber</td>
<td>869403</td>
<td>XB15UL12006AWPN</td>
<td>15 joules, pipe mount, 1 x ½&quot; NPT entry, wire guard, 60 flashes per minute, natural black finish</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Clear</td>
<td>27600042</td>
<td>XB15UL02406CWBN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
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<td>24V DC</td>
<td>Green</td>
<td>27600043</td>
<td>XB15UL02406GWBNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Blue</td>
<td>869393</td>
<td>XB15UL02406BWBNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>869398</td>
<td>XB15UL02406RWPNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Amber</td>
<td>869397</td>
<td>XB15UL02406AWPN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Clear</td>
<td>27600047</td>
<td>XB15UL02406CWPNN</td>
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<td>24V DC</td>
<td>Green</td>
<td>27600048</td>
<td>XB15UL02406GPNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Blue</td>
<td>869394</td>
<td>XB15UL02406BPNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>869396</td>
<td>XB15UL02406RPNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Amber</td>
<td>869397</td>
<td>XB15UL02406AWPN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Clear</td>
<td>27600052</td>
<td>XB15UL12006CWBNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
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<td>27600053</td>
<td>XB15UL12006GWBN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Blue</td>
<td>869405</td>
<td>XB15UL12006BWBNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Clear</td>
<td>27600057</td>
<td>XB15UL12006CWPNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
<tr>
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<td>120V AC</td>
<td>Green</td>
<td>27600058</td>
<td>XB15UL12006GPNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Blue</td>
<td>869404</td>
<td>XB15UL12006BWPNN</td>
<td>15 joule beacon, 60 flashes per minute, wire guard, backstrap, 2 x ½&quot; NPT entries, natural black enclosure</td>
</tr>
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</table>
## XB16 UL

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
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<tr>
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<td>869406</td>
<td>XB16UL12060BYNN</td>
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<tr>
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<td>120V AC</td>
<td>Red</td>
<td>869407</td>
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<tr>
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<td>Amber</td>
<td>869408</td>
<td>XB16UL12060AYNN</td>
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<tr>
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<td>Clear</td>
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<td>XB16UL12060CYNN</td>
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<tr>
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<td>120V AC</td>
<td>Green</td>
<td>29600014</td>
<td>XB16UL12060GYNN</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Blue</td>
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<tr>
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<td>Red</td>
<td>29600003</td>
<td>XB16UL12060RYNN</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>120V AC</td>
<td>Amber</td>
<td>29600004</td>
<td>XB16UL12060AYNN</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Green</td>
<td>29600016</td>
<td>XB16UL02460GYNN</td>
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<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>Blue</td>
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<td>XB16UL02460BYNN</td>
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<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
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<td>Amber</td>
<td>869411</td>
<td>XB16UL02460AYNN</td>
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</table>

**Certification**
- cULus, UL 1971 compliant
- Class I, Div. 2, Groups A, B, C, D

**Certified Ambient Temperature**
- -67°F to +158°F
- -55°C to +70°C

**Ingress Protection**
- NEMA 4X & 6
- IP66 & 67

**Material**
- Corrosion-free GRP

**Entries**
- Standard 1 x 1/4" NPT

**Options**
- Body & lens color, lens guard, voltages 12–48V DC, 110–254V AC

**Certification**
- UL 1971 Listed for signaling devices for the hearing impaired. Suitable for fire alarm indication.
- 10 joule beacon, 60 flashes per minute, lens guard, pipe mounting, 1 x 1/2" NPT entry, natural black enclosure

**Standard Product Configuration**
- 10 joules, 60 flashes per minute, 1 x 3/4" NPT entry, 240 Cd, lens guard, natural black finish

- 10 joule beacon, 60 flashes per minute, lens guard, pipe mounting, 1 x 1/4" NPT entry, natural black enclosure

- 10 joule beacon, 60 flashes per minute, lens guard, pipe mounting, 1 x 1/2" NPT entry, natural black enclosure
Strobe Lights

MEDC Series

Electrical Ratings:

<table>
<thead>
<tr>
<th>Voltage</th>
<th>DC</th>
<th>AC</th>
<th>DC</th>
<th>AC</th>
<th>DC</th>
<th>AC</th>
<th>DC</th>
<th>AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage (A) at 60 fpm</td>
<td>.78</td>
<td>.67</td>
<td>.4</td>
<td>.4</td>
<td>.2</td>
<td>.2</td>
<td>.2</td>
<td>.2</td>
</tr>
<tr>
<td>Voltage (A) at 80 fpm</td>
<td>.99</td>
<td>.73</td>
<td>.4</td>
<td>.4</td>
<td>.2</td>
<td>.2</td>
<td>.2</td>
<td>.2</td>
</tr>
<tr>
<td>Voltage (A) at 120 fpm</td>
<td>.99</td>
<td>.73</td>
<td>.4</td>
<td>.4</td>
<td>.2</td>
<td>.2</td>
<td>.2</td>
<td>.2</td>
</tr>
</tbody>
</table>

Effective Candlepower: 330 (Effective candlepower is the intensity that would appear to an observer if the light was burning steadily)

Peak Candlepower: 520,000 (Peak candlepower is the maximum light intensity generated by a flashing light during its light pulse)

Multiplying Factor for Colored Lenses:

<table>
<thead>
<tr>
<th>Red</th>
<th>Blue</th>
<th>Amber</th>
<th>Green</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.15</td>
<td>0.12</td>
<td>0.51</td>
<td>0.49</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

**XB15**

**Specification—XB15 Unit**

**Certification:**
- UL Listed for USA and Canada:
  - Hazardous locations
    - Class I, Div. 2, Groups A, B, C, D
    - Class I, Zone 1, AExd IIC T5/T6
  - Ordinary locations:
    - Visual Signal Device
    - UL listing No. S8128
    - CENELEC/ATEX approved
    - CENELEC EN50014 & EN50018
    - ATEX Cert. No. Baseefa 04ATEX0009X

**Material:**
- Body: Glass reinforced polyester
- Lens: Glass
- Backstrap: stainless steel 316
- Wire Guard (optional): stainless steel wire
- Cast Guard (optional): aluminum LM25M

**Finish:**
- Natural black or epoxy painted to customer specification

**Voltage:**
- 24, 48V DC
- 110, 120, 230, 240, 254V AC

**Flash Rate:**
- 60, 80, 120 fpm

**Certified Temperature:**
- –67°F to +131°F (–55°C to +55°C) T6
- –67°F to +158°F (–55°C to +70°C) T5

**Weight:**
- Pipe mount: 5.75 lb/2.6kg; Direct mount: 6.5 lb/3.0kg

**Ingress Protection:**
- NEMA 4X & 6, IP66 & IP67

**Entries:**
- Supplied as 2 × 3/4" NPT (direct mount) or 3/4" (pipe mount) as standard
- Other options available:
  - Up to 3 × 1/2" NPT or 3 × 3/4" NPT (direct mount); 1/2" NPT (pipe mount) — contact sales office to order

**Terminals:**
- Direct mount: 12 x 14AWG
- Pipe mount: 8 x 14AWG

**Relay Initiate:**
- Available on all units — suitable for 24V DC supplies only

**Labels:**
- Tag/Duty label option

**Model | Certification | Voltage | Lens Flashrate | Lens Color | Unit Guard | Fixing | Unit Options | Finish**

| XB15 | ATEX | 24V DC | 08 | Red | None | N | N |
|------|------|--------|----|-----|------|---|---|---|
|      | B    | 110V AC| 80 fpm | Blue | Cast |   |   |   |
|      | UL   | 120V AC| 12 | Amber | Wire |   |   |   |
|      | UL   | 240V AC| 120 fpm | Yellow |   |   |   |   |

**Color Code:**
- Red R
- Blue B
- Amber A
- Green G
- Yellow Y
- Clear C

**Unit Fixing Code:**
- Pipe mount P*
- Direct w/backstrap B

*Not available on ATEX version.*
Specifi cation—XB16UL Unit

Certification: UL Listed for USA and Canada:
- Hazardous locations for USA and Canada
  - Class I, Div. 2, Groups A, B, C, D
  - UL listing No. E251185
- Ordinary locations: Visual Signal Device: UL1638
  - UL listing No. E251185
- Hazardous locations for hearing impaired: UL1971
  - UL listing No. E251185

Material:
- Body: Glass reinforced polyester
- Lens: U.V. stable polycarbonate
- Lens screws: stainless steel 316

Finish:
- Natural black or painted to customer specification

Voltage:
- 24, 48V DC
- 110, 120, 230, 240, 254V AC
- Conforms to UL regulated voltage output (12V DC, 24V DC, 120V AC, 240V AC)

Certification Temperature:
- –67°F to +158°F (-55°C to +70°C)

Tube Energy:
- 10 joules

Tube Life:
- > 1 x 10^6 flashes

Weight:
- 2.2lb/1.0kg

Ingress Protection:
- NEMA 4X & 6, IP66 & IP67

Entries:
- Standard 1 x 1/2" NPT pipe mount

Terminals:
- 8 x 14AWG

Labels:
- Tag/Duty label option

Electrical Ratings:
For Hazardous Locations and Ordinary Locations (UL1638) Units

<table>
<thead>
<tr>
<th>DC/AC</th>
<th>Voltage</th>
<th>Current (A) at 60 fpm</th>
<th>Current (A) at 80 fpm</th>
<th>Current (A) at 120 fpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>0.89</td>
<td>0.30</td>
<td>0.38</td>
<td>0.22</td>
</tr>
<tr>
<td>48</td>
<td>0.30</td>
<td>0.38</td>
<td>0.22</td>
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<tr>
<td>110</td>
<td>0.38</td>
<td>0.38</td>
<td>0.22</td>
<td>0.22</td>
</tr>
<tr>
<td>120</td>
<td>0.38</td>
<td>0.38</td>
<td>0.22</td>
<td>0.22</td>
</tr>
<tr>
<td>230</td>
<td>0.22</td>
<td>0.22</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>240</td>
<td>0.22</td>
<td>0.22</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>254</td>
<td>0.18</td>
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<td></td>
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</tbody>
</table>

For UL1971 Units Only

<table>
<thead>
<tr>
<th>DC/AC</th>
<th>Voltage</th>
<th>Current (A) at 60 fpm</th>
<th>Current (A) at 80 fpm</th>
<th>Current (A) at 120 fpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>1.22</td>
<td>1.52</td>
<td>0.38</td>
<td>0.38</td>
</tr>
<tr>
<td>48</td>
<td>1.52</td>
<td>0.38</td>
<td>0.38</td>
<td>0.78</td>
</tr>
<tr>
<td>110</td>
<td>0.38</td>
<td>0.38</td>
<td>0.78</td>
<td>0.78</td>
</tr>
<tr>
<td>120</td>
<td>0.38</td>
<td>0.38</td>
<td>0.78</td>
<td>0.78</td>
</tr>
<tr>
<td>230</td>
<td>0.22</td>
<td>0.22</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>240</td>
<td>0.22</td>
<td>0.22</td>
<td>0.18</td>
<td>0.18</td>
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<tr>
<td>254</td>
<td>0.18</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Note: 24V DC units are certified for use in regulated 24V DC supplies (16–33V AC).
110/120V DC units are certified for use on regulated 120V AC supplies (96–132V AC).
230/240V DC units are certified for use on regulated 240V AC supplies (192–264V AC).

Multiplying factor for colored lenses:

<table>
<thead>
<tr>
<th>Color</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>0.15</td>
</tr>
<tr>
<td>Blue</td>
<td>0.12</td>
</tr>
<tr>
<td>Amber</td>
<td>0.51</td>
</tr>
<tr>
<td>Yellow</td>
<td>0.49</td>
</tr>
<tr>
<td>Clear</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.
**SM87 HXB**  
**5 Joule Xenon Strobe—Explosionproof**

- **Certification**: cULus, CSA, ATEX  
- **UL Listed for**: Class I, Div. 1, Groups C, D  
- **Class I, Zone 1**  
- **Certified Ambient Temperature**: $-67^\circ F$ to $+158^\circ F$  
- **Temperature**: $-55^\circ C$ to $+70^\circ C$  
- **Ingress Protection**: NEMA 4X & 6, IP66 & 67  
- **Material**: Alloy  
- **Entries**: Up to $2 \times \frac{1}{2}$" or $\frac{3}{4}$" NPT, M20, M25  
- **Weight**: 4.4lb/2.0kg approx.  
- **Options**: Body & lens color, certification, lens guard, voltages 24–48V DC, 110–254V AC

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Red</td>
<td>813005</td>
<td>SM87HXBA024RN1LNNR</td>
<td>5 joules, 2 × M20 Entries, 29Cd, Exd Iic</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Amber</td>
<td>813006</td>
<td>SM87HXBA024RN1LNNR</td>
<td>5 joules, 2 × M20 Entries, 29Cd, Exd Iic</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>240V AC</td>
<td>Red</td>
<td>813007</td>
<td>SM87HXBA240RN1LNNR</td>
<td>7 joules, 2 × M20 Entries, 39Cd, Exd Iic</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>240V AC</td>
<td>Amber</td>
<td>813008</td>
<td>SM87HXBA240RN1LNNR</td>
<td>7 joules, 2 × M20 Entries, 39Cd, Exd Iic</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Red LED</td>
<td>813009</td>
<td>SM87LEDAB024RN1LNNR</td>
<td>192Cd, 2 × M20 Entries, Exd Iic</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>869161</td>
<td>SM87HXBAUL240RN3LNNR</td>
<td>Standard models are in alloy, red body color, no tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 29Cd, 60 flashes per minute</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Amber</td>
<td>869162</td>
<td>SM87HXBAUL240RN3LNNR</td>
<td>Standard models are in alloy, red body color, no tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 29Cd, 60 flashes per minute</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>869165</td>
<td>SM87HXBAUL110RN3LNNR</td>
<td>Standard models are in alloy, red body color, no tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 32Cd, AExd IIB, 60 flashes per minute</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Amber</td>
<td>869166</td>
<td>SM87HXBAUL110AN3LNNR</td>
<td>Standard models are in alloy, red body color, no tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 32Cd, AExd IIB, 60 flashes per minute</td>
</tr>
</tbody>
</table>

**XB11**  
**5 Joule Xenon Strobe—Hazardous Locations**

- **Certification**: cULus, ATEX  
- **UL Listed for**: Class I, Div. 2, Groups C, D  
- **Class I, Zones 1 & 2, AExd IIB T5**  
- **Certified Ambient Temperature**: $-67^\circ F$ to $+158^\circ F$  
- **Temperature**: $-55^\circ C$ to $+70^\circ C$  
- **Ingress Protection**: NEMA 4X & 6, IP66 & 67  
- **Material**: Corrosion-free GRP  
- **Entries**: $2 \times \frac{1}{2}$" NPT, 20mm  
- **Weight**: 2.6lb/1.2kg  
- **Options**: Body & lens color, voltages 24V DC, 110–254V AC

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Body Color</th>
<th>Lens Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>Red</td>
<td>869171</td>
<td>XB11UL02406RBN3RNRRR</td>
<td>No tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 60 flashes per minute</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>Amber</td>
<td>869172</td>
<td>XB11UL02406AN3RNRRR</td>
<td>No tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 60 flashes per minute</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Natural Black</td>
<td>Clear</td>
<td>869173</td>
<td>XB11UL02406CNBNNRRR</td>
<td>GRP, natural black body, no tag or duty labels, backstrap mounting, 2 × M20 entries, 60 flashes per minute</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Natural Black</td>
<td>Red</td>
<td>869174</td>
<td>XB11UL02406CNBBNNRRR</td>
<td>GRP, natural black body, no tag or duty labels, backstrap mounting, 2 × M20 entries, 60 flashes per minute</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Natural Black</td>
<td>Red</td>
<td>869175</td>
<td>XB11UL02406CNBBNNRRR</td>
<td>GRP, natural black body, no tag or duty labels, backstrap mounting, 2 × M20 entries, 60 flashes per minute</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Natural Black</td>
<td>Amber</td>
<td>861101</td>
<td>XB11B2406RBN3RNRRR</td>
<td>No tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 60 flashes per minute</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Natural Black</td>
<td>Amber</td>
<td>861102</td>
<td>XB11B2406AN3RNRRR</td>
<td>No tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 60 flashes per minute</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Natural Black</td>
<td>Red</td>
<td>861103</td>
<td>XB11BZ2406RBN3RNRRR</td>
<td>No tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 60 flashes per minute</td>
</tr>
<tr>
<td>ATEX EX II 2GD</td>
<td>24V DC</td>
<td>Natural Black</td>
<td>Amber</td>
<td>861104</td>
<td>XB11BZ2406AN3RNRRR</td>
<td>No tag or duty labels, 2 × $\frac{1}{2}$&quot; NPT entries, 60 flashes per minute</td>
</tr>
</tbody>
</table>
**Specification—SM87HXB Unit**

**Certification:** UL Listed for USA and Canada for Class I, Div. 1, Groups C, D and Class I, Zone 1. Listing No. E187894. CSA Certification: to C22.2, Nos. 0, 0.4, 0.5, 9, 30-M 1986, 94-M91, 137-M 1981, Class I, Div. 1, Group 0. Enclosure 3/4, Cert. No. 96406. ATEX approved: EN50014, EN50018, EN50019 Cert. No. Baseefa 03ATEX0222, Exd IIC T6

**Material:** LM25 TF Marine Grade Alloy
Lens: Toughened Glass

**Finish:** Epoxy paint finish as standard or to customer's specification

**Weight:** 5.5lb/2.5kg. approx.

**Certified Temperature:** Standard unit SM87 HXB: –67°F to +158°F, –55°C to +70°C
High temperature unit: –67°F to +185°F, –55°C to +85°C

**Ingress Protection:** NEMA 4X & 6, IP66 & 67

**Terminals:** 4 off suitable for up to 14AWG conductor size

**Labels:** Duty & tag labels optional

**Entries:** Up to 4 off ½” or ¾” NPT

### Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

![Diagram of SM87HXB Unit]

**Voltage**

<table>
<thead>
<tr>
<th>DC</th>
<th>24</th>
<th>48</th>
<th>110</th>
<th>120</th>
<th>240</th>
<th>254</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube Energy (joules)</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Peak Current Consumption (mA)</td>
<td>320</td>
<td>170</td>
<td>250</td>
<td>275</td>
<td>135</td>
<td>150</td>
</tr>
<tr>
<td>Power Consumption (Watts)</td>
<td>7.2</td>
<td>7.6</td>
<td>25</td>
<td>27</td>
<td>27</td>
<td>35</td>
</tr>
<tr>
<td>Effective Intensity (Cd)</td>
<td>29</td>
<td>29</td>
<td>32</td>
<td>39</td>
<td>39</td>
<td>44</td>
</tr>
</tbody>
</table>

**For Colored Lenses**

<table>
<thead>
<tr>
<th>Color</th>
<th>Red</th>
<th>Blue</th>
<th>Amber</th>
<th>Green</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiplying Factor</td>
<td>0.15</td>
<td>0.12</td>
<td>0.51</td>
<td>0.49</td>
<td>0.86</td>
</tr>
</tbody>
</table>

The photometric data has been independently verified. A report is available if required.
**Specification—XB11 Unit**

**Certification:**
- Hazardous locations:
  - Class I, Div. 2, Groups C, D
  - Class I, Zones 1 & 2, AExd IIB T5
  - UL Listing No. E187894
- Ordinary locations: Visual Signal Device
  - UL Listing No. S8128
  - ATEX approved:
    - Exd IIB T5/T6
    - Cert. No. 99 ATEX 2195X
    - CENELEC EN50014 and EN50018

**Material:**
- Body: Glass reinforced polyester
- Lens: Glass
- Cover Screws + Backstrap: Stainless steel 316

**Finish:**
- Natural black or painted to customer specification

**Weight:**
- 5.5lb/2.5kg

**Certified Temperature:**
- Standard unit SM87 HXB: –67°F to +158°F, –55°C to +70°C
- High temperature unit: –67°F to +185°F, –55°C to +85°C

**Ingress Protection:**
- NEMA 4X & 6, IP66 & 67

**Terminals:**
- 6 off suitable for up to 14 AWG conductor size

**Labels:**
- Duty/tag label optional

**Entries:**
- 2 × ½” NPT, 20mm

**Strobe/Sounder Unit:**
- The beacon may be combined with an MEDC Sounder to create a visual/audible alarm.
- Contact MEDC for price and specification.

**For Colored Lenses**

<table>
<thead>
<tr>
<th>Color</th>
<th>Red</th>
<th>Blue</th>
<th>Amber</th>
<th>Green</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiplying Factor</td>
<td>0.15</td>
<td>0.12</td>
<td>0.51</td>
<td>0.49</td>
<td>0.86</td>
</tr>
</tbody>
</table>

The photometric data has been verified by BSI. A report is available if required.

**Ordering Requirements**

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.
# Strobe Lights

## MEDC Series

### XB4

**21 Joule Xenon Strobe—Explosionproof**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Approved Ex II 2G</td>
<td>24V DC</td>
<td>Red</td>
<td>814001</td>
<td>XB4BBB8D2B3B06AN0RN1R</td>
</tr>
<tr>
<td>ATEX Approved Ex II 2G</td>
<td>240V AC</td>
<td>Red</td>
<td>814002</td>
<td>XB4BBH8D2B3B06AN0RN1R</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>869121</td>
<td>XB4ULBB8D2E3E06ANRN1R</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Amber</td>
<td>869122</td>
<td>XB4ULBB8D2E3E06ANAN1R</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>110V AC</td>
<td>Red</td>
<td>869125</td>
<td>XB4ULE8D2E3E06ANRN1R</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>110V AC</td>
<td>Amber</td>
<td>869126</td>
<td>XB4ULE8D2E3E06ANAN1R</td>
</tr>
</tbody>
</table>

**Standard Product Configuration**

- 21 joules, 2 × M20 entries, 355Cd, 60 flashes per minute, no labels, red finish
- Marine grade alloy, 2 × ½” NPT entries, no lens guard, 60 flashes per minute, red finish

### XB12

**21 Joule Xenon Strobe—Hazardous Locations**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Approved Ex II 2G</td>
<td>24V DC</td>
<td>Red</td>
<td>812101</td>
<td>XB12B02406RNBNNN</td>
</tr>
<tr>
<td>ATEX Approved Ex II 2G</td>
<td>24V DC</td>
<td>Amber</td>
<td>812102</td>
<td>XB12B02406ANBNNN</td>
</tr>
<tr>
<td>ATEX Approved Ex II 2G</td>
<td>240V AC</td>
<td>Red</td>
<td>812103</td>
<td>XB12B24006RNBNNN</td>
</tr>
<tr>
<td>ATEX Approved Ex II 2G</td>
<td>240V AC</td>
<td>Amber</td>
<td>812104</td>
<td>XB12B24006ANBNNN</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Red</td>
<td>869181</td>
<td>XB12UL02406RNBNNN</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Amber</td>
<td>869182</td>
<td>XB12UL02406ANBNNN</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>110V AC</td>
<td>Red</td>
<td>869185</td>
<td>XB12UL11006RNBNNN</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>110V AC</td>
<td>Amber</td>
<td>869186</td>
<td>XB12UL11006ANBNNN</td>
</tr>
</tbody>
</table>

**Standard Product Configuration**

- 21 joules, 2 × M20 entries, 355Cd, 60 flashes per minute, no labels, black body
- Red painted GRP, no tag or duty labels, 2 × ½” NPT, 60 flashes per minute, 355 Cd
## XB13 10 Joule Flashing Xenon—Weatherproof and Heavy Duty

**Certification**
- UL Listed for: Weatherproof IP66 & 67
- Certified Ambient Temperature: –67°F to +158°F, –55°C to +70°C
- Ingress Protection: NEMA 4X & 6, IP66 & 67
- Material: Corrosion-free GRP
- Entries: Up to 3 × 20mm via knockouts
- Weight: 1.1kg
- Options: Body & lens color, lens guard, voltages 12–24V DC, 115–230V AC

### XB13 Series

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weatherproof, IP66 &amp; 67</td>
<td>24V DC</td>
<td>Red</td>
<td>813101</td>
<td>XB13024RNNN</td>
<td>Dust-tight and weatherproof, uncertified, no tag or duty labels, 3 × 20mm entries via knockouts, 60 flashes per minute, dual and single flash modes, natural red GRP</td>
</tr>
<tr>
<td>Weatherproof, IP66 &amp; 67</td>
<td>24V DC</td>
<td>Amber</td>
<td>813102</td>
<td>XB13024ANN</td>
<td></td>
</tr>
<tr>
<td>Weatherproof, IP66 &amp; 67</td>
<td>230V AC</td>
<td>Red</td>
<td>813103</td>
<td>XB13320RNNN</td>
<td></td>
</tr>
<tr>
<td>Weatherproof, IP66 &amp; 67</td>
<td>230V AC</td>
<td>Amber</td>
<td>813104</td>
<td>XB13230ANN</td>
<td></td>
</tr>
</tbody>
</table>
Specification—XB4 Unit

Certification: UL Listed for USA and Canada
- Hazardous locations:
  Class I, Div. 1, Groups C, D
  Class I, Zone 1, AExd IIB T4
  UL Listing No. E187894
- Ordinary locations: Visual Signal Device
  UL Listing No. 58129
  ATEX approved:
  Exd IIC T5
  Cert. No. Baseefa 02ATEXO224X

Materials:
LM25TF Marine Grade Alloy body
Grade 316 ANC4B Stainless Steel body
Toughened Wellglass

Finish: Red epoxy paint finish as standard or to customer’s specification

Weight:
LM25: 14.5lb/6.6kg.
Stainless Steel: Add 18.5lb/8.5kg.

Certified Temperature:
-67°F to +158°F
-55°C to +70°C

Ingress Protection: NEMA 4X & 6, IP66 & 67

Terminals: 8 off suitable for up to 8 AWG conductor size

Entries: Up to 3 × 1/2" or 3/4" NPT, 20mm, 25mm

Voltage: DC 24, 110, 240
AC 50/60Hz Tube Energy (joules) 21, 21, 21
Peak Current Consumption (mA) 1400, 350, 185
Effective Intensity (Cd) 355, 355, 355
Peak Intensity (Cd) 123691, 123691, 123691

Note: The above figures (Cd) are for a clear lens @ 1Hz flash rate.

For Colored Lenses

<table>
<thead>
<tr>
<th>Color</th>
<th>Red</th>
<th>Blue</th>
<th>Amber</th>
<th>Green</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiplying Factor (Approximate)</td>
<td>0.15</td>
<td>0.12</td>
<td>0.51</td>
<td>0.49</td>
<td>0.86</td>
</tr>
</tbody>
</table>

The photometric data has been independently verified. A report is available if required.

Ordering Requirements
The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.
### Specification—XB12

**Certification:**
- UL Listed for USA and Canada
  - Hazardous locations:
    - Class I, Div. 2, Groups C, D
    - Class I, Zone 1 & 2, AEex IIB T4/T5
  - Ordinary locations: Visual Signal Device
  - UL Listing No. S8128
  - ATEX approved:
    - Exd IIB T4/T5
    - Cert. No. 99 ATEX 2196

**Materials:**
- Body: Glass reinforced polyester
- Lens: Toughened Glass
- Cover Screws + Backstrap: Stainless steel 316

**Finish:**
- Natural black or painted to customer specification

**Weight:**
- 15.5 lb/7.0kg

**Certified Temperature:**
- -67°F to +158°F (−55°C to +70°C) hazardous locations
- -67°F to +131°F (−55°C to +55°C) ordinary locations

**Ingress Protection:**
- NEMA 4X and 6, IP66 & 67

**Terminals:**
- 6 off suitable for up to 10 AWG conductor size

**Labels:**
- Duty/tag label optional

**Entries:**
- 2 × 1/2" NPT, 20mm

### Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

**Model Type:**
- XB12

**Certification Code:**
- ATEX B
- UL

**Voltage Code:**
- 24V DC 024
- 110V AC 110
- 240V AC 240

**Flash Rate Code:**
- 06

**Lens Color Code:**
- Red R
- Blue B
- Green G
- Yellow Y
- Amber A
- Clear C

**Tag/Duty Label Code:**
- B
- N
- N
- N

**Options Code:**
- Natural Black R

### For Colored Lenses

The photometric data has been verified by BSI. A report is available if required.

### Power Consumption

<table>
<thead>
<tr>
<th>Voltage</th>
<th>DC</th>
<th>AC 50/60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>XB12</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Tube Energy (joules)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak Current Consumption (mA)</td>
<td></td>
<td>1400 350 185</td>
</tr>
<tr>
<td>Effective Intensity (Cd)</td>
<td>355</td>
<td>355 355</td>
</tr>
<tr>
<td>Peak Intensity (Cd)</td>
<td>123691</td>
<td>123691 123691</td>
</tr>
<tr>
<td>Power Consumption (Watts)</td>
<td>33.6</td>
<td>38.5 44.4</td>
</tr>
</tbody>
</table>

The Cd figures are for a clear lens @ 1Hz flash rate.
Strobe Lights

High Intensity for Outdoor Use

MEDC Series

Specifcation—XB13 Unit

Materials:
- UV stable glass reinforced polyester body
- UV stable polycarbonate cover/lens
- Retained stainless steel cover screws

Finish:
- Self colored red as standard or epoxy coated to customer’s specification

Tube Energy:
- 10 joules (second flash 7.5 joules)

Weight:
- 1.1kg

Operating Temperature:
- –55°C to +70°C

Ingress Protection:
- IP66 & IP67

Tube Life:
- >1 x 10⁶ flashes

Voltage:
- 12V DC, 24V DC, 115V AC, 230V AC

Current Consumption:
- Voltage | Current Consumption
- 12V DC | 1.4A
- 24V DC | 650mA
- 115V AC | 180mA
- 230V AC | 100mA

Tube Type:
- Xenon discharge

Lens Color:
- Various colors available

Terminals:
- 8 x 2.5mm²

Flash Rate:
- 1 flash per second

Dual Flash Rate:
- Time between dual flashes = 0.5 seconds
- Charging time = 1 second
- Cycle repeats every 1.5 seconds

Labels:
- Duty and tag labels available

Tube Type:
- Up to 3 x M20 via knockouts

Intensity:
- Effective intensity 220 Cd. Peak intensity 75,000 Cd.
  (Figures are for clear lens at 1Hz flash rate).

For Colored Lenses

<table>
<thead>
<tr>
<th>Color</th>
<th>Red</th>
<th>Blue</th>
<th>Amber</th>
<th>Green</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiplying Factor</td>
<td>0.15</td>
<td>0.12</td>
<td>0.51</td>
<td>0.49</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Lens Guard</th>
<th>Options</th>
<th>Unit Finish is Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>XB13</td>
<td>24V DC</td>
<td>Red</td>
<td>Yes</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>115V AC</td>
<td>Blue</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>230V AC</td>
<td>Green</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yellow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amber</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clear</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Hazard-Gard® EXFASC Series is a visual fire alarm signaling device for hazardous areas. The EXFASC Series strobes are UL 1971 Listed for indoor signaling applications for the hearing impaired in non-sleeping areas. They are also UL Listed for Type 3R, 4X installations. The strobes are available for pendant, wall and ceiling mounts.

The EXFASC Series Fire Alarm Explosionproof Strobe contains a supervisory diode for use in fire alarm applications. Under normal operation the diode is reversed biased, meaning it blocks voltage from being applied to the strobe light and prevents it from lighting. When a fire-initiating device such as a smoke alarm is activated, the diode’s polarity is reversed through a fire alarm panel. The diode becomes forward biased, allowing voltage to the device and activating the strobe.

Applications:
- Visual fire alarm signaling device for hazardous areas

Typical Industries:
- Energy exploration
- Utilities
- Wastewater treatment plants
- Pulp and paper plants
- Petrochemical plants
- Petroleum refineries
- Oil rigs

Features and Benefits:
- Meets NFPA requirements for fire safety warning devices
- State of the art electronic design (full wave rectified design)
  - Low current draw is efficient
  - 24V DC regulated full wave rectified
  - Limited in-rush current favorable to other fire alarm system components
  - Proven, reliable circuitry designed specifically for use with fire alarm control panels
- Available in pendant, wall and ceiling mount
- Strobe light produces 65 flashes per minute
- Factory sealed—no external seals required
- Quick connect—strobe fixture threads onto mounting module for easy installation
- Small compact size—ceiling mount is 13 3/4-inch long

Certifications and Compliances:
- Class I, Division 1, Groups C, D
- Class I, Zones 1 and 2, Group IIB
- Class II, Division 1, Groups E, F, G
- Class III
- UL 1638 and 1203 Listed
- UL 1971 Listed for indoor visual signaling for the hearing impaired in non-sleeping areas
- cUL Listed C22.2 No. 205
- NEMA 4X watertight, IP66

Materials & Finishes:
- Body, mounting modules and guard—Copper-free aluminum
- Globe—Heat and impact-resistant glass
- Gaskets—Silicone
- External hardware—Stainless steel
- Internal components—Solid-state electronics in a moisture-resistant and heat-dissipating epoxy
- Epoxy powder coated for corrosion resistance

Crouse-Hinds
The Hazard•Gard EXS and EXDS Series Explosionproof Strobe Lights are designed for installation indoors and outdoors in locations which are hazardous due to the presence of flammable vapors or gases, ignitible dusts or ignitible fibers and flyings. The units are UL Listed for Type 3R and 4X installations. The 120V and 24V DC models are Marine Rated. The strobes are available for pendant, wall, stanchion and ceiling mounts, and come in six different globe colors.

The EXDS Series is diode polarized for use in electrically supervised circuits. Electrically supervised circuits are typically used in life-safety or security applications.

Under normal operation the diode is reversed biased, meaning it blocks voltage from being applied to the strobe and prevents it from lighting. When an initiating device such as a smoke detector is activated, the diode’s polarity is reversed through a circuit panel. The diode becomes forward biased, allowing voltage to the device and activating the strobe.

Applications:
- Condition signaling
- Equipment obstruction warning
- Security alert
- Emergency evacuation signaling
- In areas where audible signals cannot be heard

Typical Industries:
- Utility gas plants
- Petroleum refineries
- Wastewater treatment plants
- Chemical and petrochemical
- Mining
- Pulp and paper

Features and Benefits:
- Strong strobe signal that produces 65 flashes per minute
- Compact design will not obstruct in low ceiling or small areas, ceiling mount is only 13¼-inch long
- Quick connect—strobe fixture threads onto mounting module for easy installation
- Factory sealed—no external seals required
- Available in pendant, wall, stanchion and ceiling mount
- Available in six different globe colors—clear, red, blue, amber, green and magenta
- Silicone gasket seals out dirt and moisture

Certifications and Compliances:
- Class I, Division 1, Groups C, D
- Class I, Zones 1 and 2, Group IIB
- Class II, Division 1, Groups E, F, G
- Class III
- UL and cUL Listed
- NEMA 4X; IP66

Materials and Finishes:
- Body, mounting modules and guard—Copper-free aluminum
- Globe—Heat and impact-resistant glass
- Gaskets—Silicone
- External hardware—Stainless steel
- Internal components—Solid-state electronics in a moisture-resistant and heat-dissipating epoxy
- Epoxy powder coated for corrosion resistance

Ratings:
- 120V AC (EXS), 12–48V DC (EXSNM) and 24V DC nominal, voltage operating range is 16–33V DC (EXDS)
- Operating Current: 0.10 amps at 120V AC
- 1.2–3.8 amps at 12–48V DC
- 0.8 amps at 24V DC
- Peak Candlepower: 800,000

Hub Size:
- ¾-inch NPT pendant, ceiling and wall mount
- 1¼-inch NPT stanchion mount
## Explosionproof Strobe Lights

**HAZARD•GARD® Series**

Cl. I, Div. 1, Groups C, D  
Cl. I, Zone 1 and 2, Group IIB  
Cl. II, Div. 1, Groups E, F, G  
Class III  
UL and cUL Listed  
NEMA 4X; IP66

### Ordering Information:

#### Step 1 - Order Strobe Type

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>NEMA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explosionproof Strobes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXS301A/120</td>
<td>120V AC</td>
<td>Amber</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXS301B/120</td>
<td>120V AC</td>
<td>Blue</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXS301C/120</td>
<td>120V AC</td>
<td>Clear</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXS301G/120</td>
<td>120V AC</td>
<td>Green</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXS301M/120</td>
<td>120V AC</td>
<td>Magenta</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXS301R/120</td>
<td>120V AC</td>
<td>Red</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXSNM301A/12 48</td>
<td>12–48V DC</td>
<td>Amber</td>
<td>3R 4X</td>
</tr>
<tr>
<td>EXSNM301B/12 48</td>
<td>12–48V DC</td>
<td>Blue</td>
<td>3R 4X</td>
</tr>
<tr>
<td>EXSNM301C/12 48</td>
<td>12–48V DC</td>
<td>Clear</td>
<td>3R 4X</td>
</tr>
<tr>
<td>EXSNM301G/12 48</td>
<td>12–48V DC</td>
<td>Green</td>
<td>3R 4X</td>
</tr>
<tr>
<td>EXSNM301M/12 48</td>
<td>12–48V DC</td>
<td>Magenta</td>
<td>3R 4X</td>
</tr>
<tr>
<td>EXSNM301R/12 48</td>
<td>12–48V DC</td>
<td>Red</td>
<td>3R 4X</td>
</tr>
<tr>
<td><strong>Diode Polarized Explosionproof Strobes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXDS301A/24</td>
<td>24V DC</td>
<td>Amber</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXDS301B/24</td>
<td>24V DC</td>
<td>Blue</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXDS301C/24</td>
<td>24V DC</td>
<td>Clear</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXDS301G/24</td>
<td>24V DC</td>
<td>Green</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXDS301M/24</td>
<td>24V DC</td>
<td>Magenta</td>
<td>3R 4X, Marine</td>
</tr>
<tr>
<td>EXDS301R/24</td>
<td>24V DC</td>
<td>Red</td>
<td>3R 4X, Marine</td>
</tr>
</tbody>
</table>

#### Step 2 - Order Mounting Module

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Hub Size</th>
<th>Mounting Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVMP2</td>
<td>⅝&quot;</td>
<td>Pendant</td>
</tr>
<tr>
<td>EV22 and EV87</td>
<td>⅜&quot;</td>
<td>Wall</td>
</tr>
<tr>
<td>EV22</td>
<td>⅜&quot;</td>
<td>Ceiling</td>
</tr>
<tr>
<td>EVMJ4</td>
<td>1⅛&quot;</td>
<td>Stanchion</td>
</tr>
</tbody>
</table>

## Temperature Performance Data:

<table>
<thead>
<tr>
<th>Model</th>
<th>Ambient Max. Temp.</th>
<th>Supply Wire</th>
<th>Class I, Div. 1, 2, Groups C, D, Zone 1, Group II B</th>
<th>Class II, Class III, Div. 1, Groups E, F, G</th>
<th>Class II, Class III, Div. 2, Groups F, G</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXFASC Series Fire Alarm Voltage 24V DC Regulated Full Wave Rectified (Operating Range 16–33V DC) (Marine Listed)</td>
<td>40°C</td>
<td>75°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>55°C</td>
<td>90°C</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td>EXS Series Strobe Light Voltage 120V AC (Marine Listed)</td>
<td>40°C</td>
<td>75°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>55°C</td>
<td>90°C</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>65°C</td>
<td>105°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td>EXSNM Series Strobe Light Voltage 12–48V DC (Not Marine Listed)</td>
<td>40°C</td>
<td>75°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>55°C</td>
<td>90°C</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>65°C</td>
<td>105°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td>EXDS Series Strobe 40°C Light-Diode Polarized Voltage 24V DC (Marine Listed)</td>
<td>40°C</td>
<td>75°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>55°C</td>
<td>90°C</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
</tbody>
</table>
Explosionproof Strobe Lights
HAZARD•GARD® Series

Dimensions
In Inches:

Net Luminaire Weights:

<table>
<thead>
<tr>
<th>Type</th>
<th>lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luminaire Housing with Guard</td>
<td>11.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add mounting modules:</td>
<td></td>
</tr>
<tr>
<td>Pendant</td>
<td>1.0</td>
</tr>
<tr>
<td>Ceiling</td>
<td>1.0</td>
</tr>
<tr>
<td>Wall</td>
<td>4.5</td>
</tr>
<tr>
<td>Stanchion</td>
<td>2.5</td>
</tr>
</tbody>
</table>

UL and cUL Listed
NEMA 4X; IP66
Cl. I, Div. 1, Groups C, D
Cl. I, Zone 1 and 2, Group IIB
Cl. II, Div. 1, Groups E, F, G
Class III
Explosionproof Rotating Beacons
HAZARD•GARD® Series

Eaton’s Crouse-Hinds Hazard•Gard EXR Series Explosionproof Rotating Beacons are designed for installation in hazardous locations, such as manufacturing plants, heavy industrial facilities, refineries, chemical, petrochemical, pharmaceutical and offshore drilling platforms.

The units are UL Listed for Type 3R, 4X and marine installations. The rotating beacons are available for pendant, wall, stanchion and ceiling mounts, and come in six different globe colors.

The EXDR Series Explosionproof Rotating Beacon is diode polarized for use in standard 24–28V DC electrical circuits or in electrically supervised circuits. Electrically supervised circuits are typically used in life safety or security applications.

Under normal operation in an electrically supervised circuit, the diode is reversed biased, meaning it blocks voltage from being applied to the rotating beacon and prevents it from lighting. When a warning detecting device is activated, the diode’s polarity is reversed through a circuit panel. The diode becomes forward biased, allowing voltage to the device and activating the rotating beacon.

Applications:
• Security alert
• Equipment obstruction warning
• Obstacle warning
• Status indication of a process
• Areas under construction
• Supplement audible signaling or off limits

Typical Industries:
• Utility gas plants
• Pharmaceutical plants
• Wastewater treatment plants
• Refineries
• Chemical plants
• Mining

Features and Benefits:
• Powerful halogen rotating beacon emits bright light to provide critical visual warning
• Available in pendant, wall, stanchion and ceiling mount
• Available in six different globe colors—amber, blue, clear, green, magenta and red
• Beacon produces 75 rotations per minute
• Factory sealed—no external seals required
• Quick connect—strobe fixture threads onto mounting module for easy installation

Certifications and Compliances:
• Class I, Division 1, Groups C, D
• Class I, Zone 1 and 2, Group IIIB
• Class II, Division 1, Groups E, F, G
• Class III
• UL and cUL Listed
• NEMA 4X; IP66

Materials and Finishes:
• Body, mounting modules and guard—Copper-free aluminum
• Globe—Heat and impact-resistant glass
• Gaskets—Silicone
• External hardware—Stainless steel
• Internal components—Solid-state electronics in a moisture-resistant and heat-dissipating epoxy
• Epoxy powder coated for corrosion resistance

Ratings:
• 120V AC (EXR) and 24–28V DC (EXDR)
• Operating Current: 0.382 amps at 120V AC
  0.8 amps at 24–28V DC
• Peak Candlepower: 3328 (EXR)
  2838 (EXDR)

Hub Size:
• ¾-inch NPT pendant, ceiling and wall mount
• 1¼-inch NPT stanchion mount
## Ordering Information:

### Step 1 - Order Rotating Beacon Type

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>NEMA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXR301A/120</td>
<td>120V AC</td>
<td>Amber</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXR301B/120</td>
<td>120V AC</td>
<td>Blue</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXR301C/120</td>
<td>120V AC</td>
<td>Clear</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXR301G/120</td>
<td>120V AC</td>
<td>Green</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXR301M/120</td>
<td>120V AC</td>
<td>Magenta</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXR301R/120</td>
<td>120V AC</td>
<td>Red</td>
<td>3R, 4X, Marine</td>
</tr>
</tbody>
</table>

### Diode Polarized Explosionproof Rotating Beacons

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>NEMA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXDR301A/24 28</td>
<td>24–28V DC</td>
<td>Amber</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXDR301B/24 28</td>
<td>24–28V DC</td>
<td>Blue</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXDR301C/24 28</td>
<td>24–28V DC</td>
<td>Clear</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXDR301G/24 28</td>
<td>24–28V DC</td>
<td>Green</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXDR301M/24 28</td>
<td>24–28V DC</td>
<td>Magenta</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXDR301R/24 28</td>
<td>24–28V DC</td>
<td>Red</td>
<td>3R, 4X, Marine</td>
</tr>
</tbody>
</table>

## Step 2 - Order Mounting Module

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Hub Size</th>
<th>Mounting Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVMP2</td>
<td>½&quot;</td>
<td>Pendant</td>
</tr>
<tr>
<td>EV22 &amp; EV87</td>
<td>½&quot;</td>
<td>Wall</td>
</tr>
<tr>
<td>EV22</td>
<td>½&quot;</td>
<td>Ceiling</td>
</tr>
<tr>
<td>EVMJ4</td>
<td>1⅜&quot;</td>
<td>Stanchion</td>
</tr>
</tbody>
</table>

## Temperature Performance Data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Ambient Max. Temp.</th>
<th>Supply Wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXR Series Rotating Beacon Voltage 120V AC</td>
<td>40°C</td>
<td>75°C</td>
</tr>
<tr>
<td></td>
<td>55°C</td>
<td>90°C</td>
</tr>
<tr>
<td></td>
<td>65°C</td>
<td>105°C</td>
</tr>
<tr>
<td>EXR Series Rotating Beacon—Diode Polarized Voltage 24–28V DC</td>
<td>40°C</td>
<td>75°C</td>
</tr>
<tr>
<td></td>
<td>55°C</td>
<td>90°C</td>
</tr>
<tr>
<td></td>
<td>65°C</td>
<td>105°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Class I, Div. 1, 2, Groups C, D</th>
<th>Class I, Zone 1, Group IIB</th>
<th>Class II, Class III, Div. 1, Groups E, F, G</th>
<th>Class II, Class III, Div. 2, Groups F, G</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXR Series Rotating Beacon Voltage 120V AC</td>
<td>T6 (85°C)</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
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<tr>
<td></td>
<td>T6 (85°C)</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td>EXR Series Rotating Beacon—Diode Polarized Voltage 24–28V DC</td>
<td>T6 (85°C)</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
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<tr>
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<td>T6 (85°C)</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
</tbody>
</table>
Explosionproof Rotating Beacons
HAZARD•GARD® Series

Cl. I, Div. 1, Groups C, D
Cl. I, Zone 1 and 2, Group IIB
Cl. II, Div. 1, Groups E, F, G
Class III
UL and cUL Listed
NEMA 4X; IP66

Dimensions
In Inches:

Wall Mount

Ceiling Mount

Stanchion Mount

Pendant Mount

Net Luminaire Weights:

<table>
<thead>
<tr>
<th>Type</th>
<th>lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luminaire Housing with Guard</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Add mounting modules:

<table>
<thead>
<tr>
<th>Type</th>
<th>lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendant</td>
<td>1.0</td>
</tr>
<tr>
<td>Ceiling</td>
<td>1.0</td>
</tr>
<tr>
<td>Wall</td>
<td>4.5</td>
</tr>
<tr>
<td>Stanchion</td>
<td>2.5</td>
</tr>
</tbody>
</table>
# Steady-On Beacons

## Hazardous

<table>
<thead>
<tr>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steady-On Beacons - MEDC Series</strong></td>
<td></td>
</tr>
<tr>
<td>FB4</td>
<td>see pages 1257–1258</td>
</tr>
<tr>
<td>FB11 UL</td>
<td>see pages 1259–1261</td>
</tr>
<tr>
<td>FB12 UL</td>
<td>see pages 1259–1261</td>
</tr>
<tr>
<td>FB15</td>
<td>see pages 1260–1262</td>
</tr>
<tr>
<td>FL4</td>
<td>see pages 1257–1258</td>
</tr>
<tr>
<td>SM87 LU3</td>
<td>see pages 1263–1264</td>
</tr>
<tr>
<td>SM87 LU1</td>
<td>see pages 1263–1264</td>
</tr>
<tr>
<td><strong>Steady-On Beacons - Hazard•Gard EX Series</strong></td>
<td></td>
</tr>
<tr>
<td>EXSO, EXDSO</td>
<td>see pages 1265–1267</td>
</tr>
<tr>
<td><strong>Steady-On Beacons - Compact Fluorescent</strong></td>
<td></td>
</tr>
<tr>
<td>VF</td>
<td>see pages 1268–1269</td>
</tr>
</tbody>
</table>
3S Steady-On Beacons

MEDC Series

The units are UL Listed for Type 3R, 4X and marine installations. The steady-on beacons are available for pendant, wall, stanchion and ceiling mounts, and come in six different globe colors. Typical industrial and commercial applications include food processing plants, refineries, mines, tankers, laboratories, sewage treatment plants, off-shore oil rigs, water and filtration plants and chemical plants. The diode polarized steady-on beacon is used in electrically supervised circuitry for life-safety or security applications.

Applications:
- Safety lighting
- Continuous source to communicate
- Obstacle warning
- Exit or entrance lights
- For identifying the location of safety equipment such as showers or emergency telephones

Typical Industries:
- Chemical plants
- Storage handling
- Dust conveyor systems
- Energy exploration
- Textile mills
- Flour and feed mills

Certifications and Compliances:
- Class I, Division 1, Groups C, D
- Class I, Zone 1 & 2, Group IIB
- Class II, Division 1, Groups E, F, G
- Class III
- UL and cUL 1638, UL 1203 and UL 844 Listed
- 1598A Marine Listed
- NEMA 4X watertight, IP66
### MEDC Series

#### FB4
**100 Watt Steady Incandescent Light - Explosionproof**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>17800026</td>
<td>FB4EUL8U1N100B1N1G</td>
<td>Marine grade alloy, 120V AC, 100W bulb (not included) blue lens, lens guard, no labels, gray finish</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>27800006</td>
<td>FL4BUL8U2M3M13R1N1RZ</td>
<td>Marine grade alloy, 24V DC, 2 x ½&quot; NPT entries, 13W tube (not included), red lens, lens guard, red finish, one certified plug</td>
</tr>
</tbody>
</table>

#### FL4
**13–39 Watt Steady Fluorescent Light—Explosionproof**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>17800002</td>
<td>FB4EUL8U1N100B1N1G</td>
<td>Marine grade alloy, 120V AC, 100W bulb (not included) blue lens, lens guard, no labels, gray finish</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>27800006</td>
<td>FL4BUL8U2M3M13R1N1RZ</td>
<td>Marine grade alloy, 24V DC, 2 x ½&quot; NPT entries, 13W tube (not included), red lens, lens guard, red finish, one certified plug</td>
</tr>
</tbody>
</table>
Specification—FL4 and FB4 Units

Certification: UL Listed for USA and Canada
- Hazardous locations:
  - Class I, Div. 1, Groups C, D
  - Class I, Zone 1, AExd IIB T4/T5
  - UL Listing No. E187894
- Ordinary locations: Visual-Signal Device (FL4 only), UL Listing No. S8128.
  - ATEX approved:
    - Exd IIC
    - Certificate No. Baseefa 02ATEX0224X

Material:
- LM25TF Marine Grade Alloy body
- Grade 316 ANC48 Stainless Steel body
- Toughened Wellglass

Models:
- FL4: Up to 3 x 13 Watt PL compact fluorescent lamps
- FB4: 100 watt GLS incandescent lamps. E27 holder as standard

Finish:
- Gray epoxy paint finish as standard or to customer’s specification

Voltage:
- FL4: 24V DC, 120V AC, 240V AC ± 10% 50/60Hz.
- FB4: 120V AC ± 10% 50/60Hz.

Weight:
- FL4: 14–17lb/6.5–7.9kg (add 19lb/8.4kg for stainless steel)
- FB4: 13lb/6.4kg

Certified Temperature:
- FL4: –4°F to +131°F (–20°C to + 55°C)
- FB4: –67°F to +131°F (–55°C to + 55°C)

Ingress Protection:
- NEMA 4X & 6
- IP66 & IP67

Lamps:
- Units are supplied without lamps

Terminals:
- 8 off suitable for up to 8 AWG conductor size

Entries:
- Up to 3 x \(\frac{1}{2}''\) NPT or 2 x \(\frac{3}{4}''\) NPT

Ordering Requirements
The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.
**Steady-On Beacons**

**MEDC Series**

**FB11 UL**

**10 Watt Steady Incandescent Light—Hazardous Locations**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX</td>
<td>32500004</td>
<td>FB11B02410RNBNNN</td>
<td>24V DC, 10W bulb, red lens, mounting bracket, natural black finish</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>32500028</td>
<td>FB11UL02410GNNR</td>
<td>10W incandescent beacon, 24V DC, green lens, no lens guard, 2 × ½ NPT entries, painted red enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>32500029</td>
<td>FB11UL11010GNNR</td>
<td>10W incandescent beacon, 110V AC, green lens, no lens guard, 2 × ½ NPT, painted red enclosure</td>
</tr>
</tbody>
</table>

**FB12 UL**

**60W/100W Steady Incandescent Light—Hazardous Locations**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>3260023</td>
<td>FB12UL12060CNBNNN</td>
<td>120V AC, 60W bulb, clear lens, mounting bracket, no labels, natural black finish</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>32600035</td>
<td>FB12UL12060GNNR</td>
<td>60W incandescent beacon, 120V AC, green lens, no lens guard, 2 × ½ NPT entries in a painted red enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>32600036</td>
<td>FB12UL02460GNNR</td>
<td>60W incandescent beacon, 24V DC, green lens, no lens guard, 2 × ½ NPT entries, painted red enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>32600037</td>
<td>FB12UL120100GNNR</td>
<td>100W incandescent beacon, 24V DC, green lens, no lens guard, 2 × ½ NPT entries, painted red enclosure</td>
</tr>
</tbody>
</table>
### 3S Steady-On Beacons

- Cl. I, Div. 1 (FB4 & FL4)
- Cl. I, Div. 2 (FB11, FB12 & FB15)
- Cl. I, Zone 1

#### MEDC Series

### FB15

100W Steady Incandescent Light—Hazardous & Ordinary Locations

<table>
<thead>
<tr>
<th>Certification</th>
<th>UL Listed for:</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>120V AC, 100W bulb, green lens, mounting bracket, no labels, red finish</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 120V AC, amber lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 120V AC, red lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 120V AC, green lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 120V AC, clear lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 24V DC, amber lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 24V DC, red lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 24V DC, green lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Cl. I, Div. 2, Groups A, B, C, D</td>
<td>cULus, ATEX, Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExd IIC T3/T4</td>
<td>100W incandescent beacon, 24V DC, clear lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure</td>
</tr>
</tbody>
</table>

#### FB15 Ordering Codes

- **FB15UL120100GNANR**: 120V AC, 100W bulb, green lens, mounting bracket, no labels, red finish
- **FB15UL120100ANPNN**: 100W incandescent beacon, 120V AC, amber lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL120100RNPNN**: 100W incandescent beacon, 120V AC, red lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL120100GNPNN**: 100W incandescent beacon, 120V AC, green lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL120100CNPNN**: 100W incandescent beacon, 120V AC, clear lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL120100BNPNN**: 100W incandescent beacon, 24V DC, amber lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL024100ANPNN**: 100W incandescent beacon, 24V DC, red lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL024100RNPNN**: 100W incandescent beacon, 24V DC, red lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL024100GNPNN**: 100W incandescent beacon, 24V DC, green lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL024100CNPNN**: 100W incandescent beacon, 24V DC, clear lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
- **FB15UL024100BNPNN**: 100W incandescent beacon, 24V DC, blue lens, no lens guard, pipe mounting, 1 x ¾ NPT entry, natural black enclosure
Steady-On Beacons

MEDC Series

Specification—FB11 and FB12 Units

Models: FB11 & FB12—Incandescent

Certification: UL Listed for USA and Canada
- Class I, Div. 2, Groups C, D
- Class I, Zone 1, AExd IIB T4/T5
UL listing No. E187894
ATEX approved:
CENELEC EN50014 and EN50018
FB11: Cert. No. 99 ATEX 2195X
FB12: Cert. No. 99 ATEX 2196

Voltage:
FB11: 24, 48V DC
110, 220, 240, 250V AC
FB12: 120V AC

Incandescent:
FB11: 10W incandescent fitted as standard
FB12: 60W or 100W incandescent fitted as standard

Material: Body: Glass reinforced polyester
Lens: Glass
Cover screws + backstrap: stainless steel 316

Finish: Natural black or painted to customer specification

Ingress Protection: NEMA 4X & 6, IP66 & IP67

Terminals:
FB11: 6 x 14 AWG
FB12: 6 x 10 AWG

Labels: Duty/Tag Label optional

Entries:
2 x 1/2” NPT

Certified Temperature:
FB11: –67°F to +131°F (–55°C to +55°C) T4
–67°F to +104°F (–55°C to +40°C) T5.
FB12: –67°F to +131°F (–55°C to +55°C) T4
–67°F to +104°F (–55°C to +40°C) T5.

Weight:
FB11: 6.2lb / 2.8kg.
FB12: 16.7lb / 7.6kg.

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Certification</th>
<th>Voltage</th>
<th>Lamp Wattage</th>
<th>Lens Color</th>
<th>Lens Guard</th>
<th>Unit Fixing</th>
<th>Earth Continuity</th>
<th>Tag/Duty Label</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB11</td>
<td>ATEX</td>
<td>024</td>
<td>10</td>
<td>N</td>
<td>B</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Natural Black</td>
</tr>
<tr>
<td>FB12</td>
<td>UL Listed</td>
<td>110</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Red</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Code</th>
<th>Lamp Wattage</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V DC</td>
<td>024</td>
<td>FB11 10W AC &amp; DC (1 x 10W bulb)</td>
<td>10</td>
</tr>
<tr>
<td>110V AC</td>
<td>110</td>
<td>FB12 60W AC &amp; DC (1 x 60W bulb)</td>
<td>60</td>
</tr>
<tr>
<td>120V AC</td>
<td>120</td>
<td>100W AC &amp; DC (1 x 100W bulb)</td>
<td>100</td>
</tr>
<tr>
<td>240V AC</td>
<td>240</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other voltages available, please specify.
*FB12 UL Listed only

Finish: Natural Black
Color: Red R
Blue B
Green G
Amber A
Yellow Y
Clear C
**Specification — FB15 Unit**

**Certification:**
- UL Listed for USA and Canada:
  - Hazardous locations
    - Class I, Div. 2, Groups A, B, C, D
    - Class I, Zone 1, AExd IIC T3/T4
    - UL listing No. E187894
  - Ordinary locations: Visual Signal Device
    - UL listing No. S8128
    - CENELEC/ATEX approved
    - CENELEC EN50014 & EN50018
    - ATEX Cert. No.
    - Baseefa 04ATEX0009X

**Material:**
- Body: Glass reinforced polyester
- Lens: Glass
- Backstrap: Stainless steel 316
- Wire Guard (optional): Stainless steel wire
- Cast Guard (optional): Aluminium LM25M

**Finish:**
- Natural black or epoxy painted to customer specification

**Voltage:**
- 24, 48V DC
- 110, 120, 230, 240, 254V AC

**Lamp Type:**
- 60W or 100W GLS incandescent

**Lamp Holder:**
- E27 as standard

**Certified Temperature:**
- 60W: –67°F to +131°F (–55°C to +55°C) T4
  - –67°F to +158°F (–55°C to +70°C) T3
- 100W: –67°F to +104°F (–55°C to +40°C) T4

**Weight:**
- Pipe mount: 5.75lb/2.6kg
- Direct mount: 6.5lb/3.0kg

**Ingress Protection:**
- NEMA 4X & 6, IP66 & IP67

**Entries:**
- Supplied as 2 x M20, up to 3 x M20 or 3 x M25
- Supplied as 2 x 1/2" NPT (direct mount) or 3/4" (pipe mount) as standard
- Other options available:
  - Up to 3 x 1/2" NPT or 3 x 3/4" NPT (direct mount):
    - 1/2" NPT (pipe mount) — contact sales office to order

**Terminals:**
- Direct mount: 12 x 14AWG
- Pipe mount: 8 x 14AWG

**Labels:**
- Tag/duty label option

---

**Ordering Requirements**

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box. Standard products available for immediate shipping - contact sales office for details.
Steady-On Beacons

MEDC Series

SM87 LU3
10 Watt Steady Incandescent Light—Explosionproof

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2,</td>
<td>762311</td>
<td>SM87LU3AUL024RN3LNR</td>
<td>24V DC, red lens, 2 x ½” NPT entries, no labels, red finish</td>
</tr>
<tr>
<td>Groups C, D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATEX</td>
<td>46200122</td>
<td>SM87LU3AB024GN1T1BNR</td>
<td>Exd, IIC, T4/T6 incandescent beacon, 24V DC, green lens, no lens guard, 2 x M20 cable entries, painted red enclosure</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1,</td>
<td>46200096</td>
<td>SM87LU3AUL024GN3T3BNR</td>
<td>24V DC, green lens, 10W incandescent bulb, marine grade alloy, red finish</td>
</tr>
<tr>
<td>Groups C, D</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SM87 LU1
10 Watt Steady Fluorescent Light—Explosionproof

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2,</td>
<td>46200054</td>
<td>SM87LU1AUL024RN4T4BNR</td>
<td>24V DC, red lens, 2 x ½” NPT entries, no labels, red finish</td>
</tr>
<tr>
<td>Groups C, D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1,</td>
<td>46200052</td>
<td>SM87LU1AUL024GN4T4BNR</td>
<td>24V DC, green lens, 10W fluorescent bulb, marine grade alloy, red finish</td>
</tr>
<tr>
<td>Groups C, D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATEX</td>
<td>46200121</td>
<td>SM87LU1AB024GN1T1BNR</td>
<td>Exd, IIC, T4/T6 fluorescent beacon, 24V DC, green lens, no lens guard, 2 x M20 cable entries, painted red enclosure</td>
</tr>
</tbody>
</table>

Certification
UL Listed for: cULs, CSA, ATEX
Class I, Div. 1, Groups C, D
Class I, Zone 1, AExd IIB

Certified Ambient Temperature
-67°F to +131°F
-55°C to +55°C

Ingress Protection
NEMA 4X & 6
IP66 & 67

Material
Alloy

Entries
2 x ½" or ¾” NPT, 20mm, 25mm

Weight
4.4lb/2.0kg

Options
Body & lens color, lens guard, certification, voltages 12–48V DC, 110V–254V AC
**Specification—SM87LU1/SM87LU3 Units**

- **Models:**
  - SM87 LU1: Fluorescent
  - SM87 LU3: Incandescent

- **Certification:**
  - UL Listed for USA and Canada: Class I, Div. 1, Groups C, D and Class I, Zone 1. Listing No: E187894.
  - CSA Certified for Class I, Div. 1 & 2, Group D
  - Certificate No. 96406
  - ATEX approved:
    - Exd IIC T3-T6 (model dependent)
    - Certificate No. 03ATEX0222X

- **Ingress Protection:** NEMA 4X and IP66 & IP67

- **Material:** Marine Grade Aluminium Alloy LM25TF with glass lens

- **Finish:** Epoxy paint finish as standard or to customer’s specification

- **Fluorescent:**
  - 10 Watt tube light output 600 Lumens (240V & 254V AC versions)
  - 5 Watt tube max. light output 250 Lumens (DC versions)

- **Incandescent:**
  - Single incandescent fitted as standard 10 watts.
  - Others may be available, please contact MEDC with your requirements

- **Weight:** 4.4lb/2.0kg approx.

- **Certified Temperature:** SM87LU1/3 –67°F to +131°F
  - –55°C to +55°C

- **Voltage:** 12, 24, 48V DC, 110V (LU3 only), 220V, 240V, 254V AC 50Hz as standard. 60Hz available if required

- **Terminals:** SM87: 4 off for up to 14 AWG cable

- **Power Consumption:**
  - LU1—
    - 7 Watts for 12V DC, 24V DC, 48V DC, 220V AC
    - 14 Watts for 240V AC, 15 Watts for 254V AC
  - LU3—
    - Single incandescent fitted as standard 10W. Other options are available—please contact MEDC with your requirements

---

**Ordering Requirements**

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Model</th>
<th>Certification</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>Lens Guard</th>
<th>Entries</th>
<th>Tag/Duty Label</th>
<th>Unit Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Code</td>
<td>Code</td>
<td>Color</td>
<td>Code</td>
<td>Code</td>
<td>Code</td>
<td>Code</td>
</tr>
<tr>
<td>Fluorescent</td>
<td>SM87LU1A</td>
<td>24V DC</td>
<td>Red</td>
<td>R</td>
<td>M20 left, M20 bottom</td>
<td>180L5, 180L6</td>
<td>R</td>
</tr>
<tr>
<td>Fluorescent</td>
<td>SM87LU3A</td>
<td>110V AC</td>
<td>Blue</td>
<td>B</td>
<td>M20 bottom</td>
<td>180L5, 180L6</td>
<td>R</td>
</tr>
<tr>
<td>Incandescent</td>
<td>SM87LU1S</td>
<td>240V AC</td>
<td>Green</td>
<td>G</td>
<td>M20 bottom</td>
<td>180L5, 180L6</td>
<td>R</td>
</tr>
<tr>
<td>Incandescent</td>
<td>SM87LU3S</td>
<td>110V AC</td>
<td>Amber</td>
<td>A</td>
<td>180L5, 180L6</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Incandescent</td>
<td>SM87LU3S</td>
<td>240V AC</td>
<td>Yellow</td>
<td>Y</td>
<td>180L5, 180L6</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Incandescent</td>
<td>SM87LU3S</td>
<td>110V AC</td>
<td>Clear</td>
<td>C</td>
<td>180L5, 180L6</td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>

*Not available UL Listed or CSA certified.*
HAZARD•GARD®

Steady-On Beacons

Eaton’s Crouse-Hinds Hazard•Gard EXSO and EXDSO (Diode Polarized) Series Explosionproof Steady-On Beacons are designed for installation in hazardous locations where a visual signal is required for tough environmental conditions involving corrosives, water, dust and extreme temperature. The units are UL Listed for Type 3R, 4X and marine installations. The steady-on beacons are available for pendant, wall, stanchion and ceiling mounts, and come in six different globe colors.

Typical industrial and commercial applications include food processing plants, refineries, mines, tankers, laboratories, sewage treatment plants, offshore oil rigs, water and filtration plants and chemical plants.

The diode polarized steady-on beacon is used in electrically supervised circuitry for life safety or security applications.

Applications:
• Safety lighting
• Exit or entrance lights
• Obstacle warning
• Continuous source to communicate
• For identifying the location of safety equipment such as showers or emergency telephones

Typical Industries:
• Chemical plants
• Storage handling
• Dust conveyor systems
• Energy exploration
• Textile mills
• Flour and feed mills

Features and Benefits:
• Powerful halogen light source for clear visual indication
• Available in six different globe colors—amber, blue, clear, green, magenta and red
• Factory sealed—no external seals required
• Quick connect—steady-on beacon fixture threads onto mounting module for easy installation
• Small compact size—ceiling mount is 13¾-inch long
• Available in pendant, wall, stanchion and ceiling mount

Certifications and Compliances:
• Class I, Division 1, Groups C, D
• Class I, Zones 1 & 2, Group IIIB
• Class II, Division 1, Groups E, F, G
• Class III
• UL and cUL 1638, UL 1203 and UL 844 Listed
• 1598A Marine Listed (120V AC and 24V DC only)
• cUL Listed C22.2 No. 205
• NEMA 4X watertight, IP66

Materials and Finishes:
• Body, mounting modules and guard—Copper-free aluminum
• Globe—Heat and impact-resistant glass
• Gaskets—Silicone
• External hardware—Stainless steel
• Internal components—Solid-state electronics in a moisture-resistant and heat-dissipating epoxy
• Epoxy powder coated for corrosion resistance

Ratings:
• 120V AC (EXR) and 24–28V DC (EXDSO)
• Operating Current: 0.35 amps at 120V AC (EXSO); 0.8 amps at 24–28V DC (EXDSO, diode polarized)
• Peak Candlepower: 3328

Hub Size:
• ¾-inch NPT pendant, ceiling and wall mount
• 1¼-inch NPT stanchion mount
Steady-On Beacons

Ordering Information:
Step 1 - Order Rotating Beacon Type

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Voltage</th>
<th>Lens Color</th>
<th>NEMA Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXSO301A/120</td>
<td>120V AC</td>
<td>Amber</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXSO301B/120</td>
<td>120V AC</td>
<td>Blue</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXSO301C/120</td>
<td>120V AC</td>
<td>Clear</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXSO301D/120</td>
<td>120V AC</td>
<td>Green</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXSO301E/120</td>
<td>120V AC</td>
<td>Magenta</td>
<td>3R, 4X, Marine</td>
</tr>
<tr>
<td>EXSO301F/120</td>
<td>120V AC</td>
<td>Red</td>
<td>3R, 4X, Marine</td>
</tr>
</tbody>
</table>

Diode Polarized Explosionproof Steady-On Beacons

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Hub Size</th>
<th>Mounting Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVMP2</td>
<td>½&quot;</td>
<td>Pendant</td>
</tr>
<tr>
<td>EV22 &amp; EV87</td>
<td>⅝&quot;</td>
<td>Wall</td>
</tr>
<tr>
<td>EV22</td>
<td>⅝&quot;</td>
<td>Ceiling</td>
</tr>
<tr>
<td>EVMJ4</td>
<td>1½&quot;</td>
<td>Stanchion</td>
</tr>
</tbody>
</table>

Step 2 - Order Mounting Module

Temperature Performance Data:

<table>
<thead>
<tr>
<th>Description</th>
<th>Ambient Max. Temp.</th>
<th>Supply Wire</th>
<th>Class I, Div. 1, 2, Groups C, D, Class I, Zone 1, Group IIB</th>
<th>Class II, Div. 1, Groups E, F, G</th>
<th>Class II, Div. 2, Groups F, G</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXSO Series Steady-On Beacon Voltage 120V AC</td>
<td>40°C 75°C</td>
<td>T6 (85°C)</td>
<td>T4A (120°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>55°C 90°C</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>65°C 105°C</td>
<td>T5 (100°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td>EXDSO Series Steady-On Beacon—Diode Polarized Voltage 24–28V DC</td>
<td>40°C 75°C</td>
<td>T6 (85°C)</td>
<td>T4A (120°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>55°C 90°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
<tr>
<td></td>
<td>65°C 105°C</td>
<td>T6 (85°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
<td>T4 (135°C)</td>
</tr>
</tbody>
</table>
Steady-On Beacons

Dimensions
In Inches:

Wall Mount
- 12 3/8
- 9 1/8
- 1
- 4
- 6 7/16

Ceiling Mount
- 6
- 4
- 13 3/4
- 1

Stanchion Mount
- 1
- 1 1/4
- 12 1/2
- 13 1/2
- 7 1/4

Pendant Mount
- 12 3/4
- 12 3/4
- 7 1/4

Net Luminaire Weights:

<table>
<thead>
<tr>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luminaire Housing with Guard</td>
<td>11.0 lbs.</td>
</tr>
<tr>
<td>Add mounting modules:</td>
<td></td>
</tr>
<tr>
<td>Pendant</td>
<td>1.0 lbs.</td>
</tr>
<tr>
<td>Ceiling</td>
<td>1.0 lbs.</td>
</tr>
<tr>
<td>Wall</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Stanchion</td>
<td>2.5 lbs.</td>
</tr>
</tbody>
</table>

Crouse-Hinds
by EATON

VF "Steady On" Beacon
Compact Fluorescent
Warning and Visual Indication Light

Applications:
VF series "Steady On" fluorescent beacons are used indoors or outdoors:
• Where the energy efficiency and long life of compact fluorescent lamps are desired
• For continuous signaling requirements
• Where a continuous "Steady-On" fluorescent light signal is required
• Where ambient noise makes audible signals difficult to hear
• As visual signals or warning lights on loading docks; at obstructions, exits or entrances
• For identifying the location of safety equipment such as safety showers or emergency telephones
• For call signals
• For status indication or area lighting on offshore rigs, mines, refineries etc.
• In locations which are hazardous due to the presence of flammable vapors or gases and where dampness or corrosion are present
• To identify a potentially dangerous obstacle
• As a continuous source to warn or communicate

Typical Applications are:
• Green - Identify safety shower locations
• Blue - Identify emergency telephones
• Amber - Caution signal
• Red - Danger signal
• Red & Amber - Emergency situations
• Blue & Red - Security or malfunctioning equipment
• Green & Clear - Equipment end of cycle

Features:
• Extremely energy-efficient, only 18 watt (2-9 watt compact fluorescent lamps)
• Packs considerable punch for ample visibility even in harsh environments
• Compact size and light weight allow adaptation and easy installation in many industrial applications
• Cast copper-free aluminum (less than 0.4 of 1% copper) construction and epoxy powder finish provide excellent resistance to corrosion
• Variety of mounting arrangements to suit any lighting layout – pendant, ceiling, wall bracket, angle stanchion
• Glass globes are internally fluted and stippled to enhance visibility; exteriors are smooth to shed dust
• Grounding wire for safety

Ordering Information:

<table>
<thead>
<tr>
<th>Luminaire Type</th>
<th>Cat. # by Globe Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Lamp</td>
<td></td>
</tr>
<tr>
<td>Pendant</td>
<td>VFA222GRP VFA222GAP</td>
</tr>
<tr>
<td>Ceiling</td>
<td>VFA222GGB VFA222GBP</td>
</tr>
<tr>
<td>Stanchion</td>
<td>VFA222GGB VFA222GBP</td>
</tr>
<tr>
<td>Wall</td>
<td>VFA222GGB VFA222GBP</td>
</tr>
</tbody>
</table>

Temperature Performance Data:

<table>
<thead>
<tr>
<th>Style &amp; Lamp</th>
<th>Class I, Div. 2</th>
<th>Max. Ambient</th>
<th>Supply Wire °C</th>
<th>Minimum Operating</th>
</tr>
</thead>
<tbody>
<tr>
<td>9W</td>
<td>T3B</td>
<td>40°C</td>
<td>75°C</td>
<td>–4°C (25°F)</td>
</tr>
</tbody>
</table>

Certifications and Compliances:
• NEC and CEC:
  Class I, Division 2, Groups A, B, C, D
  Class I, Zone 2
• UL Standards:
  844
  1598 Luminaires
• CSA Standards:
  C22.2 No. 137

Standard Materials:
• Bodies and guards – copper-free aluminum (less than 0.4 of 1%)
• Globes – glass

Standard Finishes:
• Copper-free aluminum – powder epoxy finish

Electrical Ratings:
• Input voltage – 120 VAC, 60 hertz
• Wattages: 18W (Two 9W lamps)

Weights:

<table>
<thead>
<tr>
<th>Luminaire Type</th>
<th>2-Lamp Luminaire with Globe &amp; Guard (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VFA</td>
<td>5</td>
</tr>
<tr>
<td>VFHF</td>
<td>5½</td>
</tr>
<tr>
<td>VFHB</td>
<td>7½</td>
</tr>
</tbody>
</table>

Crouse-Hinds
VF "Steady On" Beacon
Compact Fluorescent
Warning and Visual
Indication Light

Dimensions
In Inches:

Pendant

Wall

Stanchion

VFA

VFHBF

VFHA

VFHF

Cl. I, Div. 2, Groups A, B, C, D
Cl. I, Zone 2, Group IIC
Wet Locations
3, 3R

Green – Safety Shower
Blue – Emergency Telephones
Red – Danger
Amber – Warning
Visual Signal
# Status Lights

## Hazardous

<table>
<thead>
<tr>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status Lights - MEDC Series</td>
<td></td>
</tr>
<tr>
<td>FB12 SL</td>
<td>see pages 1272–1275</td>
</tr>
<tr>
<td>SM87 SL</td>
<td>see pages 1272–1275</td>
</tr>
<tr>
<td>XB11 SLUL</td>
<td>see pages 1272–1275</td>
</tr>
<tr>
<td>XB12 SL</td>
<td>see pages 1272–1275</td>
</tr>
</tbody>
</table>
Status Lights

MEDC Series

The most rugged and reliable status lights for harsh and hazardous applications. Available as Xenon, incandescent and fluorescent beacons/strobes. The SM87 SL range is manufactured in marine grade alloy and the XB12 SL in corrosion-free GRP to provide a wide range of status lights to suit your requirements. All units can be supplied as 1, 2, 3, 4 or 5 stacks.

Applications:
- Process status
- Messaging
- Alert or emergency condition indication

Typical Industries:
- Offshore & onshore
- Energy exploration & transmission
- Refining
- Chemical & petrochemical
- Pharmaceutical

Features and Benefits:
- 4–wire monitored connection for supervisory circuits
- Marine grade alloy or GRP
- Pre-wired to customer’s requirements

Certifications and Compliances:
- UL Listed for USA and Canada
  - Class I, Div. 1 & 2, Groups C, D
  - Class I, Zone 1, AExd IIB T6
- CSA certified
- ATEX approved
- Xenon, fluorescent, incandescent
- NEMA 4X & 6, IP66 & 67
- Certified temperature –67°F to +131°F
  - –55°C to +55°C

*Depending on model.
## MEDC Series

### Status Lights

#### Xenon, Incandescent & Fluorescent Status Lights—Explosionproof

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>26200043</td>
<td>SM87SL3</td>
<td>Explosion protected, three stack, one 1/2&quot; NPT entry on bottom, no lens guards, xenon strobe with red, green, and clear lenses</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>26200055</td>
<td>SM87SL2</td>
<td>Xenon status lamp, two stack 5 joule beacons interconnected on a painted red stainless steel baseplate, one red and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>26200056</td>
<td>SM87SL2</td>
<td>Incandescent status lamp, two stack 40 watt beacons interconnected on a painted red stainless steel baseplate, one red and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>26200057</td>
<td>SM87SL2</td>
<td>Fluorescent status lamp, two stack 5 watt beacons interconnected on a painted red stainless steel baseplate, one red and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>110V AC</td>
<td>26200058</td>
<td>SM87SL2</td>
<td>Xenon status lamp, two stack 5 joule beacons interconnected on a painted red stainless steel baseplate, one red, one amber, and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>26200059</td>
<td>SM87SL3</td>
<td>Xenon status lamp, three stack 5 joule beacons interconnected on a painted red stainless steel baseplate, one red, one amber, and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24VDC</td>
<td>26200060</td>
<td>SM87SL3</td>
<td>Incandescent status lamp, three stack 40 watt beacons interconnected on a painted red stainless steel baseplate, one red, one amber, and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>26200061</td>
<td>SM87SL3</td>
<td>Fluorescent status lamp, three stack 5 watt beacons interconnected on a painted red stainless steel baseplate, one red, one amber, and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>110V AC</td>
<td>26200062</td>
<td>SM87SL3</td>
<td>Xenon status lamp, three stack 5 joule beacons interconnected on a painted red stainless steel baseplate, one red, one amber, and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>110V AC</td>
<td>26200066</td>
<td>SM87SL3</td>
<td>Incandescent status lamp, three stack 40 watt beacons interconnected on a painted red stainless steel baseplate, one red, one amber, and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>220V AC</td>
<td>26200063</td>
<td>SM87SL3</td>
<td>Fluorescent status lamp, three stack 5 watt beacons interconnected on a painted red stainless steel baseplate, one red, one amber, and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
</tbody>
</table>

**Certification**
- cULus, CSA, ATEX
  - Class I, Div. 1, Groups C, D
  - Class I, Zone 1, AExd IIB T4

**Certified Ambient Temperature**
- -67°F to +158°F
- -55°C to +70°C

**Ingress Protection**
- NEMA 4X & 6
- IP66 & 67

**Material**
- Alloy

**Entries**
- Up to 1 x 1/2" NPT

**Max. No. of Ways**
- 4

**Options**
- Body & lens color, certification, voltages: 24–48V DC, 110–254V AC
**4S Status Lights**

**MEDC Series**

### XB11 SLUL

**Xenon Strobe & Incandescent Status Lights—Hazardous Locations**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>42500005</td>
<td>XB11ULSL3</td>
<td>Explosion protected, 3 stack, one 1/2&quot; NPT entry on bottom, 24V DC, green incandescent on top, yellow xenon flashing in middle, red xenon flashing on bottom, no lens guards, red finish</td>
</tr>
</tbody>
</table>

### XB12 SL/FB12 SL

**Xenon Strobe & Incandescent Status Lights—Hazardous Locations**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>42600001</td>
<td>XB12ULSL3</td>
<td>110V AC, explosion protected, three stack, one 1/2&quot; NPT entries, red xenon flashing on top, amber xenon flashing in middle, clear xenon flashing on bottom; no lens guards, red finish</td>
</tr>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>42600007</td>
<td>XB12ULSL2</td>
<td>24V DC xenon status lamp, two stack 21 joule beacons interconnected on a painted red stainless steel baseplate, one red and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>42600008</td>
<td>FB12ULSL2</td>
<td>24V DC incandescent status lamp, two stack 60W beacons interconnected on a painted red stainless steel baseplate, one red and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>42600009</td>
<td>XB12ULSL3</td>
<td>24V DC xenon status lamp, three stack 21 joule beacons interconnected on a painted red stainless steel baseplate, one red, one amber and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>42600010</td>
<td>FB12ULSL3</td>
<td>24V DC incandescent status lamp, three stack 60W beacons interconnected on a painted red stainless steel baseplate, one red, one amber and one green lens color, 1/2&quot; NPT entry in the bottom unit for customer connection</td>
</tr>
</tbody>
</table>
MEDC Series

Status Lights

Typical four unit assembly. Various options are available.

Typical two unit assembly. Various options are available.

SM87 SL

XB12 SL

SM87 SL typical three unit assembly

XB11 SL

Specification—SM87SL Unit and XB12SL Unit

<table>
<thead>
<tr>
<th></th>
<th>SM87 SL</th>
<th>XB12 SL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp Types</td>
<td>Xenon 5 joules max</td>
<td>Xenon 21 joules</td>
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<tr>
<td></td>
<td>Fluorescent 10W or</td>
<td>Incandescent 60W</td>
</tr>
<tr>
<td></td>
<td>5W</td>
<td></td>
</tr>
<tr>
<td>Voltage Frequency</td>
<td>50 Hz as std. 60 Hz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>available if required.</td>
<td></td>
</tr>
<tr>
<td>Xenon Voltages</td>
<td>24, 48V DC 110, 120</td>
<td>24V DC, 110V, 240V AC</td>
</tr>
<tr>
<td></td>
<td>240V AC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(see SM87 HXB data</td>
<td>(see XB12 data sheet</td>
</tr>
<tr>
<td></td>
<td>sheet for further</td>
<td>for further information)</td>
</tr>
<tr>
<td></td>
<td>information)</td>
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<tr>
<td>Incandescent Voltages</td>
<td>12, 24, 48V DC, 110</td>
<td>120V AC</td>
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<tr>
<td></td>
<td>220, 240, 254V AC</td>
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<tr>
<td></td>
<td>(see SM87 LU3 data</td>
<td>(see FB12 data sheet</td>
</tr>
<tr>
<td></td>
<td>sheet for further</td>
<td>for further information)</td>
</tr>
<tr>
<td></td>
<td>information)</td>
<td></td>
</tr>
<tr>
<td>Fluorescent Voltages</td>
<td>12, 24, 48V, 220,</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>240, 254V AC</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>information)</td>
<td></td>
</tr>
<tr>
<td>Lamp Colors</td>
<td>Red, Amber, Yellow</td>
<td>Red, Amber, Yellow,</td>
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<tr>
<td></td>
<td>, Green, Blue or</td>
<td>Green, Blue or Clear</td>
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<tr>
<td>Certification</td>
<td>UL Listed for USA</td>
<td>UL Listed for USA</td>
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<tr>
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<td>and Canada Class I,</td>
<td>and Canada Class I,</td>
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<td>Div. 1, Groups C,</td>
<td>Div. 2, Groups C,</td>
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<td></td>
<td>D, Class I, Zone 1,</td>
<td>Class I, Zones 1 &amp; 2,</td>
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<td>AExd IIB T6, Listing No. E187894.</td>
<td>AExd IIB T4/T5</td>
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<td>CSA Certified: Class I, Div. 1 &amp; 2, Group D.</td>
<td>Listing No. E187894</td>
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<tr>
<td></td>
<td>Cert. No. 96406.</td>
<td>ATEX Approved: Exd IIB T4/T5</td>
</tr>
<tr>
<td></td>
<td>ATEX Approved: Exd IIC T6 (incandescent), Exd IIC T6 (Fluorescent &amp; Xenon)</td>
<td>cert. No. 99 ATEX 2196</td>
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<tr>
<td></td>
<td>Cert. No. 04T5101</td>
<td>CELENEC EN50014 and EN50018</td>
</tr>
<tr>
<td>Terminals</td>
<td>Will accept up to 14AWG cable</td>
<td>Will accept up to 6 off 10AWG cable</td>
</tr>
<tr>
<td>Wiring</td>
<td>Standard configuration of internal wiring is to common the negative/neutral connections.</td>
<td>If individually wired lamps are required, please state requirements.</td>
</tr>
<tr>
<td>Entries</td>
<td>Up to 3 x 1/2&quot; or 1/2&quot; NPT</td>
<td>1 x 1/2&quot; NPT</td>
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<tr>
<td>Enclosure</td>
<td>LM 25TF Marine Grade Alloy</td>
<td>GRP</td>
</tr>
<tr>
<td>Lens</td>
<td>Glass</td>
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<tr>
<td>Finish</td>
<td>Epoxy paint as standard or to customer’s specification</td>
<td>Natural black or epoxy paint to customer’s specification</td>
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<tr>
<td>Ingress Protection</td>
<td>NEMA 4X and 6, IP66 &amp; 67</td>
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</tr>
<tr>
<td>Ambient Temp.</td>
<td>–13°F to 131°F (–25°C to +55°C) – Class I, Div 1</td>
<td>–67°F to +158°F (–55°C to +70°C) – Class I, Zone 1</td>
</tr>
</tbody>
</table>

NOTE: XB11 SLO2L also available.
### Audible Signaling Devices

#### Hazardous

<table>
<thead>
<tr>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Speakers and Tone Generators - MEDC Series</strong></td>
<td></td>
</tr>
<tr>
<td>DB1</td>
<td>see pages 1278–1280</td>
</tr>
<tr>
<td>DB3</td>
<td>see pages 1278–1281</td>
</tr>
<tr>
<td>DB4</td>
<td>see pages 1282–1285</td>
</tr>
<tr>
<td>DB5</td>
<td>see pages 1282–1286</td>
</tr>
<tr>
<td>DB12</td>
<td>see pages 1283–1287</td>
</tr>
<tr>
<td>DB15</td>
<td>see pages 1283–1288</td>
</tr>
<tr>
<td>DB16 UL</td>
<td>see pages 1284–1289</td>
</tr>
<tr>
<td><strong>Speakers and Tone Generators - Flex•Tone Series</strong></td>
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</tr>
<tr>
<td>ETH640, ETH840</td>
<td>see page 1292</td>
</tr>
<tr>
<td>ETH645, ETH845</td>
<td>see page 1291</td>
</tr>
<tr>
<td>ETH655, ETH855</td>
<td>see page 1290</td>
</tr>
<tr>
<td><strong>Signaling Horns and Bells</strong></td>
<td></td>
</tr>
<tr>
<td>ESR</td>
<td>see pages 1296–1297</td>
</tr>
<tr>
<td>ETH</td>
<td>see page 1293</td>
</tr>
<tr>
<td>W2H</td>
<td>see page 1294</td>
</tr>
<tr>
<td>WH</td>
<td>see page 1295</td>
</tr>
</tbody>
</table>
Speakers & Tone Generators

Up to 30 Watts

Loudspeakers and tone generators provide high decibel communication for messaging, alert and evacuation in harsh and hazardous locations.

- Metallic and non-metallic housings
- Explosionproof and Class I, Division 2 horns and speakers
- Mounting brackets that allow a full 180° swivel
- Products designed for both conduit wiring and/or cable connection (NPT or metric entries available)
- Selectable tones

This range of loudspeakers, intended for use in potentially explosive gas and dust atmospheres, has a power rating of up to 30 Watts and is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries. The flamepaths, flare and body, are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product.

Applications:
- Plant-wide alarm notification
- Audible process alarms

Typical Industries:
- Refineries
- Chemical plants
- Oil and gas exploration
- Marine terminals for transportation & storage

Certifications and Compliances:
- UL Listed for USA and Canada
- Hazardous locations:
  - Class I, Div. 2, Groups A, B, C, D*
  - Class I, Zone 1, AExde IIB/IIC T3/T4*
- Ordinary locations: Signalling Speaker
  - ATEX approved
  - NEMA 4X & 6, IP66 and IP67
  - Certified temperature:
    - -67°F to +104°F
    - -50°C to +40°C

Features and Benefits:
- GRP corrosion-free flamepath
- Up to 112dBA at 30 Watts at 10 feet*
- Power tappings via integral transformer
- Ratcheted swivel mounting stirrup
- Stainless steel fixtures
- 100V line or 8 ohm versions available

*Model dependent.
## DB1 103dB(A) @ 10ft Horn—Explosionproof

**Certification**
- UL, ATEX
- Class I, Div. 1, Groups C, D
- Class I, Zone 1

**Certified Ambient Temperature**
- −13°F to +118°F
- −25°C to +70°C

**Ingress Protection**
- NEMA 4X & 6
- IP66 & 67

**Material**
- Alloy

**Entries**
- Up to 3 x ⅜” or ¾” NPT, 20mm, 25mm

**Weight**
- 7.7lb/3.5kg (model dependent)

**No. of Tones**
- Multiple tones available

**Options:**
- Body color, certification, voltages
- 12–48V DC, 110V ACC

<table>
<thead>
<tr>
<th>Certification</th>
<th>Output</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX approved Ex II 2GD</td>
<td>103dB(A)</td>
<td>801001</td>
<td>DB1BA024A1A3NNNR</td>
<td>Choice of 6 tones, red finish</td>
</tr>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>Up to 96dB(A) @ 10ft</td>
<td>869111</td>
<td>DB1PULA024D1D2NNNR</td>
<td>Two-stage alarms, with 26 tones, 24V DC, alloy, red body color, no tag or duty labels, 2 x ¾” NPT entries</td>
</tr>
<tr>
<td>UL Listed, Class I, Div. 2, Groups C, D</td>
<td>Up to 103dB(A) @ 10ft</td>
<td>869115</td>
<td>DB1HPULA024D1D2NNNR</td>
<td>Sounder, 110V AC, 2 x ¾” NPT entries, red painted enclosure</td>
</tr>
</tbody>
</table>

## DB3 108dB(A) @ 10ft Horn—Hazardous Locations

**Certification**
- cULus, ATEX
- Class I, Div. 2, Groups A, B, C, D
- Class I, Zones 1 & 2, AExd IIC T4

**Certified Ambient Temperature**
- −67°F to +118°F
- −55°C to +70°C

**Ingress Protection**
- NEMA 4X & 6
- IP66 & 67

**Material**
- Corrosion-free GRP

**Entries**
- Up to 2 x ⅜” NPT, 20mm

**Weight**
- 13.2lb/6.0kg

**No. of Tones**
- 27 + 5 Programmable

**Options:**
- Body color, certification, voltages
- 12–48V DC, 110V–254V AC

<table>
<thead>
<tr>
<th>Certification</th>
<th>Body Color</th>
<th>Voltage</th>
<th>Type*</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>Red</td>
<td>12–48V DC</td>
<td>Single Stage</td>
<td>869131</td>
<td>DB3UL048N2CNRZ</td>
<td>27 tones, no tag or duty labels, 108 dB(A) output, NEMA 4X &amp; 6, 2 x ⅜” NPT entries with certified plug</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>Red</td>
<td>12–48V DC</td>
<td>Two Stage</td>
<td>869132</td>
<td>DB3PUL048N2CNRZ</td>
<td></td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups A, B, C, D</td>
<td>Red</td>
<td>110V AC</td>
<td>Single Stage</td>
<td>869135</td>
<td>DB3UL110N2CNRZ</td>
<td></td>
</tr>
<tr>
<td>ATEX Ex II 2GD</td>
<td>Natural Black</td>
<td>12–48V DC</td>
<td>Two Stage</td>
<td>803121</td>
<td>DB3PD048N2BNRZ</td>
<td>27 tones, no tag or duty labels, 2 x M20 entries with one certified plug fitted</td>
</tr>
<tr>
<td>ATEX Ex II 2GD</td>
<td>Natural Black</td>
<td>240V AC</td>
<td>Single Stage</td>
<td>803122</td>
<td>DB3D048N2BNRZ</td>
<td></td>
</tr>
<tr>
<td>ATEX Ex II 2GD</td>
<td>Red</td>
<td>12–48V DC</td>
<td>Two Stage</td>
<td>803123</td>
<td>DB3PD048N2BNRZ</td>
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<tr>
<td>ATEX Ex II 2GD</td>
<td>Red</td>
<td>240V AC</td>
<td>Single Stage</td>
<td>803124</td>
<td>DB3D048N2BNRZ</td>
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<tr>
<td>ATEX Ex II 2GD</td>
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<td>12–48V DC</td>
<td>Single Stage</td>
<td>803125</td>
<td>DB3D048N2BNRZ</td>
<td></td>
</tr>
</tbody>
</table>

*Single Stage
4 wired diode monitored connection—on board diode allows unit to be operated in supervisory mode when monitoring line in reverse polarity.

*Two Stage
Switchable unit available in DC versions only either by:
(i) Reversing the polarity of the supply, or,
(ii) By a 3 wire common +ve system, switching between the –ve lines.
Speakers & Tone Generators

Up to 30 Watts

Specification—DB1 Unit

Certification:
UL Listed for Class I, Div. 1, Groups C, D and Class I, Zone 1
UL Listing No. E187688
ATEX Approved:
Exd IIB T3
Cert. No. Baseefa 02ATEX0207 for DB1(P)
Cert. No. Baseefa 02ATEX0209 for DB1HP

Material:
LM25 corrosion resistant alloy with stainless steel cover screws
ABS flare

Finish:
Epoxy paint finish as standard or to customer’s specification

Max. Sound Levels:
DB1P=93±3dB(A) (86±3dB(A) for 12V DB1)
DB1HP=100±3dB(A) @ 10 feet
Note: Sound level is dependent upon the tone selection.

Weight:
DB1P 7.7lb/3.5kg approx.
DB1HP 12.3lb/5.6kg approx.

Certified Temperature:
–13°F to +158°F
–25°C to +70°C

Ingress Protection:
NEMA 4X, IP66

Tone Selection:
27 user selectable tones

Tone Tone Frequency Tone Tone Frequency
1 Alt Tones 800/970Hz at ¼ sec. 15 554 Hz for 0.1S/440 Hz for 0.1S
2 Sweeping 800/970Hz at 7 Hz 16 Int 660 Hz 150 ms on 150 ms off
3 Sweeping 800/970Hz at 1 Hz 17 Int 660 Hz 1.8 sec. on 1.8 sec. off
4 Continuous at 2850 Hz 18 Int 660 Hz 6.5 sec. on 13 sec. off
5 Sweeping 2400–2850 Hz at 7 Hz 19 Continuous 660 Hz
6 Sweeping 2400–2850 Hz at 1 Hz 20 Alt 554/440 Hz at 1 Hz
7 Slow Whoop 21 Int 660 Hz at ½ Hz
8 Sweep 1200–500 Hz at 1 Hz 22 Int 2850 Hz 150 ms on 100 ms off
9 Alt Tones 2400/2850 Hz at 2 Hz 23 Sweep 800–970 Hz at 50 Hz
10 Int Tones of 970 Hz at 1 Hz 24 Sweep 2400–2850 Hz at 50 Hz
11 Alt Tones 800/970Hz at ¾ Hz 25 5x970 Hz pulses 0.5 off, 1.5 off
12 Int Tone at 2850 Hz at 1 Hz 26 3x2850 Hz pulses 0.5 on/0.5 off, 1.5 off
13 970 Hz at ⅔ sec. on 1 sec. off 27 Int 3100 Hz 0.3 sec. on 0.7 sec. off
14 Continuous at 970 Hz

Single Stage

4 wired diode monitored connection—on board diode allows unit to be operated in supervisory mode when monitoring line in reverse polarity.

Two Stage
Switchable unit available in DC versions only either by:
(i) Reversing the polarity of the supply, or,
(ii) By a 3 wire common +ve system, switching between the –ve lines.

Current Consumption:

<table>
<thead>
<tr>
<th>Voltage</th>
<th>DB1P</th>
<th>DB1HP</th>
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</thead>
<tbody>
<tr>
<td>12V</td>
<td>125mA</td>
<td>900mA</td>
</tr>
<tr>
<td>24V</td>
<td>250mA</td>
<td>700mA</td>
</tr>
<tr>
<td>48V</td>
<td>250mA</td>
<td>–</td>
</tr>
<tr>
<td>110V</td>
<td>60mA</td>
<td>200mA</td>
</tr>
</tbody>
</table>

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

4 wired diode monitored connection—on board diode allows unit to be operated in supervisory mode when monitoring line in reverse polarity.

Hazardous Locations
Weatherproof

Up to 30 Watts

Speakers & Tone Generators

Crouse-Hinds
by E.F.N

Speakers & Tone Generators

Up to 30 Watts

Hazardous Locations
Weatherproof

Specification—DB3 Unit

Certification:
UL Listed for USA and Canada
– Hazardous locations:
  Class I, Div. 2, Groups A, B, C, D
  Class I, Zones 1 & 2, AExd IIC T4
  UL Listing No. E203310
– Ordinary locations: Audible Signal Device
  UL Listing No. S8116
ATEX approved:
CENELEC EN50014, 18, 19
Cert. No. BAS00ATEX2097X, Exd IIC
Cert. No. BAS00ATEX2098X, Exde IIC
Zones 1 & 2

Material:
Body & horn in anti-static, UV stable, glass reinforced polyester
Swivel bracket and captive cover screws in stainless steel

Finish:
Body and horn, natural black or epoxy paint coated to client’s color requirements

Sound Output:
DB3 105 ±3dB(A) Typical at 10 feet (tone dependent)

Volume Control:
*Nominal Input Current
Output (dBa) (mA)
83  50
95  100
98  150
101 200
102 250
104 300
105 350
*Output measured with 24V input voltage. Tone set to 970Hz continuous.

Weight:
13.2lb/6.0kg approx.

Certified
–67°F to +158°F
–55°C to +70°C

Ingress Protection:
NEMA 4X & 6, IP66 & 67

Voltage:
Up to 48V DC Up to 254V AC

Current Consumption:
Voltage Code
12V DC 760mA
24V DC 380mA
48V DC 190mA
110V AC 135mA
120V AC 124mA
220V AC 68mA
230V AC 65mA
240V AC 62mA
254V AC 62mA

Terminals:
4 x 14 AWG (AC), 6 x 14 AWG (DC)

Mounting:
Stainless steel bracket with ratchet facility

Labels:
Duty and tag labels optional

Cable Entries:
UP TO 2 x ½” NPT

Tone Selection:
27 user selectable tones available

Horn/Strobe Unit:
The DB3 may be combined with an MEDC strobe to create a combined audio-visual alarm.
Contact MEDC for price and specification.

Two Stage Unit: DB3P
Switchable between any two tones by either:
(i) Reversing the polarity of the supply, or
(ii) by a 3 wire common +ve system, switching between the two –ve lines.
Note: Two stage unit available in DC versions only.

3 & 4 Tone Unit:
Remote 3 & 4 tone unit available—contact sales office for details.

Ordering Requirements
The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Certification</th>
<th>Voltage</th>
<th>Labels</th>
<th>Entries</th>
<th>Options</th>
<th>Finish</th>
<th>Color</th>
</tr>
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<tbody>
<tr>
<td>DB3</td>
<td>DB3P</td>
<td>12V-48V DC</td>
<td>048</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td></td>
<td>Standard unit</td>
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<td>Two stage (DC only)</td>
<td>110V DC</td>
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<td>240V AC</td>
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<tr>
<td></td>
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<td>*DB3P not available in AC version.</td>
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</table>

<table>
<thead>
<tr>
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<tr>
<td></td>
<td>UL Listed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contact MEDC for price and specification.

Two Stage Unit: DB3P
Switchable between any two tones by either:
(i) Reversing the polarity of the supply, or
(ii) by a 3 wire common +ve system, switching between the two –ve lines.
Note: Two stage unit available in DC versions only.

3 & 4 Tone Unit:
Remote 3 & 4 tone unit available—contact sales office for details.

Crouse-Hinds
by EATON

# 5S Speakers & Tone Generators

## Hazardous Locations

### Weatherproof

#### Up to 30 Watts

## DB4

### 8-25 Watt Speaker—Hazardous Locations

<table>
<thead>
<tr>
<th>Certification</th>
<th>Power</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed Class I, Div. 2, Groups A, B, C, D</td>
<td>25W</td>
<td>869142</td>
<td>DB425ULX(100)N2CNR</td>
<td>100V line transformer, no labels, 2 x 1/2″ NPT entries, red finish</td>
</tr>
<tr>
<td>UL, cUL Listed Class I, Div. 2, Groups A, B, C, D</td>
<td>25W</td>
<td>869144</td>
<td>DB425ULX(70)N2CNR</td>
<td>70V line transformer, no labels, 2 x 1/2″ NPT entries, red finish</td>
</tr>
<tr>
<td>ATEX Approved ExII 1G</td>
<td>15W</td>
<td>804215</td>
<td>DB415DXN2BNZ</td>
<td>100V line transformer, no labels, 2 x M20, one certified plug, flameproof enclosure, natural black finish</td>
</tr>
<tr>
<td>ATEX Approved ExII 1G</td>
<td>25W</td>
<td>804225</td>
<td>DB425DXN2BNZ</td>
<td>100V line transformer, no labels, 2 x 1/2″ NPT entries, red finish</td>
</tr>
</tbody>
</table>

### DB5

### Up to 93dB(A) @ 10ft Horn—Intrinsically Safe

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Approved ExII 1G</td>
<td>12V DC</td>
<td>805001</td>
<td>DB5B012NR</td>
<td>Intrinsically safe, up to 3 x M20 entries via knockouts, no labels, natural red finish</td>
</tr>
<tr>
<td>ATEX Approved ExII 1G</td>
<td>24V DC</td>
<td>805002</td>
<td>DB5B024NR</td>
<td>Intrinsically safe, 26 tones, 93 dB(A) output, natural red body color, no tag or duty labels, 2 x 1/2″ entries via knockouts</td>
</tr>
<tr>
<td>FM Approved for Class I, Div. 1 &amp; 2, Groups A, B, C, D</td>
<td>24V DC</td>
<td>869150</td>
<td>DB5FM024NR</td>
<td>Intrinsically safe, up to 3 x M20 entries via knockouts, no labels, natural red finish</td>
</tr>
</tbody>
</table>
Speakers & Tone Generators

Hazardous Locations
Weatherproof

Up to 30 Watts

### DB12

**110dB(A) Sounder—Weatherproof & Heavy Duty**

- **Certification**: UL Listed for: Weatherproof
- **Certified Ambient Temperature**: –55°C to +70°C
- **Ingress Protection**: NEMA 4X & 6, IP66 & 67
- **Material**: Corrosion-free GRP
- **Entries**: Up to 3 x 20mm
- **Weight**: 1kg
- **No. of Tones**: 27 + 5 programmable
- **Options**: Body color, voltages 12V & 24V DC

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Type</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE Certification</td>
<td>115/230V AC</td>
<td>Single Stage</td>
<td>808003</td>
<td>DB1215NN</td>
<td>Weatherproof, dust-tight, no labels, choice of 27 tones, natural red finish, 3 x M20 knockouts</td>
</tr>
<tr>
<td>CE Certification</td>
<td>24V DC</td>
<td>Two Stage</td>
<td>869155</td>
<td>DB12P024NN</td>
<td>Weatherproof, choice of 27 tones, natural red finish, 3 x M20 knockouts</td>
</tr>
</tbody>
</table>

### DB15

**110dB(A) Tone Generator—Weatherproof & Heavy Duty**

- **Certification**: UL Listed for: Weatherproof
- **Certified Ambient Temperature**: –55°C to +70°C
- **Ingress Protection**: NEMA 4X & 6, IP66 & 67
- **Material**: Corrosion-free GRP
- **Entries**: 2 x M20
- **Weight**: 2.6kg
- **No. of Tones**: 27 + 5 programmable
- **Options**: Body color, two stage alarm (DB15P) version, earth continuity, EOL resistor, voltages 12–48V DC, 110–254V AC

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Type</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE Certification</td>
<td>12–48V DC</td>
<td>Two Stage</td>
<td>808110</td>
<td>DB15P048NN</td>
<td>Weatherproof, dust-tight, no labels, choice of 27 tones, painted gray finish</td>
</tr>
<tr>
<td>CE Certification</td>
<td>12–48V DC</td>
<td>Two Stage</td>
<td>808115</td>
<td>DB15P048NR</td>
<td>Weatherproof, dust-tight, no labels, choice of 27 tones, painted red finish</td>
</tr>
<tr>
<td>CE Certification</td>
<td>240V AC</td>
<td>Single Stage</td>
<td>808120</td>
<td>DB15240NN</td>
<td>Weatherproof, dust-tight, choice of 27 tones, natural gray finish</td>
</tr>
<tr>
<td>CE Certification</td>
<td>240V AC</td>
<td>Single Stage</td>
<td>808125</td>
<td>DB15240NR</td>
<td>Weatherproof, dust-tight, choice of 27 tones, painted red finish</td>
</tr>
</tbody>
</table>
### DB16 UL

**30 Watt Speaker — Hazardous & Ordinary Locations**

<table>
<thead>
<tr>
<th>Certification</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL, cUL Listed, Class I, Div 2, Groups C &amp; D</td>
<td>28600006</td>
<td>DB16UCXN2MPN</td>
<td>Unit suitable for gas Groups A, B, C, D, 70V line transformer, 2 x ¼” NPT, one certified plug, natural black finish</td>
</tr>
</tbody>
</table>

**Certification**
- cULus, ATEX
- Class I, Div. 2, Groups C, D / A, B, C, D
- Class I, Zone 1, AExde IIB T3/IIC T110°C

**Certified Ambient Temperature**
- –61°F to +90°F
- –50°C to +40°C

**Ingress Protection**
- NEMA 4X & 6
- IP66 & 67

**Material**
- Corrosion-free GRP

**Output**
- Groups C & D: 100dB(A) at 1Watt at 10 ft, 112dB(A) at 30 Watts at 10 ft,
  3dB(A) less than C & D versions
- Groups A, B, C, D:

**Entries**
- Up to 2 x ¼” NPT or 2 x ½” NPT, 20mm, 26mm

**Weight**
- 12.1lb/5.5kg

**Tappings @ 30 Watts**
- 30, 25, 12, 6, 4, 2

**Options:**
- Body color, transformer
Speakers & Tone Generators

Up to 30 Watts

Specification - DB4 Unit

Rated Power: 8, 15 or 25 watts RMS continuous (at 77°F)

Certification:
- UL Listed for USA and Canada
  - Class I, Div. 2, Groups A, B, C, D
  - Class I, Zone 1, AExd IIC T4
- UL Listing No. E203310
- ATEX approved:
  - EN50014, 18, 19
  - Cert. No.BAS00ATEX2097X, Exdl IIC T4/T5
  - Cert. No. BAS00ATEX2098X, ExdC IIC T4/T5
- Zones 1 and 2; not for use in atmospheres containing carbon disulphide

Material:
- Body & horn in anti-static, UV stable, glass reinforced polyester
- Swivel bracket in stainless steel
- Captive cover screws in stainless steel

Finish:
- Body and horn, natural black or epoxy paint coated to client’s color requirements

Output:
- 97 dB(A) at 1 watt at 10 feet
- 108 dB(A) at 25 watts at 10 feet
- Measured in accordance with IEC 268

Weight:
- 11lb/5.0kg approx. dependent on model

Certified Temperature:
- –67°F to +158°F
- –55°C to +70°C

Ingress Protection:
- NEMA 4X and 6, IP66 & 67

Frequency Range:
- 400Hz to 8kHz

Voice Coil Impedance: 8 ohms

Transformer:
- Used to vary the rated power by selecting different tappings (see table below).

<table>
<thead>
<tr>
<th>Transformer Tappings</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25W</td>
</tr>
<tr>
<td>1:2</td>
<td>25.0</td>
</tr>
<tr>
<td>2:3</td>
<td>12.5</td>
</tr>
<tr>
<td>3:4</td>
<td>6.0</td>
</tr>
<tr>
<td>1:3</td>
<td>4.0</td>
</tr>
<tr>
<td>2:4</td>
<td>2.0</td>
</tr>
<tr>
<td>1:4</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Other transformer & driver impedances available on request.

Ordering Requirements

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Rated Power</th>
<th>Certification</th>
<th>Transformer</th>
<th>Labels</th>
<th>Cable Entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB4</td>
<td>8 watt Code 8</td>
<td>E Exdl D UL</td>
<td>Yes X* None</td>
<td>N</td>
<td>Up to 2 1/2&quot; NPT</td>
</tr>
<tr>
<td></td>
<td>15 watt Code 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 watt Code 25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To specify certified plug, suffix appropriate code with ‘P’, e.g., 2BP is 2 x M20 entries with one certified plug.
Speakers & Tone Generators

Up to 30 Watts

Specification—DB5 Unit

| Certification                  | FM approved for Class I, Div. 1, Groups A, B, C, D, J.I. 3001835
|                               | CSA certified to C22.2 Nos. 0, 0.4, 0.5, 25, 30, 205, Class I, Groups A, B, D, Cert. No. 79122
|                               | ATEX approved, EN50014 and EN50020 & EN50284
|                               | Exia IICT4, 12/24V version Cert. No. BAS00ATEX 1259 (unit) and 01E2024 (system)
|                               | HSE(M) to EN50014, EN50020 and EN50303
|                               | Exia 1 Cert. No. MECS01ATEX4260 (unit) and 94Y7085 (system)  
| Material                      | A.B.S. (Acrylonitrile Butadiene Styrene)
| Finish                        | Available in red as standard
| Certified Temperature          | –4°F to +131°F
|                               | –20°C to +55°C
| Weight                        | 0.7lb/0.3kg
| Entries                       | Up to 1 x 13/16" on each side via knockouts
| Sound Output                  | 90±3dB(A) at 10 feet for 12V and 24V versions
|                               | Typical max value only—variable with tone
| Current Consumption            | 24V model—14 mA max. nominal
|                               | 12V model—12 mA max. nominal

![DB5 Unit Dimensional Drawing](image)
Speakers & Tone Generators

Up to 30 Watts

### Specification—DB12 Unit

**Material:** UV stable glass reinforced polyester. Retained stainless steel cover screws

**Finish:** Self colored red as standard or epoxy coated to customer’s specification

**Sound Output:** 107±3dB(A) at 1 meter

Typical value only—variable with tone

**Volume Control:** Integral volume control

<table>
<thead>
<tr>
<th>Nominal Output (dBa)</th>
<th>Input Current (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>92</td>
<td>60</td>
</tr>
<tr>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td>104</td>
<td>80</td>
</tr>
<tr>
<td>109</td>
<td>90</td>
</tr>
</tbody>
</table>

*Output measured with 24V input voltage. Tone set to 2850Hz continuous.*

**Tone Selection:**

- **Single Stage DB12:** 27 user selectable tones
- **Two stage Unit DB12P:** Switchable between any two tones by either:
  - (i) Reversing the polarity of the supply, or
  - (ii) by a 3 wire common +ve system, switching between the two -ve lines.

Note: Two stage unit available in DC versions only.

**Weight:** 1.0 kg, Dc, 1.2kg AC

**Operating Temperature:** –55°C to +70°C

**Ingress Protection:** IP66 & IP67

**Voltage:**

- DC: 12V, 24V
- AC: 115/230V

**Current Consumption:**

- 24V operation 55mA–100mA
- 115V operation 85mA–140mA
- 12V operation 55mA–90mA
- 230V operation 45mA–60mA

**Terminals:** 6 x 2.5mm²

**Labels:** Duty and tag labels available

**Cable Entries:** Up to 3 x M20 via knockouts

AFNOR NF S 32 001 compliant version available—contact sales office for details.

### Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Unit type</th>
<th>Voltage</th>
<th>Labels</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB12</td>
<td>12V DC</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>DB12P</td>
<td>24V DC</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>115/230V AC</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
Speakers & Tone Generators

Up to 30 Watts

Tone Selection:
DB15:
27 user selectable tones available. Additional 5 tones may be programmed.

DB15P (Two stage unit):
Switchable between any two of the 27 tones by either:
(i) Reversing the polarity of the supply, or
(ii) by a 3 wire common +ve system, switching between the two –ve lines.
Note: Two stage unit available in DC versions (DB15P) only.

AFNOR NF S 32 001 compliant version available—contact sales office.

Specification—DB15 Unit

Material:
Body & horn in UV stable, glass reinforced polyester
Swivel bracket in stainless steel
Cover screws in stainless steel

Finish:
Body and horn, natural gray to RAL 7035 or epoxy paint coated to client’s color requirements

Sound Output:
DB15 117dB(A) maximum

Volume Control:
Integral volume control

<table>
<thead>
<tr>
<th>*Nominal Output (dBa)</th>
<th>Input Current (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>105</td>
<td>250</td>
</tr>
<tr>
<td>108</td>
<td>350</td>
</tr>
<tr>
<td>110</td>
<td>450</td>
</tr>
<tr>
<td>112</td>
<td>550</td>
</tr>
</tbody>
</table>

*Output measured with 24V input voltage, Tone set to 970Hz continuous.

Weight: 2.6kg approx. dependent on model

Temperature Range: –55°C to +70°C

Ingress Protection: IP66 and IP67

Voltage: Up to 48V DC Up to 254V AC

Current Consumption:

<table>
<thead>
<tr>
<th>V</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V DC</td>
<td>900mA</td>
</tr>
<tr>
<td>24V DC</td>
<td>600mA</td>
</tr>
<tr>
<td>48V DC</td>
<td>280mA</td>
</tr>
<tr>
<td>110V AC</td>
<td>150mA</td>
</tr>
<tr>
<td>120V AC</td>
<td>175mA</td>
</tr>
<tr>
<td>220V AC</td>
<td>93mA</td>
</tr>
<tr>
<td>240V AC</td>
<td>86mA</td>
</tr>
<tr>
<td>254V AC</td>
<td>80mA</td>
</tr>
</tbody>
</table>

Terminals: 4 x 2.5mm² (AC), 6 x 2.5mm² (DC)

Earth Continuity: Available

Mounting: Stainless steel bracket with ratchet facility

Labels: Duty and tag labels optional

Cable Entries: 2 x M20 ISO

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Voltage</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB15</td>
<td>12V DC</td>
<td>012</td>
</tr>
<tr>
<td></td>
<td>24V–48V DC</td>
<td>048</td>
</tr>
<tr>
<td>DB15P</td>
<td>*110V AC</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>*120V AC</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>*240V AC</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>*DB15P not available in AC version.</td>
<td></td>
</tr>
</tbody>
</table>

*Nominal Output (dBa)
Speakers & Tone Generators

Up to 30 Watts

Specification—DB16 Unit

<table>
<thead>
<tr>
<th>Transformer Tappings</th>
<th>Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:2</td>
<td>30</td>
</tr>
<tr>
<td>2:3</td>
<td>25</td>
</tr>
<tr>
<td>3:4</td>
<td>12</td>
</tr>
<tr>
<td>1:3</td>
<td>6</td>
</tr>
<tr>
<td>2:4</td>
<td>4</td>
</tr>
<tr>
<td>1:4</td>
<td>2</td>
</tr>
</tbody>
</table>

(i) Loop in/loop out (4 x 2) power tap change; 8 terminals

(ii) Loop in/loop out (2 x 2) 8 ohm; 4 terminals

Terminals: 8 x 2.5mm²

Earth Continuity: Available via optional earthing stud or by internal earth plate

Mounting: Via stirrup with ratchet facility

Labels: Optional stainless steel tag and duty labels

Cable Entries: Up to 2 x ⅜ NPT or 2 x ¾ NPT into termination chamber, 20mm, 25mm

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UL, ULB, C, CO, CTEX, H</td>
<td>Yes</td>
<td>N</td>
<td>1 x M20</td>
<td>Natural Black</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>O</td>
<td>2 x M20</td>
<td>Red</td>
</tr>
<tr>
<td></td>
<td>Unit available for groups.</td>
<td>*400V AC maximum</td>
<td></td>
<td>3 x M20</td>
<td>N</td>
</tr>
</tbody>
</table>

Material:
Body & horn in anti-static, UV stable, glass reinforced polyester

Finish:
All natural or body and horn can be painted to client’s requirements

Output:
Groups C, D Version: Maximum output at 1W at 10 feet is 100dBA
Maximum output at 30W at 10 feet is 112dBA
Groups A, B, C, D Version: Maximum output at 1W at 10 feet is 97dBA
Maximum output at 30W at 10 feet is 109dBA

Weight: 12lb/5.5kg approx.

Certified Temperature: 67°F to +104°F (-50°C to +40°C)

Ingress Protection: NEMA 4X & 6, IP66 & IP67

Voltage: 370Hz to 8kHz

Voice Coil Impedance: 8 ohms

Transformer:
Used by combining the rated power tappings below

Transformer Tapping Options:

UL Listed for USA and Canada

Hazardous Locations:
Class I, Div. 2, Groups C, D, Class I, Zone 1, AExde IIB T3
Class I, Div. 2, Groups A, B, C, D, Class I, Zone 1, AExde IIC T110°C
UL Listing No. E203310

Ordinary Locations:
Signalling Speaker; UL Listing No. 58847

IIB Version: Cert. No. Baseefa04ATEX0166X
ATEX Ex II 2G Exde IIB T3 (Tamb. -50°C to +40°C)

IIC Version: Cert. No. Baseefa04ATEX0167X
ATEX Ex II 2GD Exde IIC T110°C (Tamb. -50°C to +40°C)

Zones 1 and 2

Cable Entries:

Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.
ETH Flex•Tone™ Series
Signaling Devices
Electronic Signals

Cl. I, Div. 1 & 2, Groups B, C, D
Cl. II, Div. 1 & 2, Groups E, F, G
Cl. III
UL and cUL 464 and 1203 Listed
Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations

Eaton’s Crouse-Hinds Flex•Tone Series Electronic Signals are explosionproof, heavy duty, tone-selectable signaling devices capable of producing volume-controlled, high decibel tones. Certified for use in Class I, Division 1, Groups B, C, and D applications, the Flex•Tone Series is ideal for signaling warning or emergency conditions.

The Flex•Tone ETH855 accepts up to two contact closures and delivers two audible output signals selected from 55 available tones. The two tones are selected by setting miniature switches within the unit. One of the tones can be assigned a priority status to override the other tone.

The Flex•Tone ETHD855 is diode polarized for applications requiring electrical supervision of signaling circuit field wiring. The signal delivers one audible output signal selected from the 55 tones available.

Applications:
• For use where a high decibel sound is required for alert or evacuation in hazardous locations.

Features and Benefits:
• Heavy duty zinc cast construction.
• 55 tone capacity – no additional tone modules needed.
• Internal volume control with internal potentiometer.
• Corrosion-resistant heat-flowed epoxy finish.
• Supplied with factory sealed ½” threaded fitting for quick installation.
• Speaker can swivel 180° vertically or horizontally depending on orientation of mounting bracket.
• Mounts onto any surface using only three bolts.
• 30’ numbered wire leads.

Certifications and Compliances:
• Class I, Division 1, Groups B, C, D
• Class II, Division 1, Groups E, F, G
• Class III
• UL and cUL 464 and 1203 Listed

Materials and Finishes:
• Body – Heavy duty zinc cast construction
• External hardware – Stainless steel

Ratings:
• 24VDC, 36VDC, 125VDC, 250VDC, 24VAC, 120VAC and 240VAC (ETH)
• 20 – 31VDC (ETHD)

Output Sound Pressure:
• 109 decibel (dBA) output

Ordering Information:

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Voltage</th>
<th>Signal OFF Standby Current (Amps)</th>
<th>Signal ON Operating Current (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETH855/24</td>
<td>24VDC</td>
<td>0.061</td>
<td>0.250</td>
</tr>
<tr>
<td>ETH855/36</td>
<td>36VDC</td>
<td>0.077</td>
<td>0.380</td>
</tr>
<tr>
<td>ETH855/24</td>
<td>24VAC, 50 / 60Hz</td>
<td>0.250</td>
<td>0.950</td>
</tr>
<tr>
<td>ETH855/120</td>
<td>120VAC</td>
<td>0.088</td>
<td>0.260</td>
</tr>
<tr>
<td>ETH655/240</td>
<td>240VAC</td>
<td>0.091</td>
<td>0.190</td>
</tr>
<tr>
<td>ETH855/125</td>
<td>125VDC</td>
<td>0.031</td>
<td>0.130</td>
</tr>
<tr>
<td>ETH855/250</td>
<td>250VDC</td>
<td>0.019</td>
<td>0.070</td>
</tr>
</tbody>
</table>

Diode Polarized, Explosionproof, Single Output For Fire Alarm Applications
Meets min. 75 dBA for fire alarm indication
ETHD855/24  | 20 – 31VDC    | 0.061                             | 0.950                             |
**ETH Flex•Tone™ Series**

**Signaling Devices**

**Remote Speaker / Amplifier**

Cl. I, Div. 1 & 2, Groups B, C, D
Cl. II, Div. 1 & 2, Groups E, F, G
Cl. III
UL and cUL 464 and 1203 Listed

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations

Eaton’s Crouse-Hinds Flex•Tone Series Explosionproof Remote Speaker/Amplifier is designed for remote mounting in Division 1 areas where simultaneous high decibel signaling is required.

Used in connection with the Panel Control Signaling Generator, the Flex•Tone ETH845 operates directly from local power sources, allowing remote speaker/amplifiers of different voltages to be connected within the same system. Available in both AC and DC voltages, the Flex•Tone can be mixed and matched throughout an application using the available line power.

ETH845 Series Remote Speaker/Amplifiers must be used with Eaton’s Crouse-Hinds Flex•Tone Panel Control Signal Generator on next page.

**Applications:**
- For use where simultaneous signaling of a high decibel sound is required for alert or evacuation in hazardous locations.

**Features and Benefits:**
- Heavy duty zinc cast construction.
- Individual volume control.
- Corrosion-resistant heat-flowed epoxy finish.
- Supplied with factory sealed 1/2” threaded fitting for quick installation.
- Speaker can swivel 180° vertically or horizontally depending on orientation of mounting bracket.
- Mounts onto any surface using only three bolts.
- 30” numbered wire leads.

**Certifications and Compliances:**
- Class I, Division 1, Groups B, C, D
- Class II, Division 1, Groups E, F, G
- Class III
- UL and cUL 464 and 1203 Listed

**Materials and Finishes:**
- Body – Heavy duty zinc cast construction
- External hardware – Stainless steel

**Ratings:**
- 120VAC, 240VAC, 125VDC and 250VDC

**Output Sound Pressure:**
- 109 decibel (dBA) output

**Ordering Information:**

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Voltage</th>
<th>Signal OFF Standby Current (Amps)</th>
<th>Signal ON Operating Current (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETH845/24</td>
<td>24VDC</td>
<td>0.061</td>
<td>0.250</td>
</tr>
<tr>
<td>ETH845/24</td>
<td>24VAC, 50/60Hz</td>
<td>0.250</td>
<td>0.950</td>
</tr>
<tr>
<td>ETH645/120</td>
<td>120VAC</td>
<td>0.088</td>
<td>0.260</td>
</tr>
<tr>
<td>ETH645/240</td>
<td>240VAC</td>
<td>0.091</td>
<td>0.190</td>
</tr>
<tr>
<td>ETH845/125</td>
<td>125VDC</td>
<td>0.031</td>
<td>0.130</td>
</tr>
<tr>
<td>ETH845/250</td>
<td>250VDC</td>
<td>0.091</td>
<td>0.070</td>
</tr>
</tbody>
</table>

ETH845 Series Remote Speaker/Amplifiers must be used with Eaton’s Crouse-Hinds Flex•Tone Panel Control Signal Generator on next page.

ETH845 Series Remote Speaker/Amplifiers accept a 10VAC audio signal from Flex•Tone Panel Control Signal Generator.
Eaton’s Crouse-Hinds Flex•Tone Series Panel Control Signal Generator controls and initiates a synchronous signaling sound from all Flex•Tone 3 Remote Speaker/Amps installed in a system. The Panel Control Signal Generator is mounted in a Division 2 area, while controlling the Flex•Tone 3 Speaker/Amps that are remotely mounted in Division 1 areas.

The Panel Control Signal Generator produces 27 sounds. Four tones may be activated from field-wired, normally open contacts, or a 24VDC or 120VAC external voltage source such as an output from a PLC.

Applications:
• Hazardous area applications calling for high decibel output with simultaneous signal delivery over all speakers installed in a system
• Emergency warning systems, plant evacuation alarms, security intrusion alarms, process monitoring, shift start and dismissal horns, and paging signals

Features and Benefits:
• 27 tone capability – no additional tone modules needed
• Centralized programmable tone selection
• PLC compatible
• System-wide priority tone
• 24 VDC battery back-up terminals
• Short circuit protected

Certifications and Compliances:
• Class I, Division 2, Groups A, B, C, D
• Class II, Division 2, Groups F, G
• Class III
• UL 464 and 1604 Listed
• cUL C22.2 No. 205
• CE Marked – CENELEC LV and EMC Directives
• NEMA 3R, IP44

Materials and Finishes:
• Zinc-cast construction with an epoxy powder coat finish

Ratings:
• See table below

Ordering Information:

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Voltage</th>
<th>Input Card Activation Voltage</th>
<th>Signal OFF Standby Current (Amps)</th>
<th>Signal ON Operating Current (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETH840/24ET4</td>
<td>24VDC</td>
<td>24VDC</td>
<td>0.10</td>
<td>0.74</td>
</tr>
<tr>
<td>ETH840/24ET13</td>
<td>24VAC, 50/60Hz</td>
<td>24VDC</td>
<td>0.10</td>
<td>1.30</td>
</tr>
<tr>
<td>ETH840/120ET36</td>
<td>120VAC, 50/60Hz</td>
<td>24VDC</td>
<td>0.10</td>
<td>0.36</td>
</tr>
<tr>
<td>ETH840/120ET38</td>
<td>120VAC, 50/60Hz</td>
<td>120VAC</td>
<td>0.10</td>
<td>0.38</td>
</tr>
<tr>
<td>ETH840/120ET32</td>
<td>120VAC, 50/60Hz</td>
<td>24VDC</td>
<td>0.10</td>
<td>0.32</td>
</tr>
<tr>
<td>ETH840/240ET20</td>
<td>240VAC, 50/60Hz</td>
<td>24VDC</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td>ETH840/125ET21</td>
<td>125VDC</td>
<td>24VDC</td>
<td>0.10</td>
<td>0.21</td>
</tr>
<tr>
<td>ETH840/250ET10</td>
<td>250VDC</td>
<td>24VDC</td>
<td>0.02</td>
<td>0.10</td>
</tr>
<tr>
<td>ETH840/120M31</td>
<td>120VAC, 50/60Hz</td>
<td>120VAC</td>
<td>0.10</td>
<td>0.31</td>
</tr>
<tr>
<td>ETH840/240M20</td>
<td>240VAC, 50/60Hz</td>
<td>120VAC</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td>ETH840/125M20</td>
<td>125VDC</td>
<td>120VAC</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td>ETH840/250M10</td>
<td>250VDC</td>
<td>120VAC</td>
<td>0.02</td>
<td>0.10</td>
</tr>
<tr>
<td>ETH840/200ET31</td>
<td>120VAC, 50/60Hz</td>
<td>RS485</td>
<td>0.10</td>
<td>0.31</td>
</tr>
<tr>
<td>ETH840/240R20</td>
<td>240VAC, 50/60Hz</td>
<td>RS485</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td>ETH840/125R20</td>
<td>125VDC</td>
<td>RS485</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td>ETH840/250R10</td>
<td>250VDC</td>
<td>RS485</td>
<td>0.02</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Flex•Tone Panel Control Signal Generator must be used with Eaton’s Crouse-Hinds ETH845 Remote Speaker/Amps on previous page.

Dimensions
In Inches:

Speaker pivots 180°

Mounting flange
4 holes (2 each side)

Crouse-Hinds by F.H.N
Applications:
ETH horn signals are used:
- For call signals, alarms, and various other signalling applications
- In specific hazardous atmospheres as found in chemical plants, oil and gas refineries, bulk loading stations, paint and varnish manufacturing plants, grain processing industries and grain elevators, as well as in certain metal, coal, combustible fiber processing or handling areas
- In conduit systems and mounted on a flat surface with the projectors aimed in the desired direction

Features:
- No external conduit seal is required.
- The AC signals do not have arcing contacts.
- The DC horns have factory sealed wire leads in the interconnecting nipple and hub.
- The body cover joint of AC horn signals is of serrated construction, machined to close tolerance to ensure flametightness and secured by a clamping ring. The DC unit has a ground joint design.

Certifications and Compliances:
- NEC:
  - Class I, Division 1 & 2, Groups B†, C, D
  - Class II, Division 1, Groups E, F, G
  - Class II, Division 2, Groups F, G
  - Class III
- UL Standard: 464, 1203
- CSA Standard: C22.2 No. 30

Standard Materials:
- Copper-free aluminum

Standard Finishes:
- Natural

Size Ranges:
- Hub – ½” or ¾” size

Sound Levels:
- See Ordering Information table for individual ratings

Electrical Rating Ranges:
- Nominal voltage – 24, 115, 230 VAC 24 VDC

Table 1
Operating Current in Amperes at the Nominal Voltage for Horn and Siren Signals

<table>
<thead>
<tr>
<th>Horn Signal</th>
<th>Single Projector</th>
<th>Grill Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom. Volts</td>
<td>50 to 60 hertz AC ETH2702, ETH2703</td>
<td>50 to 60 hertz AC ETH2313, ETH2316, ETH2312 DC ETH2416</td>
</tr>
<tr>
<td>24</td>
<td>115</td>
<td>0.625</td>
</tr>
<tr>
<td>115</td>
<td>45</td>
<td>0.13</td>
</tr>
<tr>
<td>230</td>
<td>2</td>
<td>0.065</td>
</tr>
</tbody>
</table>

Ordering Information:

<table>
<thead>
<tr>
<th>Supply</th>
<th>Nom. Volts*</th>
<th>Nom. Watts</th>
<th>Minimum audibility rating (dB) at 10'</th>
<th>Hub Size</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Projector Horn Signal</td>
<td>50 to 60 hertz AC</td>
<td>115 33</td>
<td>105 dB</td>
<td>⅛</td>
<td>ETH2703</td>
</tr>
<tr>
<td>Grill Type Horn Signals</td>
<td>50 to 60 hertz AC</td>
<td>115 49</td>
<td>100 dB</td>
<td>⅛</td>
<td>ETH2316</td>
</tr>
<tr>
<td>Grill Type Horn Signals</td>
<td>24 DC</td>
<td>230 49</td>
<td>100 dB</td>
<td>⅛</td>
<td>ETH2312</td>
</tr>
</tbody>
</table>

Dimensions
In Inches:

- Single Projector
- Grill Type

Dimensions are approximate, not for construction purposes.

*Grill type horns are certified for Group B.
* See Table 1 for more complete ratings

Crouse-Hinds by Eaton
Applications:
W2H series signaling devices are used:
- As independent audible signal or warning devices
- In Class I, Division 2, Groups A, B, C, D hazardous areas where flammable vapors or gases may be present due to accidental or abnormal operation
- In Class II, Division 2, Group G hazardous areas where combustible dusts may be present due to accidental or abnormal operation

Features:
- The W2H is solid-state, compact, rugged but lightweight. The system is programmable, which allows the convenience of tone selection, without the need for separate tone modules. Each unit can be programmed for any one of four different tones (whoop, wail, hi-lo, and horn), by wiring to the corresponding terminal on the unit’s terminal strip. Separate sound modules not required.
- Unit may be field wired for multiple signal selection by manual or automatic control.
- 180° speaker rotation allows flexibility in direction of sound.
- Corrosion-resistant conformal coating protects the printed circuit and other interior components.

Certifications and Compliances:
- UL Standard: 1203
- NEC:
  Class I, Division 2, Groups A, B, C, D
  Class II, Division 2, Group G
- NEMA 3, 7ABCD Division 2, 9G Division 2

Standard Materials:
- Body – die-cast aluminum
- Projector – spun aluminum
- Hardware – stainless steel

Standard Finishes:
- Body and projector – gray hammertone enamel
- Stainless steel – natural

Sound Levels:
- Minimum audibility rating (dB) at 10': W2H Series – 93dB

Electrical Rating Ranges:
- Nominal voltage – 24, 120, 240 AC; 60 Hz 24 DC

Ordering Information - Normal Power

<table>
<thead>
<tr>
<th>Nominal Voltage</th>
<th>Operating Current</th>
<th>Standby Current</th>
<th>Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>24VDC</td>
<td>0.55A</td>
<td>0.06A</td>
<td>W2H840</td>
</tr>
<tr>
<td>24VAC</td>
<td>1.25A</td>
<td>0.13A</td>
<td>W2H640</td>
</tr>
<tr>
<td>120VAC</td>
<td>0.27A</td>
<td>0.03A</td>
<td>W2H620</td>
</tr>
<tr>
<td>240VAC</td>
<td>0.15A</td>
<td>0.02A</td>
<td>W2H660</td>
</tr>
</tbody>
</table>

Dimensions
In Inches:

[Diagram of the W2H Signaling Device]

Dimensions are approximate, not for construction purposes.
WH Vibrating Horn Signals

Applications:
WH vibrating horn signals are used:
- For code or call signals, or as a general alarm in a signal system that might involve hours of continuous operation
- In non-hazardous atmospheres of industrial areas such as warehouses, yards, exteriors of buildings, and in-plant areas
- Mounted on walls or other flat surfaces with projectors aimed in a desired direction

Features:
- The joint between the body and horn assembly is gasketed for raintightness

Certifications and Compliances:
- UL Standard: 464

Standard Materials:
- Copper-free aluminum and die cast zinc

Standard Finishes:
- Gray hammertone enamel

Capacity Ranges:
- Minimum audibility rating (dB) at 10':
  AC – 87 decibels

Electrical Rating Ranges:
- Nominal voltage
  120 AC, 50 / 60 hertz
- Operating characteristics
  Voltage range +10%, –20%
  Nominal watts – 18 VA on 120 VAC

Ordering Information

<table>
<thead>
<tr>
<th>Nominal Voltage</th>
<th>Nominal Voltage</th>
<th>Grill Cat #</th>
<th>Single Projector Cat. #</th>
<th>Double Projector Cat. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>.15</td>
<td>120 AC 50 to 60 Hz</td>
<td>WH13503</td>
<td>WH13513</td>
<td>WH13523</td>
</tr>
</tbody>
</table>

Dimensions
In Inches:

Dimensions are approximate, not for construction purposes.
5S ESR Bell Signals

Factory Sealed

Applications:
ESR bell signals are used:
• For call signals, alarms, or in various other signalling applications
• In specific hazardous atmospheres such as in chemical plants, oil and gas refineries, bulk loading stations, paint and varnish manufacturing plants, grain processing industries and grain elevators, as well as in certain metal, coal, combustible fiber processing or handling areas
• In conduit systems, and mounted on a vertical flat surface with the striker at the bottom

Features:
• The conduit hub contains an integral bushing.
• The body cover assembly permits the location of a hub at the top, bottom or either side (the striker must be located at the bottom for proper operation).
• There are no external seals required except when used in Group B hazardous areas.
• The AC signal does not have arcing contacts.
• Binding screw terminals are provided in AC signals for supply conductors.
• A vibrating or single stroke striker mechanism is furnished with 6 or 10 inch diameter gongs.

Certifications and Compliances:
Standard Units:
• NEC/CEC:
  Class I, Division 1 & 2, Groups C, D
  Class II, Division 1, Groups E, F, G
  Class II, Division 2, Groups F, G
  Class III

NEMA/EEMAC: 7CD, 9EFG
• UL Standard: 464, 1203
• CSA Standard: C22.2 No. 30

Group B Units:
• NEC/CEC:
  Class I, Division 1 & 2, Groups B, C, D
  Class II, Division 1, Groups E, F, G
  Class II, Division 2, Groups F, G
  Class III

NEMA/EEMAC: 7BCD, 9EFG
• UL Standard: 464, 1203
• CSA Standard: C22.2 No. 30

Standard Materials:
• Body – Feraloy® iron alloy
• Cover – copper-free aluminum
• Junction box body – Feraloy iron alloy
  cover – copper-free aluminum
• Gong – steel

Standard Finishes:
• Feraloy iron alloy – electrogalvanized and aluminum acrylic paint
• Aluminum – natural
• Steel – gray matte

Size Ranges:
• Hub – one ¾" size

Sound Levels:
• See Table 1 below for individual ratings

Electrical Rating Ranges:
• Nominal voltage – 12, 24, 48, 115, 230 AC
  See Table 1 for complete ratings.

Dimensions
In Inches:

<table>
<thead>
<tr>
<th>Dia. Gong</th>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 1
Operating Current in Amperes at the Nominal Voltage For Bell Signals

<table>
<thead>
<tr>
<th>Nom. Volts</th>
<th>All Vibrating 25 to 60 Hz AC</th>
<th>All Single Stroke 50 to 60 Hz AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1.67</td>
<td>1.75</td>
</tr>
<tr>
<td>24</td>
<td>.53</td>
<td>.62</td>
</tr>
<tr>
<td>48</td>
<td>.44</td>
<td>.41</td>
</tr>
<tr>
<td>115</td>
<td>.189</td>
<td>.189</td>
</tr>
<tr>
<td>230</td>
<td>.092</td>
<td>.096</td>
</tr>
</tbody>
</table>
### Ordering Information:

<table>
<thead>
<tr>
<th>Hub Size</th>
<th>Supply</th>
<th>Nom. Volts</th>
<th>Voltage Range</th>
<th>Dia. Bell</th>
<th>Standard Units Cat. #</th>
<th>Group B Units Cat. #</th>
<th>Minimum Audibility Rating (dB) at 10'</th>
<th>Single Stroke Hammer (50 to 60 hertz) Cat. #</th>
<th>Minimum Audibility Rating (dB) at 10'</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4 AC</td>
<td>12</td>
<td>9.6 to 13.2</td>
<td></td>
<td></td>
<td>ESR2675</td>
<td>ESR2675 GB</td>
<td>67</td>
<td>ESR2665</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>19.2 to 26.4</td>
<td></td>
<td></td>
<td>ESR2674</td>
<td>ESR2674 GB</td>
<td>82</td>
<td>ESR2664</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>38.4 to 52.8</td>
<td>6</td>
<td></td>
<td>ESR2673</td>
<td>ESR2673 GB</td>
<td>88</td>
<td>ESR2663</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>115</td>
<td>92 to 126.5</td>
<td></td>
<td></td>
<td>ESR2672</td>
<td>ESR2672 GB</td>
<td>88</td>
<td>ESR2662</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>230</td>
<td>184 to 253</td>
<td></td>
<td></td>
<td>ESR2671</td>
<td>ESR2671 GB</td>
<td>85</td>
<td>ESR2661</td>
<td>67</td>
</tr>
<tr>
<td>1/2 AC</td>
<td>12</td>
<td>9.6 to 13.2</td>
<td></td>
<td></td>
<td>ESR2615</td>
<td>ESR2615 GB</td>
<td>82</td>
<td>ESR2625</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>19.2 to 26.4</td>
<td></td>
<td></td>
<td>ESR2614</td>
<td>ESR2614 GB</td>
<td>85</td>
<td>ESR2624</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>38.4 to 52.8</td>
<td>10</td>
<td></td>
<td>ESR2613</td>
<td>ESR2613 GB</td>
<td>85</td>
<td>ESR2623</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>115</td>
<td>92 to 126.5</td>
<td></td>
<td></td>
<td>ESR2612</td>
<td>ESR2612 GB</td>
<td>91</td>
<td>ESR2622</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>230</td>
<td>184 to 253</td>
<td></td>
<td></td>
<td>ESR2611</td>
<td>ESR2611 GB</td>
<td>85</td>
<td>ESR2621</td>
<td>67</td>
</tr>
</tbody>
</table>

‡ Install seal within 11/2" of conduit opening.
Combination Visual & Audible Signaling Devices

Hazardous

<table>
<thead>
<tr>
<th>Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combination Units - MEDC Series</td>
<td></td>
</tr>
<tr>
<td>DB3/SM87</td>
<td>see pages 1300–1301</td>
</tr>
<tr>
<td>DB3/XB11</td>
<td>see pages 1300–1301</td>
</tr>
<tr>
<td>DB12/XB13</td>
<td>see pages 1300–1301</td>
</tr>
</tbody>
</table>
Visual and Audible Combination Units

MEDC Series

Truly a unique product offering with integral visual and audible signaling devices pre-wired for simultaneous output activation.

- Suitable for Class I, Division 2 applications
- Strobe light and audible tone generator in one package
- Mounts with ease and facilitates quick field wiring
- UL, cUL, Ex and ATEX for worldwide acceptance

This range of lightweight all GRP, explosionproof horns intended for use in potentially explosive atmospheres has been designed with high ingress protection to cope with the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

The flamepaths, flare, and body are manufactured completely from a UV stable glass reinforced polyester. Stainless steel screws and sinter are incorporated thus ensuring a corrosion-free product. A tapered flamepath is used to overcome the problems of assembly of parallel spigot flamepaths.

Features and Benefits:
- All GRP corrosion-free
- Up to 108dBA output at 10 feet
- Integral volume control
- 27 tones, user selectable
- Horn/Strobe Combination Unit available

Certifications and Compliances:
- UL Listed for USA and Canada
  - Hazardous locations:
    - Class I, Div. 2, Groups A, B, C, D
    - Class I, Zones 1 & 2, AExd IIC T4
  - Ordinary locations: Audible Signal device
- ATEX approved
- NEMA 4X & 6, IP66 & 67
- Certified temperature
  - −67°F to +158°F
  - −55°C to +70°C
### Visual & Audible Combination Units—Hazardous Locations, Weatherproof

<table>
<thead>
<tr>
<th>Certification</th>
<th>Voltage</th>
<th>Lens/Body Color</th>
<th>Ordering Code</th>
<th>Cat. #</th>
<th>Standard Product Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEX Ex II 2GD</td>
<td>24V DC</td>
<td>Red/Red</td>
<td>803130</td>
<td>DB3/XB11B24V RED/RED</td>
<td>DB3/XB11, Exd II B T5, choice of 27 tones, 115dB(A) at 1m output, 29 Cd, no labels, 1 x M20 entry</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Red/Natural Black</td>
<td>869200</td>
<td>DB3/XB11UL24V RED/NB</td>
<td>DB3/XB11, GRP material, NEMA 4X &amp; 6, choice of 27 tones, 106dB(A) at 10 feet output, 29 Cd, no labels, 1 x ½” NPT entries</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>24V DC</td>
<td>Red/Red</td>
<td>869205</td>
<td>DB3/XB11UL24V RED/RED</td>
<td>DB3/XB11, GRP material, NEMA 4X &amp; 6, choice of 27 tones, 106dB(A) at 10 feet output, 29 Cd, no labels, 1 x ½” NPT entries</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 2, Groups C, D</td>
<td>110V AC</td>
<td>Red/Red</td>
<td>869210</td>
<td>DB3/XB11UL110V RED/RED</td>
<td>DB3/XB11, GRP material, NEMA 4X &amp; 6, choice of 27 tones, 106dB(A) at 10 feet output, 29 Cd, no labels, 1 x ½” NPT entries</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Red/Red</td>
<td>62500182</td>
<td>DB1P/SM87HXBUL 24V RED/RED</td>
<td>24V DC, alloy sounder, interconnected to, painted red stainless steel baseplate, alloy 5 joule beacon</td>
</tr>
<tr>
<td>UL, cUL Listed, Class I, Div. 1, Groups C, D</td>
<td>24V DC</td>
<td>Red/Red</td>
<td>62500183</td>
<td>DB3/SM87HXBUL 24V RED/RED</td>
<td>GRP sounder interconnected to, painted red stainless steel baseplate, alloy 5 joule beacon</td>
</tr>
<tr>
<td>Ex II 2GD</td>
<td>24V DC</td>
<td>Red/Red</td>
<td>62500009</td>
<td>DB12/XB13 24V RED/RED</td>
<td>IP66 &amp; 67 weatherproof only, 24V DC, GRP sounder interconnected to, on a painted red stainless steel baseplate, a IP66 &amp; 67 weatherproof only, GRP 10 joule beacon</td>
</tr>
</tbody>
</table>