

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: A	ECR/ECN INFORMATION: EC No: NA DATE: 2010 / 02 / 02	TITLE: IO Block IP67 60MM M12 8 Ports with M23 connection	SHEET No. 1 of 1
-----------------------	---	---	----------------------------

DOCUMENT NUMBER: SD-112038-5002	CREATED / REVISED BY: SZOUTARD	CHECKED BY: SMENARD	APPROVED BY: SZOUTARD
---	--	-------------------------------	---------------------------------

INTRODUCTION



Brad® Harsh IO 623sPB

I/O Systems for Harsh Environments

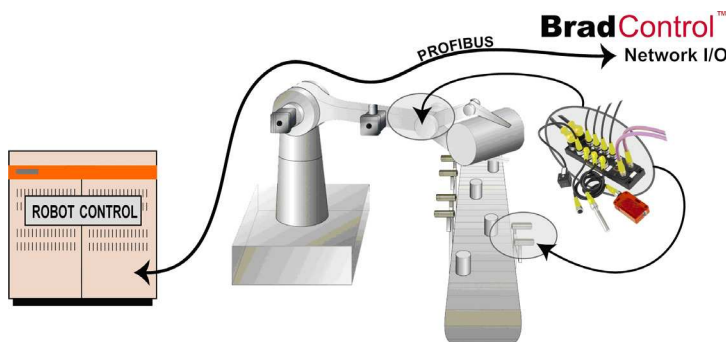
BradControl™ Classic 60mm I/O modules for PROFIBUS provide a reliable solution for connecting industrial controllers to I/O devices in harsh environments.

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

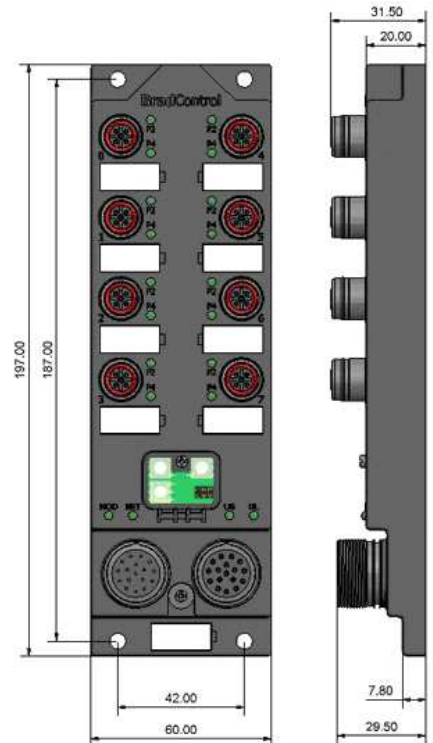
Shock
10G, 11ms, 3 axis

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