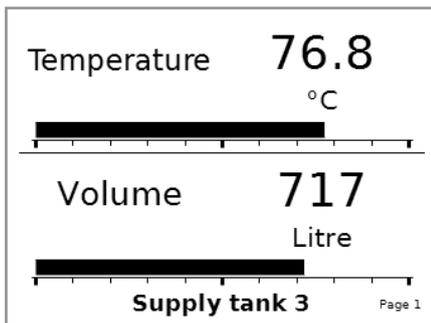
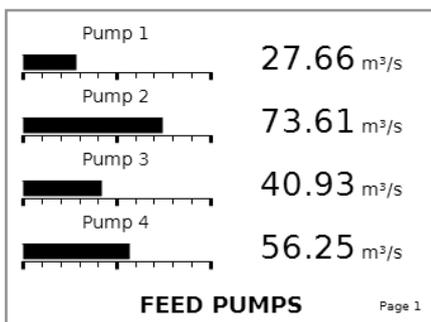


The **BA329** indicator displays up to eight 4/20mA inputs with engineering units and tag identifications on a 7 inch backlit display which is visible in all lighting conditions. No programming is required. The BA329 is easily configured and calibrated via the front panel touch buttons using a simple intuitive menu, which will be familiar to anyone who has used a BEKA loop powered indicator. If a Configuration Table is completed when the BA329 indicator is ordered, the indicator can be supplied configured and calibrated ready for installation, for no additional charge.

**Nine different display formats** allow one, two, four or eight variables to be shown together on a screen.



Each variable can be individually scaled and displayed with its units of measurement and tag identification.



**International intrinsic safety certification** allows the BA329 indicator to be installed in Zones 0, 1, 2, 20, 21 or 22 throughout the world. Each of the eight 4/20mA inputs is galvanically isolated, and complies with the requirements for simple apparatus. This, combined with the low voltage drop, allows each input to be connected in series with most intrinsically safe 4/20mA loops with minimal documentation.

**Both BA329 models are powered** from a BEKA Power Isolator located in a safe area, or in Zone 2 with IP54 protection. The BA212 Power Isolator should be used for applications in IIB or IIA gases, or in dust atmospheres. It is also suitable for IIC gas applications when the BA329 indicator and the isolator are close together. Where greater separation in a IIC gas application is required, the BA243 Power Isolator and BA3901 Power Combiner should be used.

**For applications in a Ex e or Ex t enclosure** the BA329-PC front panel has certified Ex e and Ex t compliant impact and ingress protection. When correctly installed in an Ex e or Ex t apparatus certified enclosure, the BA329-PC does not invalidate the enclosure's certification.

**The stainless steel front panel** is completely flat and easy to clean. The front of both models have certified IP66 protection for the indicator and the joint between the indicator and the panel in which it is mounted. Both models are suitable for installation in areas that are regularly washed or hosed down. The BA329-GL features a toughened glass display window, and the BA329-PC has an impact resistant polycarbonate window with a hard, scratch resistant outer surface.

# BA329-GL BA329-PC

## 8 input 4/20mA indicator

*Intrinsically safe for use in  
Zone 0, 1, 2, 20, 21 or 22*

- ◆ No programming required.
- ◆ Simple calibration via front panel touch buttons.
- ◆ Ex ia international intrinsic safety certification.
- ◆ 1 to 8 variables per screen including bargraphs, units of measurement and tags.
- ◆ 7 inch backlit screen visible in all lighting conditions.
- ◆ IP66 stainless steel front panel:
  - BA329-GL Toughened glass window.
  - BA329-PC Impact resistant window for installation in an Ex e or Ex t enclosure.
- ◆ 3 year guarantee

[www.beka.co.uk/ba329](http://www.beka.co.uk/ba329)



# BEKA

## associates

BEKA associates Ltd. Old Charlton Rd.  
Hitchin, Hertfordshire, SG5 2DA, U.K.  
Tel. (0) 1462 438301 e-mail [sales@beka.co.uk](mailto:sales@beka.co.uk)  
website: [www.beka.co.uk](http://www.beka.co.uk)

## SPECIFICATION

### Power supply

#### BA329

|         |                                               |
|---------|-----------------------------------------------|
| Voltage | 7.5V min via a BA212 or BA243 Power Isolator. |
| Current | 280mA at 7.5V                                 |

### Display

|               |                     |
|---------------|---------------------|
| Type          | FSTN Liquid crystal |
| Size diagonal | 178mm (7 inch)      |
| Resolution    | 320 x 240 pixels    |
| Backlight     | White               |

### Touch buttons

|      |                                                                                    |
|------|------------------------------------------------------------------------------------|
| Type | Projected capacitance<br>8 each with a red, amber and green backlight annunciator. |
|------|------------------------------------------------------------------------------------|

### Inputs

For each of the eight galvanically isolated input channels

|              |                                                   |
|--------------|---------------------------------------------------|
| Current      | 4/20mA                                            |
| Voltage drop | Less than 1.2V at 20°C<br>Less than 1.3V at -40°C |
| Overrange    | ±200mA or ±30V will not cause damage.             |
| Isolation    | 500V to other inputs and the supply               |

### Accuracy

|                        |                                                                    |
|------------------------|--------------------------------------------------------------------|
| At 20°C                | ±0.02%                                                             |
| Temperature effect on: |                                                                    |
| Zero                   | Less than 25ppm                                                    |
| Span                   | Less than 50ppm                                                    |
| Series mode rejection  | Less than 0.05% error for<br>1mA pk to pk 50 or 60Hz interference. |

### Safety certification

#### International IECEx

|      |                                                              |
|------|--------------------------------------------------------------|
| Code | Ex ia IIC T4 Ga<br>Ex ia IIIC T135°C Da<br>-40°C ≤ Ta ≤ 65°C |
|------|--------------------------------------------------------------|

Safety parameters for each 4/20mA input channel

|        |                                                         |
|--------|---------------------------------------------------------|
| Input  |                                                         |
| Ui     | 30V dc                                                  |
| Ii     | 200mA                                                   |
| Pi     | 0.84W                                                   |
| Output | Complies with the requirements for<br>simple apparatus. |

|            |                                                                |
|------------|----------------------------------------------------------------|
| Cert. Nos. | IECEX CML 20.0150X<br>IECEX CML 20.0152X<br>IECEX CML 21.0101X |
|------------|----------------------------------------------------------------|

#### Europe ATEX and UK UKCA

|      |                                                                          |
|------|--------------------------------------------------------------------------|
| Code | II 1G Ex ia IIC T4 Ga<br>II 1D Ex ia IIIC T135°C Da<br>-40°C ≤ Ta ≤ 65°C |
|------|--------------------------------------------------------------------------|

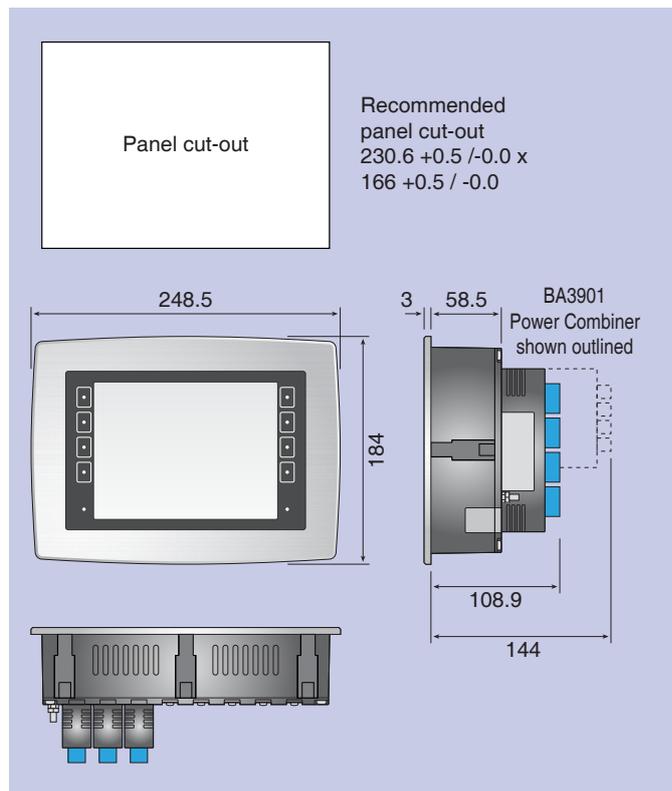
Safety parameters for each input channel as IECEx

|            |                                                                                                            |
|------------|------------------------------------------------------------------------------------------------------------|
| Cert. Nos. | CML 20ATEX2252X<br>CML 20ATEX2254X<br>CML 21ATEX2830X<br>CML 21UKEX2003X<br>21UKEX2005X<br>CML 21UKEX2831X |
|------------|------------------------------------------------------------------------------------------------------------|

### Environmental

|                |                                            |
|----------------|--------------------------------------------|
| Operating temp | -40 to +65°C display -20 to +65°C          |
| Storage temp   | -40 to +85°C                               |
| Humidity       | To 95% at 40°C non-condensing              |
| EMC            | Complies with UK & European EMC Directive. |

## DIMENSIONS (mm)



### Mechanical

#### Enclosure

|                 |                                                                                                      |
|-----------------|------------------------------------------------------------------------------------------------------|
| Front bezel     | 316 stainless steel                                                                                  |
| BA329-GL window | Toughened glass                                                                                      |
| BA329-PC window | Polycarbonate with scratch resistant coating. Certified for installation in Ex e and Ex t enclosures |

#### Sides & rear

|                    |                                  |
|--------------------|----------------------------------|
| Ingress protection | Noryl flame class rating UL94V-1 |
| Front              | IP66                             |
| Rear               | IP20                             |
| Weight             | 1.8kg                            |

## HOW TO ORDER

|                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For intrinsic safety applications.                              | <b>Please specify</b><br>BA329-GL indicator<br>Plus BA212 Power Isolator for IIB, IIA gas or dust applications.                                                                                                                                                                                                                                                                                      |
|                                                                 | or<br>BA243 Power Isolator & BA3901 Power Combiner for IIC gas applications.                                                                                                                                                                                                                                                                                                                         |
| For intrinsic safety applications in an Ex e or Ex t enclosure. | BA329-PC indicator<br>Plus BA212 Power Isolator for IIB, IIA gas or dust applications.<br>or<br>BA243 Power Isolator & BA3901 Power Combiner for IIC gas applications.                                                                                                                                                                                                                               |
| Calibration                                                     | Both models can be supplied calibrated with units of measurement and tag information for no additional charge. If required, please complete the Configuration Table which will be supplied with your order acknowledgement. If calibration information is not specified the BA329 will be supplied with default calibration, but can easily be calibrated on-site via the front panel touch buttons. |