

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



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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

 li
 159mA

 Pi gas
 1.2W

 Pi dust
 0.683W

Certification number <u>IECEx ITS 08.0030X</u>

**Europe ATEX & UK UKCA** 

Code gas Group II Category 1G Ex ia IIC T4 Ga

dust Group II Category 1D Ex ia IIIC T135°C Da  $-20^{\circ}\text{C} \leq \text{Ta} \leq +60^{\circ}\text{C}$ 

Input safety parameters

 Ui
 30V

 li
 159mA

 Pi gas
 1.2W

 Pi dust
 0.683W

Certificate numbers <u>ITS13ATEX27822X</u> &

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 <u>3022662</u>

Standard 3611 Nonincendive

Code CL I: Div 2: GP A, B, C & D:

T4 @ 60°C 3022662

India CCOE/PESO As ATEX - see certificate

Environmental

File

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.
Complies with EU & UK EMC

Directives

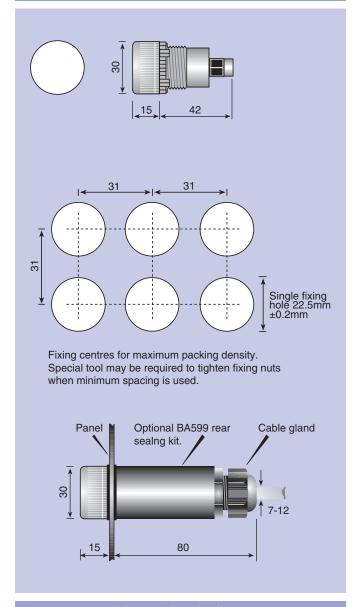
Mechanical

**EMC** 

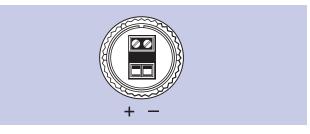
Terminals Screw clamp for 1.5mm<sup>2</sup>

Diffuser material Polycarbonate
Body material Nylon 6
Weight 18g

## **DIMENSIONS (mm)**



## **TERMINAL CONNECTIONS**



### Accessories

Dust certification Rear sealing kit IECEx and ATEX dust certification 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
 Please specify

 Red
 BA390R

 Amber
 BA390A

 Green
 BA390G

 Blue
 BA390B

 White
 BA390W

Accessories Please specify if required
Rear sealing kit BA599