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.
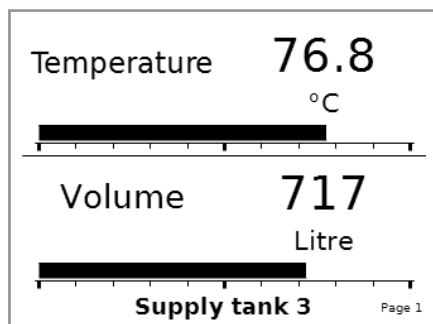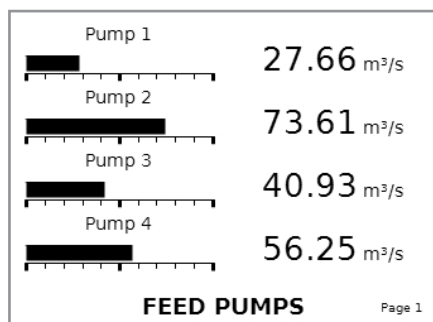
◆ **3 year guarantee**

 www.beka.co.uk/ba329

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.

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
                 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
                 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
                 1mA pk to pk 50 or 60Hz interference.

Safety certification
International IECEx
Code   Ex ia IIC T4 Ga
                 Ex ia IIIC T135°C Da
                 -40°C ≤ Ta ≤ 65°C

Safety parameters for each 4/20mA input channel
  Input
  U_i 30V dc
  I_i 200mA
  P_i 0.84W
  Output   Complies with the requirements for
                 simple apparatus.
Cert. Nos.   IECEx CML 20.0150X
                 IECEx CML 20.0152X
                 IECEx CML 21.0101X

Europe ATEX and UK UKCA
Code   II 1G Ex ia IIC T4 Ga
                 II 1D Ex ia IIIC T135°C Da
                 -40°C ≤ Ta ≤ 65°C
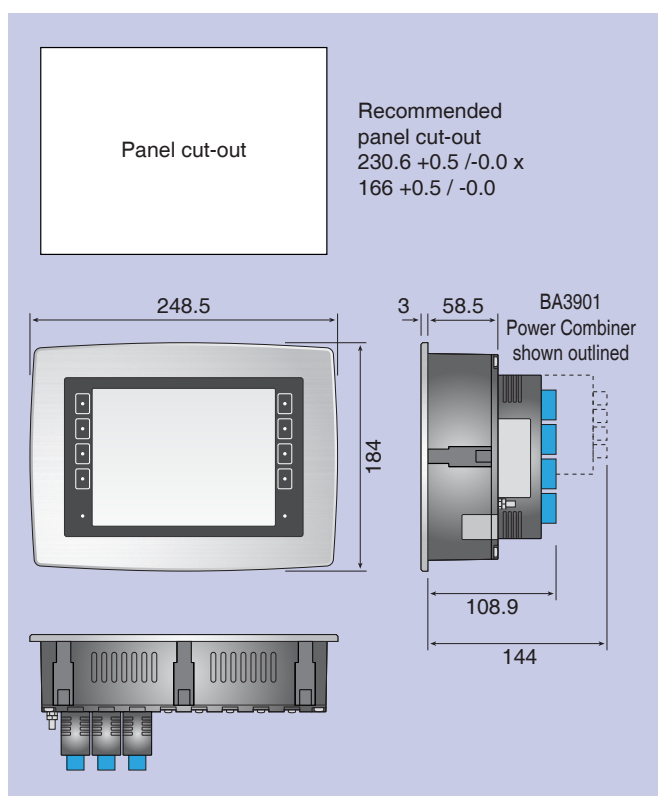Safety parameters for each input channel as IECEx
Cert. Nos.   CML 20ATEX2252X
                 CML 20ATEX2254X
                 CML 21ATEX2830X
                 CML 21UKEX2003X
                 21UKEX2005X
                 CML 21UKEX2831X

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)

Panel cut-out

Recommended
panel cut-out
230.6 +0.5 /-0.0 x
166 +0.5 / -0.0

248.5

184

3   58.5   BA3901
             Power Combiner
             shown outlined

108.9

144

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

HOW TO ORDER

                              Please specify
For intrinsic safety   BA329-GL indicator
applications.   Plus BA212 Power Isolator for IIB,
                                    IIA gas or dust applications.
                              or   BA243 Power Isolator & BA3901
                                    Power Combiner for IIC gas
                                    applications.

For intrinsic safety   BA329-PC indicator
applications in an Ex e   Plus BA212 Power Isolator for IIB,
or Ex t enclosure.   IIA gas or dust applications.
                              or   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.