Hazardous area

Optional BEKA intrinsically safe sounder

Optional alarm accept push-button

Safe area

Zener barrier or galvanic isolator

24V

BA386
LED flashing beacon

Intrinsically safe for use in all hazardous gas areas

◆ **Intrinsically safe ATEX, IECEx & FM certification.**

◆ **Red, amber, green blue & white models.**

◆ **Two double flashes per second.**

◆ **Will power BEKA intrinsically safe sounder.**

◆ **IP66 enclosure**

◆ **Incorporates alarm accept function to silence sounder.**

◆ **3 year guarantee**

www.beka.co.uk/ba386

Shown with optional sounder

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 two opposite 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.

IEC · IECEx

Ex · FM APPROVED

BEKA associates

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.
Alone — 25mA typical
With BR385 sounder — 40mA typical

Output
Brightness
Equivalent to 0.5 Joule xenon beacon
Frequency
Alone — 2Hz (2 double flashes per second)
With BR385 sounder
on — 1Hz (1 double flash per second)
silenced — 2Hz (2 double flashes per second)
(alarm accepted)

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	With BR385
Uo	28Vdc	28Vdc
Io	110mA	93mA
Po	0.8W	0.66W

Location
Zone 0, 1 or 2

Accept input terminals 5 & 6.
May be connected to any mechanically activated switch having IP20 protection which is capable of withstanding an ac test voltage of 500Vrms to earth for one minute.

USA FM
Does not include use with BR385 sounder
Standard — 3610 Entity
Code
CL.1, 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

Standard — 3611 Nonincendive.
Code
CL.1, 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 1.5mm^2 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.

DIMENSIONS (mm)
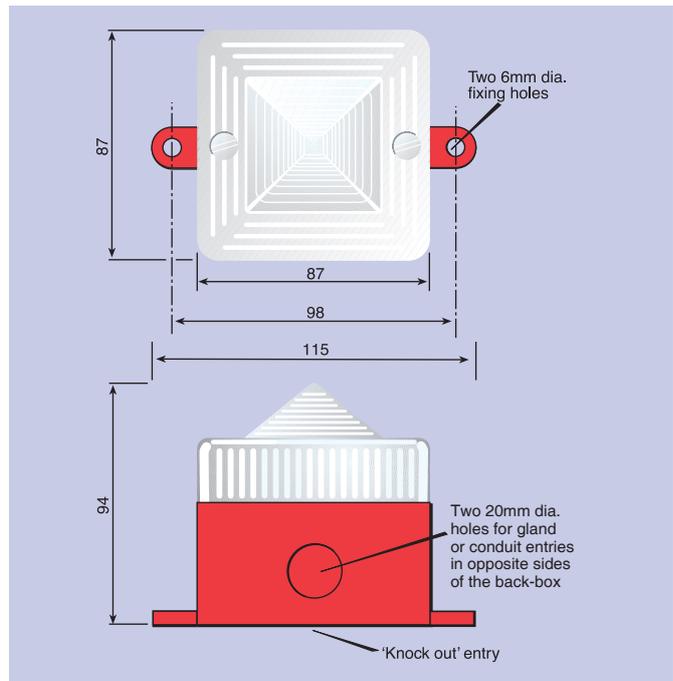
Two 6mm dia. fixing holes
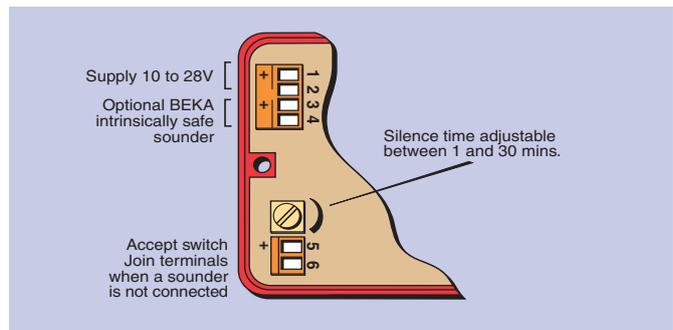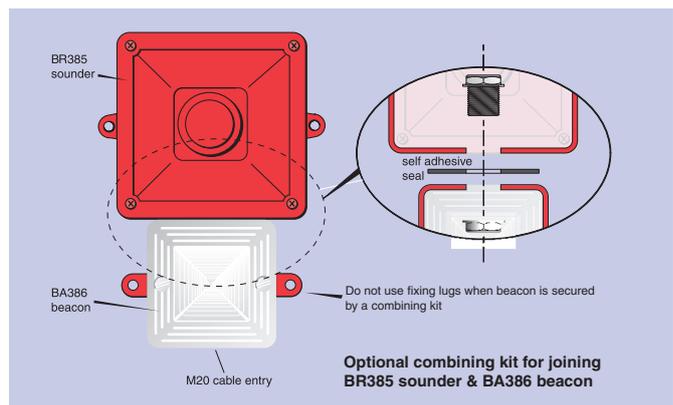
87
87
98
115
94

Two 20mm dia. holes for gland or conduit entries in opposite sides of the back-box

'Knock out' entry

TERMINAL CONNECTIONS

Supply 10 to 28V
Optional BEKA intrinsically safe sounder
Silence time adjustable between 1 and 30 mins.
Accept switch
Join terminals when a sounder is not connected

COMBINING KIT

BR385 sounder
self adhesive seal
BA386 beacon
M20 cable entry
Do not use fixing lugs when beacon is secured by a combining kit

Optional combining kit for joining BR385 sounder & BA386 beacon

HOW TO ORDER

	Please specify
Colour	Model number
Red	BA386R
Amber	BA386A
Green	BA386G
Blue	BA386B
White	BA386W

Accessories	**Please specify if required**
Tag strip	Legend
Combining kit for joining beacon & BR385 sounder. *	Combining kit

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