

**BA390 panel lamps** provide reliable cost effective visual status indication in all hazardous gas and dust areas. Each BA390 lamp produces a bright, uniform output with a typical life greater than ten years. All models contain a 20mA current regulator therefore they consume a constant current and hence have a constant brilliance independent of supply voltage. Protection against excess voltage and reverse connection is included in each lamp.

**International intrinsic safety** certification allows BA390 LED panel lamps to be installed in all gas and dust hazardous areas. Two lamps may be powered from a single IIC intrinsically safe galvanic isolator. FM gas approval allows BA390 lamps to be installed in the USA.

**Five well defined lamp colours** - red, amber, green, blue and white allow lamps to be selected to comply with the indicator light colours recommended by IEC 73. When not powered, the front of panel coloured diffuser enables the lamp colour to be easily identified.

**IP66 sealing** of the lamp front and the joint between the lamp and the panel allow the BA390 to be installed in areas that will be hosed, washed or splashed. When rear of panel environmental protection is also required, the optional BA599 rear sealing kit provides IP66

protection and includes a cable gland to seal and support the supply cable.

**Mounting** is via a single industry standard 22.5mm diameter hole. The lamp housing, fixing nut and terminals have a maximum diameter of 30mm which permits a very high packing density on the panel.

**To aid identification** from the rear of the panel, the model number and suffix which identifies the colour are marked on the lamp body close to the terminals

**Reliability is ensured** by an ISO9001 approved quality control system supported by a three year guarantee.

**For low current applications** complementary BA390S panel lamps, which have the same features and certifications as BA390 lamps, but without a current regulator, can be used with currents as low as 4mA. These lamps are ideal for use with low current sources such as fieldbus multiple output modules. See the BA390S datasheet for details.

**For safe area installations**, please refer to the BA590 datasheet which describes a range of non certified 24V dc powered panel lamps.

**Application Guide AG390** includes additional information about how to use both BA390 and BA390S lamps.

# BA390

## LED Panel Lamp

*Intrinsically safe for use in all gas and dust hazardous areas*

- ◆ Intrinsically safe
- ◆ Red, amber, green, blue & white models.
- ◆ 20mA constant current & brilliance.
- ◆ IP66 front
- ◆ IIC isolator will power two lamps.
- ◆ 3 year guarantee

[www.beka.co.uk/ba390](http://www.beka.co.uk/ba390)



CCOE  
PESO

# BEKA

## associates

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## SPECIFICATION

### Power supply

Voltage	
Operating	14 to 30V dc
Reverse	60V max
Current	18 to 22mA

### Output

Lamp colour	Typical illuminance at 150mm
Red	160 lux
Amber	230 lux
Green	230 lux
Blue	530 lux
White	270 lux

### Intrinsic Safety

#### International IECEx

Code	gas	Ex ia IIC T4 Ga
	dust	Ex ia IIIC T135°C Da
		-20°C ≤ Ta ≤ +60°C

#### Input safety parameters

Ui	30V
Ii	159mA
Pi gas	1.2W
Pi dust	0.683W

#### Certification number

[IECEX ITS 08.0030X](#)

### Europe ATEX & UKEX

Code	gas	Group II Category 1G
		Ex ia IIC T4 Ga
	dust	Group II Category 1D
		Ex ia IIIC T135°C Da
		-20°C ≤ Ta ≤ +60°C

#### Input safety parameters

Ui	30V
Ii	159mA
Pi gas	1.2W
Pi dust	0.683W

#### Certificate numbers

[ITS13ATEX27822X](#) &  
[ITS21UKEX0093X](#)

### USA FM *only gas certification*

Standard	3610 Entity intrinsic safety
Code	CL I: Div 1: GP A, B, C & D: T4 @ 60°C
	AEx ia IIC T4 Ta = 60°C
File	<a href="#">3022662</a>

Standard	3611 Nonincendive
Code	CL I: Div 2: GP A, B, C & D: T4 @ 60°C
File	<a href="#">3022662</a>

### India CCOE/PESO

As ATEX - [see certificate](#)

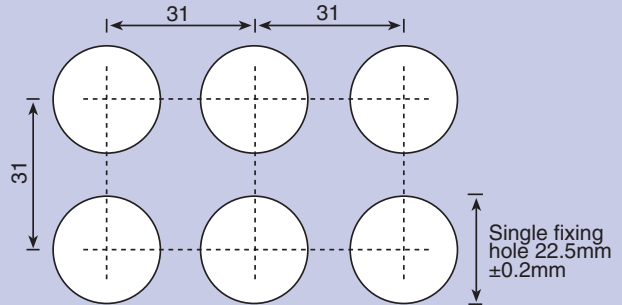
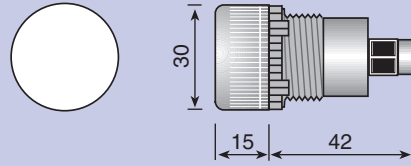
### Environmental

Operating temperature	-20 to 60°C
Storage temperature	-40 to 85°C
Relative humidity	5 to 95% non condensing
Operating life	100,000 hours typical
Enclosure Front	IP66
Rear	IP20 - see accessories for BA599 optional IP66 rear sealing kit.
EMC	Complies with EU & UK EMC Directives

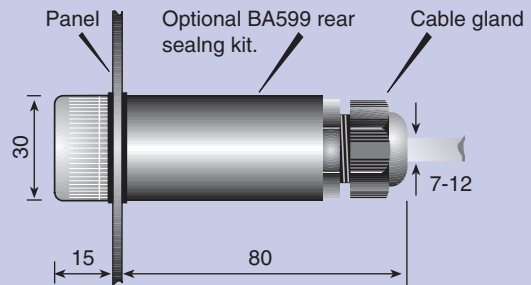
### Mechanical

Terminals	Screw clamp for 1.5mm <sup>2</sup>
Diffuser material	Polycarbonate
Body material	Nylon 6
Weight	18g

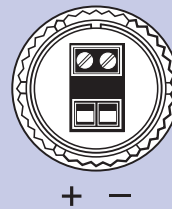
## DIMENSIONS (mm)



Fixing centres for maximum packing density.  
Special tool may be required to tighten fixing nuts  
when minimum spacing is used.



## TERMINAL CONNECTIONS



### Accessories

Rear sealing kit

BA599 provides IP66 protection  
for terminals and rear of the lamp.  
Supplied with gland for 7 to  
12mm diameter cable.

## HOW TO ORDER

### Lamp colour

Red  
Amber  
Green  
Blue  
White

### Please specify

BA390R  
BA390A  
BA390G  
BA390B  
BA390W

### Accessories

Rear sealing kit

### Please specify if required

BA599