

Part Number	Description
TCDPB-8B4P-KKU-T	IO:Profibus:IP67:60MM:M12:8P:12DI/4DO:PM23T
TCDDN-8B4P-KKU-T	IO:DeviceNet:IP67:60MM:M12:8P:12DI/4DO:PM23T

REVISION: <b>A</b>	ECR/ECN INFORMATION: EC No: NA DATE: 2010 / 02 / 02	TITLE: <b>IO Block IP67 60MM M12 8 Ports with M23 connection and Terminal Connector</b>	SHEET No. <b>1 of 1</b>
DOCUMENT NUMBER: <b>SD-112038-5003</b>	CREATED / REVISED BY: <b>SZOUTARD</b>	CHECKED BY: <b>SMENARD</b>	APPROVED BY: <b>SZOUTARD</b>

## INTRODUCTION



## Brad® Harsh IO 623sPB

### I/O Systems for Harsh Environments

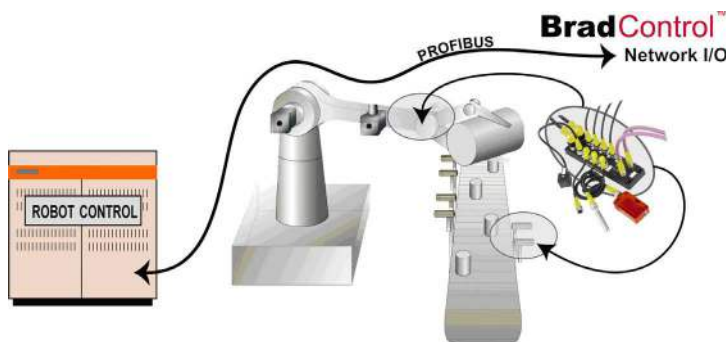
BradControl™ Classic 60mm I/O modules for PROFIBUS provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments.

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.



## FEATURES AND BENEFITS

- 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
- Module and channel diagnostics supported through PROFIBUS
- Supports PROFIBUS Slave DP-V0 in accordance with EN 50170
- Visible diagnostic through status LEDs

## APPLICATIONS

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



## TECHNICAL DESCRIPTION



## Brad® Harsh IO 623sPB

### 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

**112038 IP67 IO 8 port M23**  
**112038 IP67 IO 8 port M23T**

## SPECIFICATIONS

### 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  
(2.36x 7.75 x 1.20 inches)

**Mounting Dimensions**  
42mm (1.65 inches) horizontal on centers  
210mm (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 60068-6-2 conformance

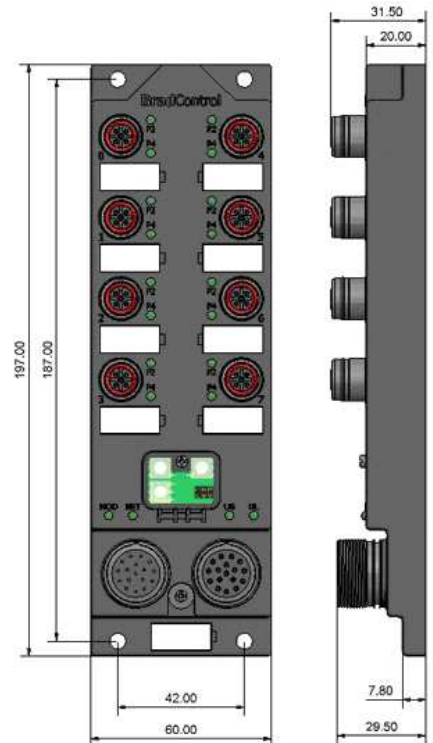
**Shock**  
10G, 11ms, 3 axis

**Input Signal Voltage**  
"0": -2V...5 Volts /  
"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	Order No.
TCDPB-8B4P-KKU	IO, IP67, 60mm, 8 Ports, 12 Inputs/4 outputs, M23	1120385002
TCDPB-8B4P-KKU-T	IO, IP67, 60mm, 8 Ports, 12 Inputs/4 outputs, M23T	1120385003

www.molex.com



North America:  
Lincolnshire-IL: + 1-800-225-7724  
Waterloo-Canada +1 (905) 624-6518

Europe:  
Caudebec-lès-Elbeuf-France: +33 232 960422  
Walldorf-Germany: +49 6227 30 91 0  
Milan-Italy: +39 02 6642961

Asia:  
Shanghai-China: +86 21-5835-9885  
Nagoya-Japan: +81 3 5791 4621