



The **BA3202 Pageant CPU module** contains the BA3101 Operator Panel's central processing unit (CPU) and associated memory. CODESYS® runtime software is resident including an IEC61131-3 compliant PLC and visualization engine enabling screens designed in the CODESYS integrated development environment (IDE) to be displayed on the BA3101 Operator Panel.

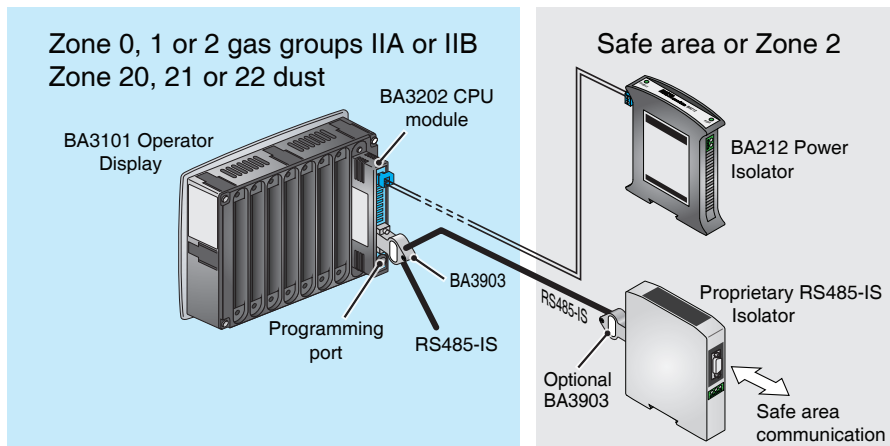
The **isolated RS485-IS port** may be directly connected to other equipment in the hazardous area, or to safe area equipment via a proprietary RS485-IS isolator. Communication with other equipment uses Modbus protocol and allows the Pageant BA3101 Operator Panel to function as a master or as a slave.

If **external communication** is not required the alternative BA3201 CPU module should be selected.

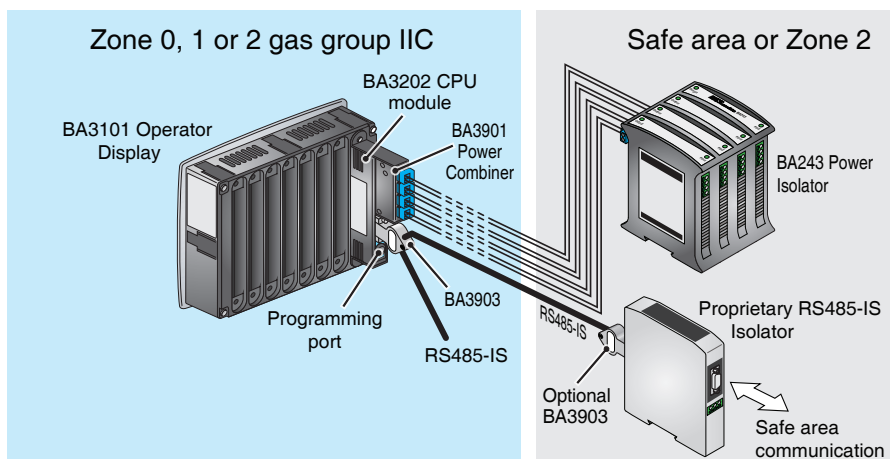
The **programming port** at the rear of the module enables CODESYS application code to be downloaded to the CPU module in a safe area. Connection to a PC USB is made via a BEKA BA3902 Pageant Programming Cable. Alternatively, the SD card may be removed from the CPU module and new application code entered in the safe area.

The **CPU module also distributes** power to the Operator Panel and its plug-in input and output modules. Every BA3101 Operator Panel must therefore be fitted with a plug-in CPU module.

The **BA3101 Operator Panel** is powered via a BA3202 CPU module from a BEKA power isolator located in a safe area or in Zone 2. For installations in gas groups IIA and IIB and in dust atmospheres, a BA212 isolator is required. For most applications in group IIC gases a four channel BA243 Power Isolator should be used. The four channels are remotely combined at the CPU module by a BA3901 Power Combiner which fits onto the rear of the CPU module allowing relatively long cables to be used.



For applications in gas groups IIA and IIB and in dust atmospheres



For applications in gas group IIC

BA3202

Pageant CPU module with Modbus RTU communication

Contains central processing unit, memory and power distribution

- ◆ **CODESYS® runtime software.**
- ◆ **IEC61131-3 compliant PLC.**
- ◆ **Isolated RS485-IS communication port.**
- ◆ **Modbus RTU**
- ◆ **Module plugs into a Pageant BA3101 Ex ia intrinsically safe Operator Panel.**
- ◆ **IECEx, ATEX & UKEX Ex ia certification**
- ◆ **3 year guarantee**

www.beka.co.uk/ba3202



BEKA

associates

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SPECIFICATION

Power supply

Voltage 7.5 to 12V from a BEKA BA212 Power Isolator or from a BA243 Power Isolator with a BA3901 Power Combiner.

Current Depends upon mix of plug-in modules fitted to the BA3101 Operator Panel.

Processor Single Core ARM Cortex - A7 528 MHz.

Communication

Port Isolated RS485-IS
Protocol Modbus RTU master or slave

Intrinsic safety

International IECEx

Code Ex ia IIC T4 Ga
Ex ia IIIC T120°C Da
-40°C ≤ Ta ≤ +65°C

Safety parameters

Power Supply	Terminals 1 & 2
Ui	12.4V dc
Ii	2.68A
Pi	5.44W
Li	0
Ci	0

Communication port SK100

Complies with requirements specified by Profibus RS485-IS User and Installation Guide 1.1

Ui	4.2V
Uo	3.8V
Io	132mA
Po	126mW
Li	0
Ci	0

Cert. No. [IECEX CML 20.0152X](#)

Europe ATEX and UKEX

Code Group II Category 1GD
Ex ia IIC T4 Ga
Ex ia IIIC T120°C Da
-40°C ≤ Ta ≤ +65°C

Safety parameters as IECEx certificate

Cert. Nos. [CML 20ATEX2254X](#)
[CML 21UKEX2005X](#)

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 EMC Directive.

Mechanical

Terminals
Power Blue with screw clamp for 0.5 to 1.5mm² cable.
RS485-IS 9 way 'D' female connector
Weight 0.2kg

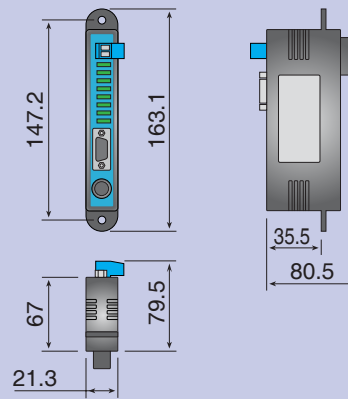
Reliability is ensured by component conformal coating, protection from incorrect connection and radio frequency interference. The module has been subjected to extensive vibration and thermal testing and is supported by a three year guarantee.

Accessories

BA3901 Power Combiner. For applications in a group IIC gas, remotely combines the output of a four channel BA243 Power Isolator allowing long interconnecting cables to be used.

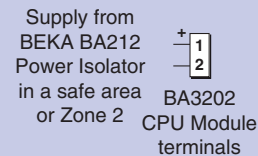
BA3902 USB Programming Cable. Connects CPU module to a PC USB port allowing CODESYS application codes to be downloaded.
Only usable in a safe area

DIMENSIONS (mm)

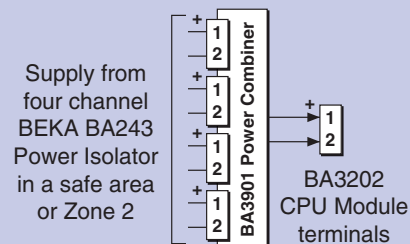


TERMINAL CONNECTIONS

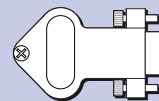
For applications in IIA or IIB gases or in dust atmospheres



For applications in IIC gases BA3901 Power Combiner fitted to a BA3202 CPU Module

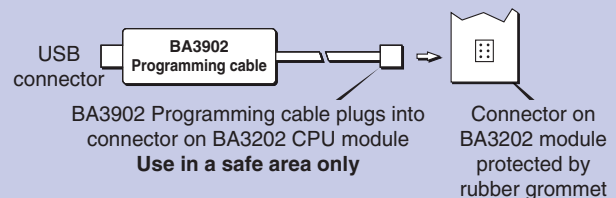


BA3903 for connecting a bus cable to a RS485-IS port



The BA3903 connector has duplicate screw terminals enabling a twisted pair bus cable to be easily connected to and looped through the BA3202.

For downloading CODESYS application code in a safe area



HOW TO ORDER

	Please specify
Model number	BA3202
Accessories	Please specify if required
Power Combiner	BA3901
for applications in a IIC gas group	
Programming cable	BA3902
RS485-IS Sub D9 connector	BA3903
For connecting to RS485-IS bus	