

The Pageant BA3601 module has four isolated solid state contact outputs, each certified as a separate intrinsically safe circuit. The module is intended for switching intrinsically safe loads located in any hazardous area, or low power safe area loads via a Zener barrier or a galvanic isolator.

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 BA3601 module may be fitted on-site to an Operator Panel which has already been installed and commissioned.

This output module enables up to four hazardous area loads such as a solenoid valve, sounder, beacon or panel lamp to be controlled by a Pageant Operator Panel PLC output.

Each contact output is galvanically isolated from the other three outputs and from the Pageant operator panel's power supply allowing certification as a separate Ex ia circuit. The output safety parameters of each contact output are below those specified for simple apparatus and may be ignored when assessing the safety of most loops. This, together with the switch's low contact resistance and voltage drop, enables the switch to control almost any intrinsically safe load in any gas or dust hazardous Zone.

Hazardous area loads, such as sounders and beacons, should be powered from a compatible galvanic isolator or Zener barrier. Terminals 2 and 4 of each BA3601 input are internally linked for joining the return wire as shown below.

Safe area Zone 0, 1, 2, 20, 21 or 22 Hazardous area instrument requiring a Galvanic contact input such as isolator One output resetting a counter power of BA3601 supply plug-in module Galvanic isolator Second loop can power one or two sounders BR385 Sounder, panel lamp, solenoid One output valve or similar of BA3601 hazardous area device plug-in module

Typical applications

BA3601Pageant Digital Output Module 4 x Contact

Each intrinsically safe output can switch a load in any gas or dust hazardous area

- Four isolated solid state contact outputs.
- Module plugs into a Pageant BA3101 Ex ia intrinsically safe Operator Display.
- Each Ex ia output is a separate intrinsically safe circuit.
- ◆ IECEx, ATEX & UKEX Ex ia certification.
- ◆ 3 year guarantee

www.beka.co.uk/ba3601



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

4% of available power

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Output

Type Isolated unipolar solid state switch

Ron $5\Omega + 0.7V \text{ max}$

Roff $1M\Omega$ min

Speed Each output polled 10 times per

second by the BA3101 Operator Panel.

Intrinsic safety

International IECEx

Code Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da -40°C \leq Ta \leq +65°C

Safety parameters for each output channel

Ui 30V Ii 200mA Pi 0.66W

Uo 1.38V *
Io 0*
Po 0*

Ci 0 Li 4µH

Cert. No. <u>IECEx 21.0124X</u>

* Output parameters are below the *simple apparatus* threshold and may be ignored for some applications.

Europe ATEX and UKEX

Code Group II Category 1GD

Ex ia IIC T4 Ga Ex ia IIIC T135°C Da -40°C \leq Ta \leq +65°C

Safety parameters for each input as IECEx

Cert. Nos. CML 21ATEX21097X CML 21UKEX21098X

Environmental

Operating temp $-40 \text{ to } +65^{\circ}\text{C}$ Storage temp $-40 \text{ to } +85^{\circ}\text{C}$

Enclosure IP20

Material Noryl UL94V-1 flame class rating
Humidity To 95% at 40°C non- condensing
EMC Complies with UK & European

Directives

Mechanical

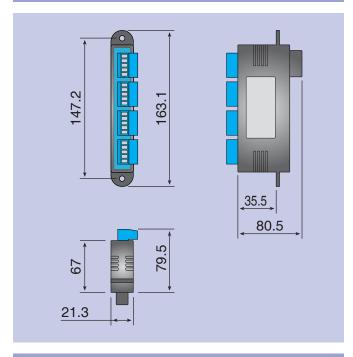
Terminals Screw clamp for 0.5 to 1.5mm² cable

with blue removable terminal block for

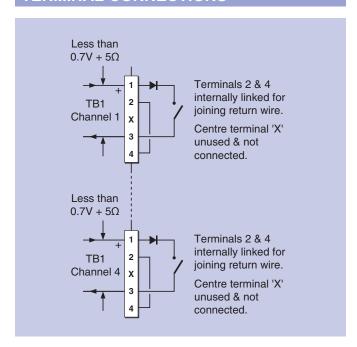
each channel.

Weight 0.15kg

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 BA3601