The BA386 is an intrinsically safe field mounting beacon which produces a bright flashing warning signal in a hazardous area. This beacon is significantly less expensive than the traditional Xenon devices, although it has a similar light output, flashes more frequently and is available in five different colours.

The beacon may be used alone, or in conjunction with a BEKA intrinsically safe sounder. The high efficiency of the BA386 enables the beacon and the sounder to be powered from a common Zener barrier or galvanic isolator. In combined systems this eliminates one barrier or isolator and associated wiring, thus simplifying the installation and further reducing cost.

Alarm accept is another unique feature of the BA386 which in combined systems enables the sounder to be silenced for a pre-set time leaving the beacon flashing twice per second. The alarm is accepted by momentarily closing a pair of external contacts, such as a push-button which may be located in the hazardous or the safe area. The sounder silence time may be pre-set for between 1 and 30 minutes.

Main application of the BA386 beacon is to provide a visible warning in a noisy hazardous process area where a sounder is not easily identified. The beacon may be powered from a wide variety of Zener barriers or galvanic isolators and may be controlled by any contact or dc supply in the safe area. It may also be switched in the hazardous area by an intrinsically safe relay or any equipment with an intrinsically safe output such as the alarm output of a BEKA indicator or totaliser.

When the BA386 beacon is used in conjunction with a BEKA intrinsically safe sounder it forms a combined audio visual alarm with integral sounder silence facilities. It is ideal where an operator needs to be advised that an alarm condition has occurred, but wishes to silence the intrusive audible warning. If the alarm condition is not corrected during the silence period, the sounder will be re-activated when the pre-set silence time has expired.

IECEx and ATEX certification permits installation in Zones 0, 1 or 2. For applications in the USA, the BA386 also has FM intrinsic safety and nonincendive approval.

The flame retardant enclosure provides IP66 protection and is suitable for external mounting in sheltered locations. Cable entry is via 20mm untapped holes in the sides of the enclosure and there is a 'knock-out' in the rear for an additional entry.

When used with a BEKA BR385 sounder, the beacon may be mounted onto the base of the sounder to form a combined assembly, or may be mounted separately.

A complementary intrinsically safe steady state beacon with five different colour output options is also available. These BA386S beacons provide a continuous status indication when a flashing warning is not required.
**SPECIFICATION**

**Power supply**
- Voltage: 10 to 28V (across terminals 1 & 2)
- Not damaged by temporary connection to the supply without a Zener barrier or galvanic isolator in circuit.

**Current**
- When powered from 24V supply via 28V 93mA Zener barrier.
- 25mA typical
- 40mA typical

**Output**
- **Brightness**
  - Equivalent to 0.5 Joule xenon beacon
- **Frequency**
  - Alone: 2Hz (2 double flashes per second)
  - With BR385 sounder: 1Hz (1 double flash per second)
  - silenced: 2Hz (2 double flashes per second)
- **Sounder output**: Reduced by typically 2dB when used with beacon.
- **Response**
  - On time: First flash within 2 seconds of supply being connected.
  - Off time: Last flash less than 5 seconds after supply is removed.
  - Repeat alarm: To guarantee alarm accept status, supply should not be reconnected within 5 seconds of disconnection.

**Intrinsic safety**
- **Europe ATEX**
  - Code: Group II Category 1G
  - Ex ia op is IIC T4 Ga
  - -40°C ≤ Ta ≤ 60°C
  - Cert. No.: ITS02ATEX2006X
- **International IECEx**
  - Code: Ex ia op is IIC T4 Ga
  - -40°C ≤ Ta ≤ 60°C
  - Cert. No.: IECEx ITS 17.0052X

**Installation**
- May be powered from any certified Zener barrier or galvanic isolator whose output parameters do not exceed:
  - **Alone**
    - Uo: 28Vdc
    - Io: 110mA
    - Po: 0.8W
  - **With BR385**
    - Uo: 28Vdc
    - Io: 93mA
    - Po: 0.66W
- **Location**: Zone 0, 1 or 2
- **Accept input terminals**: 5 & 6.
- **USA FM**
  - Standard: 3610 Entity
  - Code: CL1, Div. 1, Gp. A, B, C and D
  - CL 1, Zone 0, AEx ia IIC T4
  - Temperature code: T4 at 60°C
  - File No: 3014996
  - **Nonincendive**
    - Standard: 3611 Nonincendive.
    - Code: CL1, Div. 2, Gp. A, B, C and D
    - CL 1, Zone 2, IIC T4
    - Temperature code: T4 at 60°C
    - File No: 3014996

**Environmental**
- **Operating temp**: -20 to 60°C (certified for use at -40°C)
- **Storage temp**: -40 to 85°C
- **Humidity**: To 95% @ 40°C
- **Enclosure**: IP66

**Mechanical**
- **Terminals**: Removable with screw clamp for 0.5 to 1.5mm² cable.
- **Weight**: 0.4kg

**Accessories**
- **Tag strip**: Thermally printed tag strip secured by screws.
- **Combining kit**: Gasket and conduit fitting for mounting BA386 beacon onto bottom of BR385 sounder.

**TERMINAL CONNECTIONS**

**COMBINING KIT**

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>Colour</th>
<th>Please specify</th>
<th>BA386R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Model number</td>
<td>BA386A</td>
</tr>
<tr>
<td>Amber</td>
<td></td>
<td>BA386G</td>
</tr>
<tr>
<td>Green</td>
<td></td>
<td>BA386B</td>
</tr>
<tr>
<td>Blue</td>
<td></td>
<td>BA386W</td>
</tr>
<tr>
<td>White</td>
<td></td>
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</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>Tag strip</th>
<th>Please specify if required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combining kit for joining beacon &amp; BR385 sounder. *</td>
<td>Legend Combining kit</td>
</tr>
</tbody>
</table>

* Supplied free of charge on request when sounder and beacon are purchased at the same time