

Part Number	Description
TCDPB-8B4P-KKU	IO:Profibus:IP67:60MM:M12:8P:12DI/4DO:PM23
TCDDN-8B4P-KKU	IO:DeviceNet:IP67:60MM:M12:8P:12DI/4DO:PM23

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</b>	SHEET No. <b>1 of 1</b>
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DOCUMENT NUMBER: <b>SD-112038-5002</b>	CREATED / REVISED BY: <b>SZOUTARD</b>	CHECKED BY: <b>SMENARD</b>	APPROVED BY: <b>SZOUTARD</b>
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## INTRODUCTION



## Brad® Harsh IO 623sDN

### I/O Systems for Harsh Environments

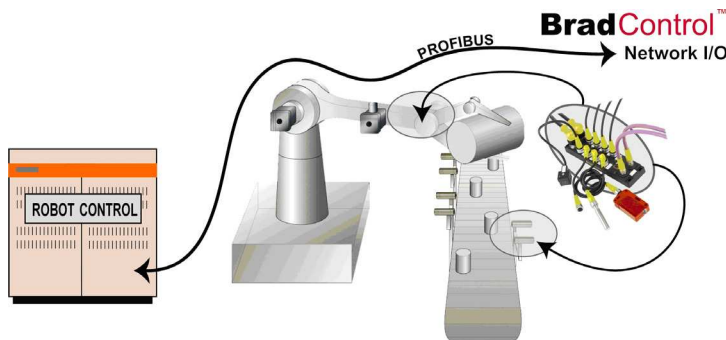
BradControl™ Classic 60mm I/O modules for DeviceNet™ provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments.

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.

DeviceNet specific features include easy to set rotary MAC ID switches, support for ARD and Quick-Connect ODVA Group 2 Server Slave functionality.



## 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
- Visible diagnostic through status LEDs
- Easy to set rotary MAC ID switches
- Support ADR and Quick-Connect
- Supports ODVA Group 2 Server Slave functionality
- Module and channel diagnostics supported through PROFIBUS

## APPLICATIONS

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



## TECHNICAL DESCRIPTION



## Brad® Harsh IO 623sDN

### LED Indicators

#### DeviceNet™ Network Status

##### (NET):

Green - running  
Flashing green - connection not allocated  
Flashing red - recoverable network error  
Red - bus off; unrecoverable network error  
Off - auto bauding

#### I/O Module Diagnostics (MOD):

Green - baud rate established, I/O module OK  
Flashing green - auto bauding  
Red - configuration error

#### Input / Output

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

**112092 IP67 IO 8 port M23**  
**112092 IP67 IO 8 port M23T**

#### Module & Input Power (UB):

Green - external supply present

#### Output Power (UL):

Green - external supply present

## 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  
125, 250, 500 Kbaud

### Address Settings

0-63 using rotary switches or software

### Input Type

Compatible with dry contact and PNP 3-wire switches Electronic short circuit protection

### Input Device Supply

140 mA per Port at 25°C

### Output Load Current

Maximum 1.0 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

### I/O Data

Polled, Cyclic, COS, Bit Strobe

### Operating Temperature

-20°C to 70°C (-4°F to 158°F)

### Storage Temperature

-25°C to 85°C (-13°F to 185°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

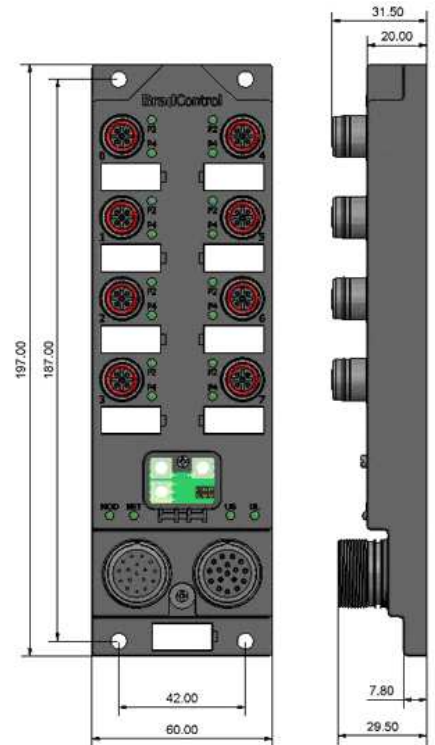
10G, 11ms, 3 axis

### MTBF

100 000 hours

### Approvals

CE, UL, CUL



## ORDERING INFORMATION

### Part Number

TCDDN-8B4P-KKU  
TCDDN-8B4P-KKU-T

### Product Description

IO, IP67, 60mm, 8 Ports, 12 Inputs/4 outputs, M23  
IO, IP67, 60mm, 8 Ports, 12 Inputs/4 outputs, M23T

### Order No.

1120925002  
1120925003

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