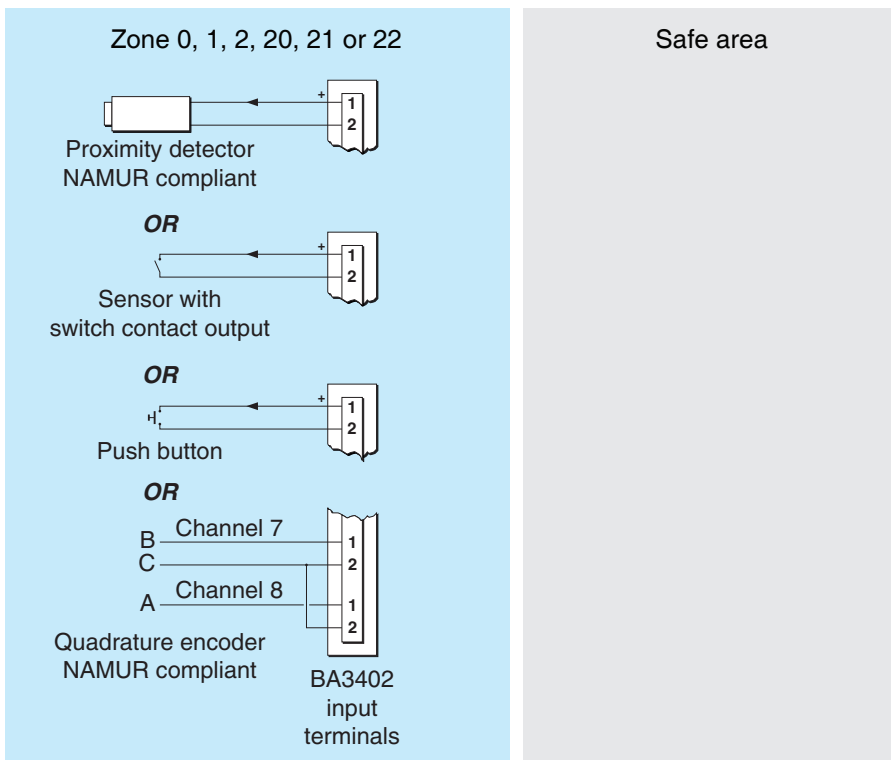


The BA3402 Pageant Digital Input Module has eight 2-wire NAMUR compliant proximity detector inputs, each certified as a separate intrinsically safe circuit. The module is also intended for use with isolated mechanical switches or isolated sensors with an open collector output located in a high noise environment. For most contact and open collector inputs the simpler lower cost plug-in BA3401 Pageant module should also be considered.

Separate apparatus certification for the module allows it to be safely plugged into any one of the seven slots on a Pageant BA3101 Operator Display without the need for additional certification or approval. If requirements change, a BA3402 module may be fitted on-site to an Operator Panel which has already been installed and commissioned.

Each input may be connected to and will power most NAMUR compliant intrinsically safe proximity detectors located in Zone 0, 1, 2, 20, 21 or 22. Intrinsically safe sensors with an isolated open collector output and switch contacts may also be connected. Although each input is a separate intrinsically safe circuit, inputs are not individually isolated and therefore the proximity detector, switch or sensor and associated wiring should have 500V isolation from other circuits and from earth.

A quadrature input from a plant position sensor with NAMUR compliant outputs or from a BEKA panel mounting BA490 rotary encoder can be decoded by combining channels 7 and 8. This enables plant positions to be input to the Pageant Operator Panel system, or variables such as plant set-points to be easily adjusted by an operator.



Alternative sensor inputs

BA3402

Pageant Digital Input Module

8 x Proximity Detector

Each intrinsically safe input may be connected to a 2-wire proximity detector in any gas or dust hazardous area

- ◆ Eight NAMUR 2-wire proximity detector inputs.
- ◆ Two inputs can decode a quadrature signal.
- ◆ Module plugs into a Pageant BA3101 Ex ia intrinsically safe Operator Display.
- ◆ Each Ex ia input is a separate intrinsically safe circuit.
- ◆ IECEx, ATEX & UKCA Ex ia certification
- ◆ 3 year guarantee

www.beka.co.uk/ba3402



BEKA

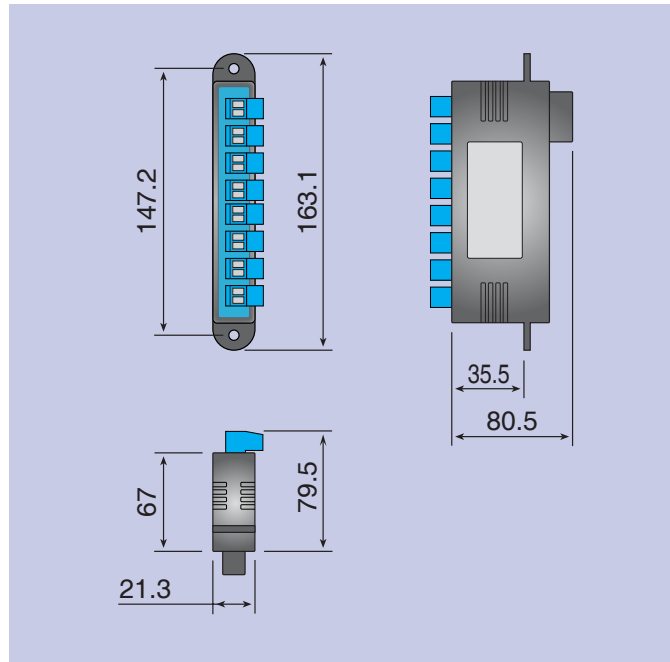
associates

BEKA associates Ltd. Old Charlton Rd.
Hitchin, Hertfordshire, SG5 2DA, U.K.
Tel. (01462) 438301 e-mail sales@beka.co.uk
website: www.beka.co.uk

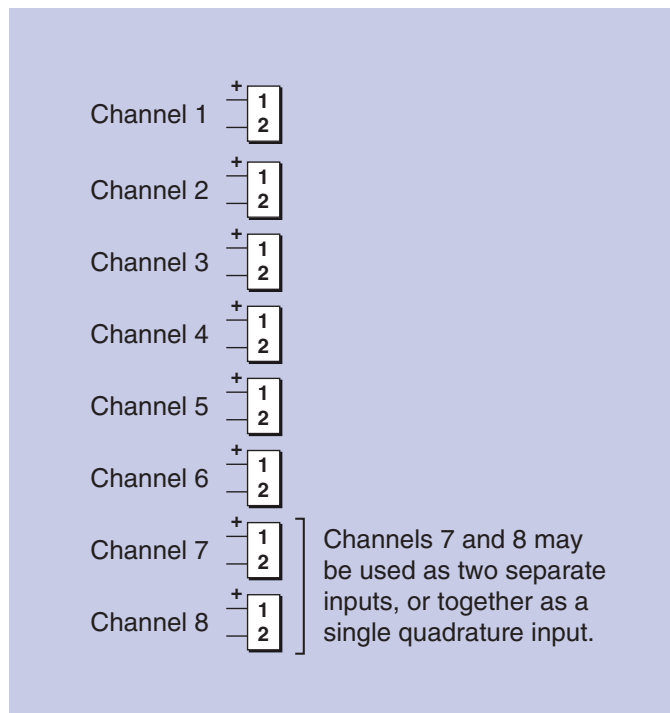
SPECIFICATION

Power supply	From Pageant Operator Panel via CPU module	
Module consumption	40% of available power	
Input	For each input channel	
Switching threshold	Lower	Upper
Proximity detector	1.2mA	2.1mA
Contact	2.6k Ω	5.5k Ω
Sensing voltage	8.2V	
Quadrature encoder	Combining input channels 7 and 8 provides one quadrature input.	
Frequency	Inputs polled 10 times per second Determined by BA3101 Operator Panel.	
Intrinsic safety		
International IECEx		
Code	Ex ia IIC T4 Ga Ex ia IIIC T195°C Da -40°C \leq Ta \leq +65°C	
Safety parameters for each input channel		
Ui	0	
Uo	8.8V	
Io	7.4mA	
Po	16mW	
Ci	1.1nF	
Li	4 μ H	
Co	5.5 μ F	
Lo	556mH	
] For gas Group IIC	
Cert. No.	IECEX 21.0004X	
Europe ATEX and UK UKCA		
Code	Group II Category 1GD Ex ia IIC T4 Ga Ex ia IIIC T195°C Da -40°C \leq Ta \leq +65°C	
Safety parameters for each input as IECEx		
Cert. Nos.	CML 21ATEX2110X CML 21UKEX2111X	
Environmental		
Operating temp	-40 to +65°C	
Storage temp	-40 to +85°C	
Enclosure	IP20	
Material	Noryl UL94V-1 flame class rating	
Humidity	To 95% at 40°C non- condensing	
EMC	Complies with UK & European Directives.	
Mechanical		
Terminals	Screw clamp for 0.5 to 1.5mm ² cable with blue removable terminal block for each channel.	
Weight	0.2kg	

DIMENSIONS (mm)



TERMINAL CONNECTIONS



Reliability is ensured by component conformal coating, protection from incorrect connection and radio frequency interference. The module has been subjected to extensive vibration and thermal testing and is supported by a three year guarantee.

HOW TO ORDER

Please specify

Model number BA3402