Now Dust Certified

Hazardous area

Safe area

Zener barrier or galvanic isolator

Supply

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

IECEx   FM APPROVED

Ex   UK CA

CCOE   PESO

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.

BEKA
associates

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 & 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°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	3022662

Standard	3611 Nonincendive
Code	CL I: Div 2: GP A, B, C & D:
	T4 @ 60°C
File	3022662

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

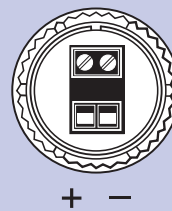| Terminals	Screw clamp for 1.5mm²
Diffuser material	Polycarbonate
Body material	Nylon 6
Weight	18g

DIMENSIONS (mm)
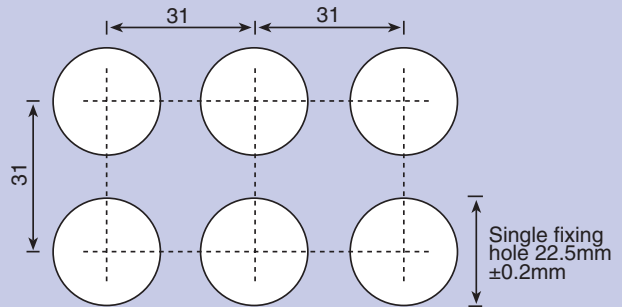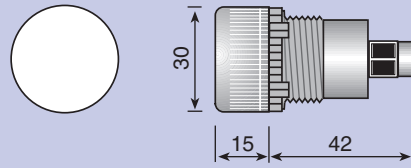
Fixing centres for maximum packing density.
Special tool may be required to tighten fixing nuts when minimum spacing is used.
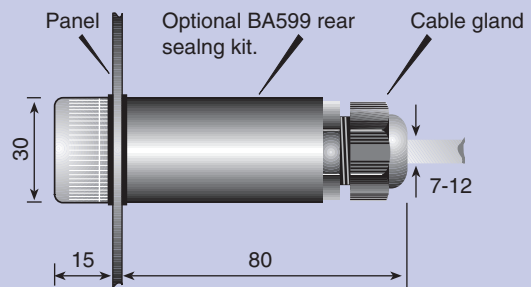
TERMINAL CONNECTIONS

Accessories

Dust certifcation	IECEx and ATEX dust certification
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	Please specify
Red	BA390R
Amber	BA390A
Green	BA390G
Blue	BA390B
White	BA390W

Accessories	Please specify if required
Rear sealing kit	BA599