



The BradControl™ IP67 I/O modules provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments.

PROFIBUS Discrete I/O Modules

IP67 Classic 60mm - M12 I/O & M23 Bus/Power Connections

Features

- Classic design allows space savings for direct machine mount applications
- I/O connections made using standard M12 threaded or BradConnectivity™ Ultra-Lock™ connection system providing secure and reliable connections
- Standard hole pattern allows for interchangeability with popular I/O modules
- Visible diagnostics through status LEDs
- Module and channel diagnostics supported through PROFIBUS
- Supports PROFIBUS Slave DP-V0 in accordance with EN 50170

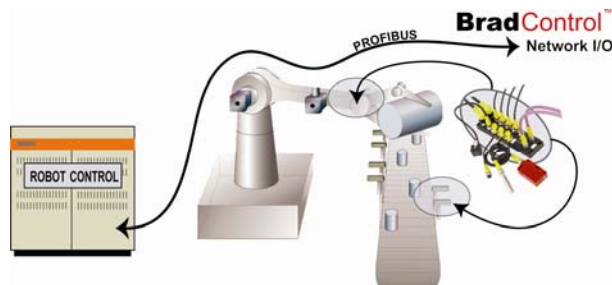
Typical Applications

- Robotic applications
- Machine tool industry
- Material handling systems
- Filling & packaging
- Steel industry



I/O Systems for Harsh Environments

BradControl™ Classic 60mm I/O modules for PROFIBUS provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments.



Contained in a 60mm wide housing rated for IP67 environments, BradControl I/O modules can be machine mounted and are able to withstand areas where liquids, dust or vibration may be present. This makes them ideally suited for many applications including robotics, material handling equipment and automated assembly machinery.

To facilitate input and output device wiring BradControl Classic 60mm I/O modules accept standard threaded M12 connectors or BradConnectivity™ Ultra-Lock™ connection system, a “push-to-lock” method that provides a fast, simple and secure connection between the I/O module and I/O devices. With the BradConnectivity Ultra-Lock connection system, performance and reliability are designed right into the connector! The unique radial seal design provides a reliable, operator independent seal each and every time. There’s no chance for under – or over-tightening. When you hear and feel the connector click, you know it’s locked in – there’s no guesswork.

Built-in diagnostic tools include the highly visible LEDs which provide maintenance personnel with the ability to easily determine I/O, module and network status.

PROFIBUS specific features include support of module and channel diagnostics through PROFIBUS and PROFIBUS Slave DP-V0 in accordance with EN 50170.





LED Indicators

PROFIBUS Network Status (NET):

Green – running
Red – device not configured

I/O Module Diagnostics (MOD):

Off – no fault
Red – fault

Module & Input Power (UB):

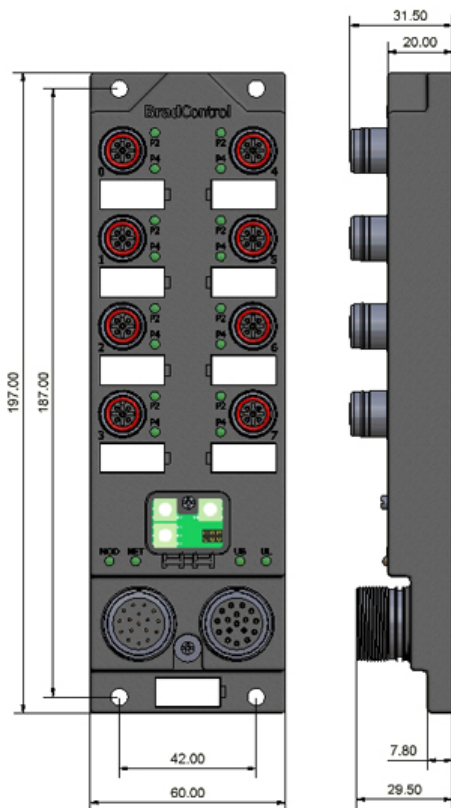
Green – external supply present

Output Power (UL):

Green – external supply present

Input / Output (M12: 1A to 8B):

Green – input / output on



Technical Information

I/O Configurations	12 inputs / 4 outputs
I/O Connectors	Micro-Change [®] 5-pole M12 female BradConnectivity [™] Ultra-Lock [™] , internally threaded Allows 2 input or 2 output channels per connector
Bus and Power Connectors	M23 male in: 17-pole, power in, bus in M23 female out: 17-pole, power out, bus out
External Power Requirements	Module & input power : 24 Vdc, device current + module Output power : 24 Vdc (13 to 28 V), 8A max per module
Baud Rate Settings	Auto baud All PROFIBUS baud rates up to 12 MBaud
Address Settings	1 – 99 by rotary switches, (0 = factory default of 126) or 1 – 125 by Set_Slave_Address command
Input Type	Compatible with dry contact and PNP 3-wire switches Electronic short circuit protection
Input Delay	3 ms
Input Device Supply	140 mA per port at 25°C
Output Load Current	Maximum 2.0 A per channel Electronic short circuit protection
Maximum Switching Frequency	200 Hz
Housing Dimensions	60mm x 197mm x 30.5mm (2.36 x 7.75 x 1.20 inches)
Mounting Dimensions	42 mm (1.65 inches) horizontal on centers 210 mm (7.36 inches) vertical on centers
Operating Temperature	-25°C to 70°C (-13°F to 158°F)
Storage Temperature	-25°C to 90°C (-13°F to 194°F)
RH Operating	5 to 95% non-condensing
EMC	IEC 61000-6-2
Protection	IP67 according to IEC 60529
Vibration	IEC 60068-2-6 conformance
Shock	10G, 11ms, 3 axis
Input Signal Voltage	"0": -2V ... 5Volts / "1": 10 ...28 Volts
Output Voltage	Supply value less 1 Volt.
MTBF	100 000 hours
Approvals	CE, UL, CUL, PNO certification

Ordering Information

Part Number	Product Description
TCDPB-8B4P-KKU	8 Port M12 – 12 inputs NPN / 4 sourcing outputs

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