

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

INTRODUCTION



Brad® Harsh IO 623sDN

I/O Systems for Harsh Environments

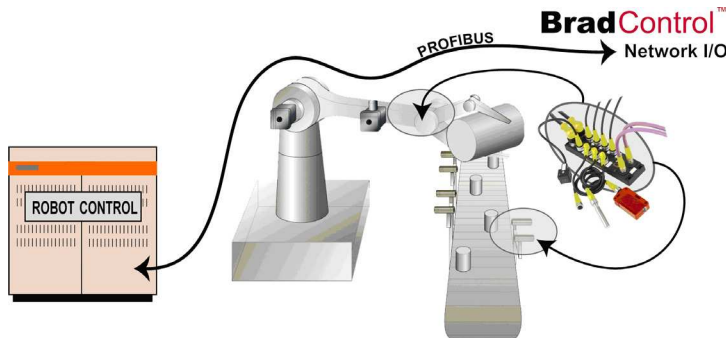
BradControl™ Classic 60mm I/O modules for DeviceNet™ provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments.

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

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

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



Brad® Harsh IO 623sDN

112092 IP67 IO 8 port M23
112092 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
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

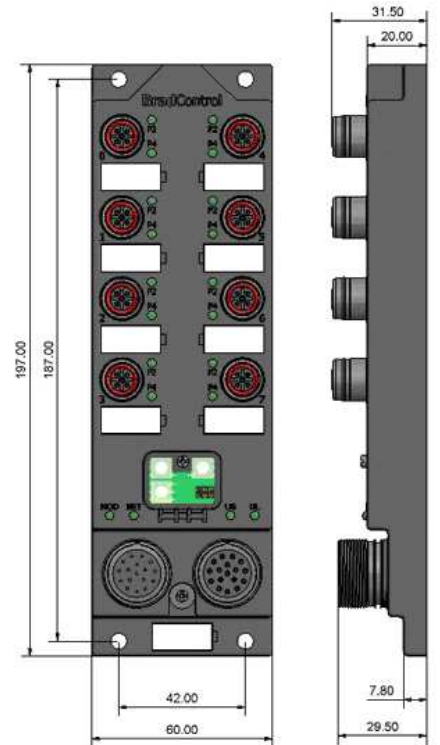
10G, 11ms, 3 axis

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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