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Part Number: [1120955006](#)
Status: **Active**
Overview: [brad industrial ethernet products](#)
Description: BradControl™ Class 60mm 8 Port IO module, 8 Inputs, 8 Outputs NPN

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

UL E200650

General

Product Family Industrial I/O Modules
 Series [112095](#)
 IP Rating IP67
 Mechanical Shock 10G, 11ms, 3 AXIS
 Overview [brad industrial ethernet products](#)
 Product Name HarshIO Ethernet
 Protocol EtherNet/IP
 Style Classic

Physical

Bus Input 5-pole Micro-Change® (M12)
 Bus Output 5-pole Micro-Change® (M12)
 Housing Width 60.00mm (2.362")
 I/O Connector 5-pole Micro-Change® (M12)
 I/O Signal Mix 8 input / 8 output
 Ports 8
 Power Input 4-pole Mini-Change®
 Power Output 4-pole Mini-Change®
 Temperature Range - Operating -25°C to +70°C
 Vibration IEC 60068-2-6 Conformance

Electrical

Current - Maximum per Contact 2A per channel
 EMC IEC 61000-6-2
 Input Delay 2.5ms
 Input Device Supply 200 mA per port at 25°C
 Input Type NPN or Dry Contact

Material Info

Old Part Number TCDEI-888N-D1U

Reference - Drawing Numbers

Sales Drawing SD-112095-5003

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Not Reviewed
Halogen-Free
Status
Not Reviewed

China RoHS



Need more information on product environmental compliance?

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[112095Series](#)



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

EtherNet/IP™ Discrete I/O Module

IP67 Classic Module

Features

- Scrolling 4 characters status display for IP addressing and module status
- Built-in 2-port Ethernet switch
 - 10/100 Mbps auto-sensing and crossover capability
- Built-in web server for remote monitoring, configuration and diagnostics
- Configurable I/O capability (through web interface & EtherNet/IP commands)
- Accepts M12 threaded connectors or BradConnectivity™ Ultra-Lock™ connection system
- Supports PNP & NPN input devices
- Several I/O configurations to choose from
 - TCDEM-8YYX-DIU offers 16 points of configurable I/O where the user can configure each point as either an input or output
- Visible LEDs provide maintenance personnel with the ability to easily determine I/O, module & network status
- Error-memory for diagnostics via EtherNet/IP
- Rated IP67 for harsh environments
- Designed for direct machine mount applications
- IP addressing via Bootp, DHCP or static (through web interface, push button & Modbus commands)
- Standard hole pattern allows for interchangeability with popular I/O modules
- Watchdog

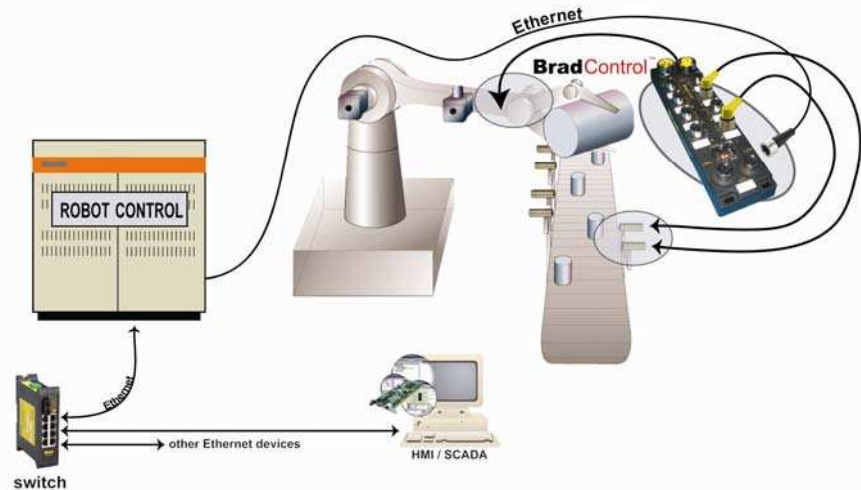
Typical Applications

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



I/O Systems for Harsh Duty Environments

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



Contained in an IP67 rated housing, 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 material handling equipment and automated assembly machinery.

Advanced network features such as 10/100 Mbps auto-sensing, web server capabilities and a flexible IP address setup method, make configuration and operation simple. Following traditional industrial fieldbus practices, standard M12 connectors from sensing devices or actuators plug directly into the I/O module. An environmentally sealed IP67 connection between the I/O module and the Ethernet network is created using the Ultra-Lock™ connection system built into the BradControl EtherNet/IP I/O module.



LED Indicators

Module & Input Power (I):

Green –power present
Off –power not connected

Output Power (O):

Green –power present
Off –power not connected

Display Box:

Inform about Ethernet address, IO and Watchdog status

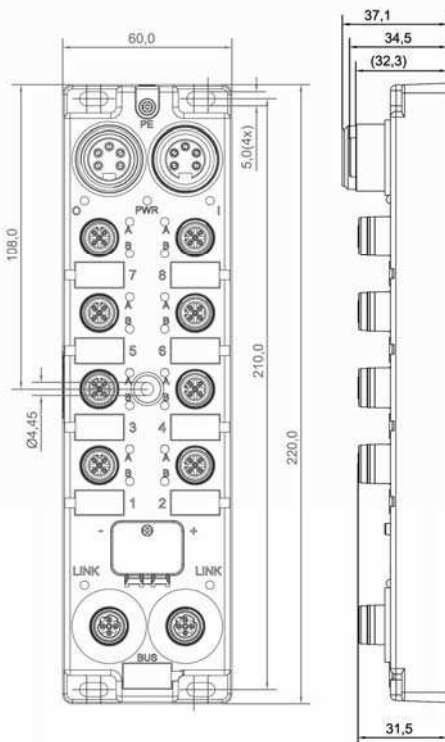
Input / Output (Ix / Ox):

Green – input/output on
Red – input/output fault
Off – input/output off

Ethernet Link (LNK 1/2):

Solid Green– Ethernet link at 100 Mbit/s without activity.
Flashing Green– Ethernet link at 100 Mbit/s with activity.

Solid Yellow– Ethernet link at 10 Mbit/s without activity.
Flashing Yellow – Ethernet link at 10 Mbit/s with activity.



Technical Information

| | |
|-----------------------------|--|
| I/O Configurations | 16 inputs 14 inputs / 2 outputs 12 inputs / 4 outputs 8 inputs / 8 outputs Universal & user configurable input / output channels |
| I/O Connectors | Micro-Change® 5-pole M12 female BradConnectivity™ Ultra-Lock™, internally threaded |
| Ethernet Connectors | 2 connectors 4-pole female M12 D-Coded Ultra-Lock Acting as a switch. Crossover capability |
| Power Connectors | Power in : male Mini-Change® 5-pole Power out : female Mini-Change 5-pole |
| Power Requirements | Module & input power : 24 Vdc, Module output power : 24 Vdc (13 to 28 V), 8A max per module |
| Communications Rate | 10/100 Mbps auto-sensing, auto-detecting, full duplex |
| IP Address Capabilities | BOOTP (default), DHCP, static address |
| Protocol | EtherNet/IP |
| Input Type | Compatible with dry contact and PNP or NPN 3-wire switches. Electronic short circuit protection |
| Input Delay | 2.5 ms default or configurable through Modbus messaging |
| Input Device Supply | 200 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 220mm x 20mm (2.36 x 8.66 x .78 inches) |
| Mounting Dimensions | 37.5 mm (1.48 inches) horizontal on centers 210 mm (8.27 inches) vertical on centers Center hole |
| Operating Temperature | -20°C to 70°C (-4°F to 158°F) |
| Storage Temperature | -40°C to 85°C (-40°F to 185°F) |
| Protection | IP67 according to IEC 60529 |
| Vibration | IEC 60068-2-6 |
| Mechanical Shock | 10G, 11ms, 3 axis |
| Approvals | CE, UL, cUL, ODVA |

Ordering Information

| Catalog Number | SAP Material Number | Product Description |
|----------------|---------------------|--|
| TCDEI-8DON-D1U | 1120955003 | 8-port, M12 Ultra-Lock, 16 input, NPN |
| TCDEI-8C2N-D1U | 1120955004 | 8-port, M12 Ultra-Lock, 14 input, 2 output, NPN |
| TCDEI-8B4N-D1U | 1120955005 | 8-port, M12 Ultra-Lock, 12 input, 4 output, NPN |
| TCDEI-888N-D1U | 1120955006 | 8-port, M12 Ultra-Lock, 8 input, 8 output, NPN |
| TCDEI-8DOP-D1U | 1120955007 | 8-port, M12 Ultra-Lock, 16 input, PNP |
| TCDEI-8C2P-D1U | 1120955008 | 8-port, M12 Ultra-Lock, 14 input, 2 output, PNP |
| TCDEI-8B4P-D1U | 1120955009 | 8-port, M12 Ultra-Lock, 12 input, 4 output, PNP |
| TCDEI-888P-D1U | 1120955010 | 8-port, M12 Ultra-Lock, 8 input, 8 output, PNP |
| TCDEI-8YYX-D1U | 1120955011 | 8-port, M12 Ultra-Lock, 16 I/O user configurable |

To contact us: www.woodhead.com

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United Kingdom: +44 1495 356300

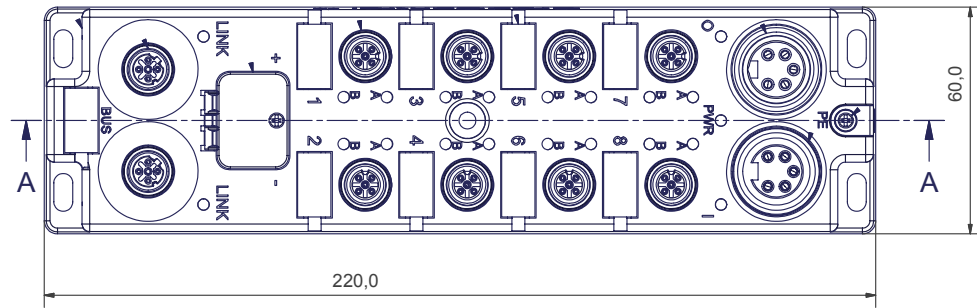
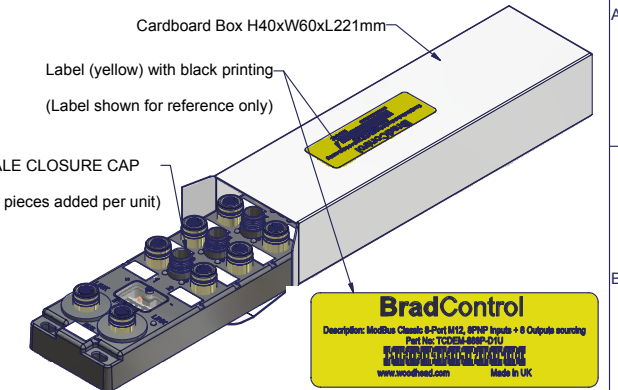
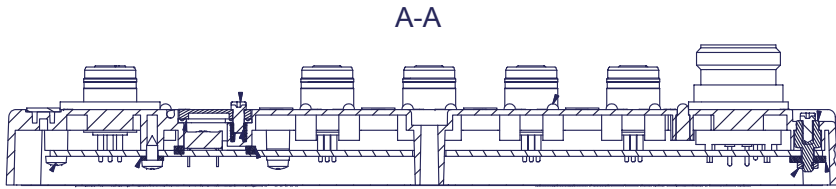
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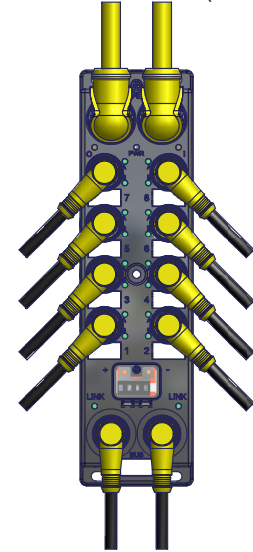
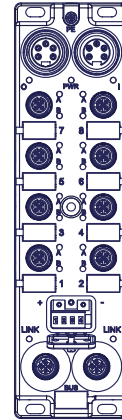
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from **molex**

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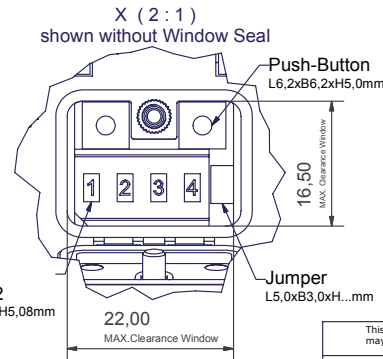
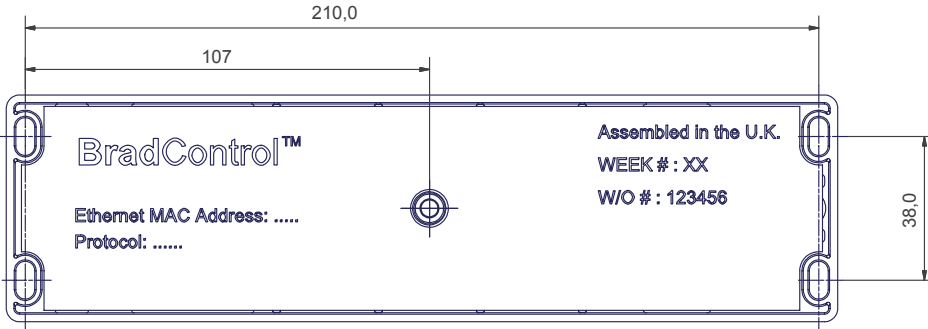
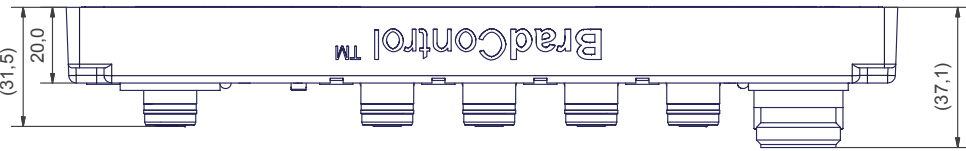
| REVISIONSVERLAUF | | | | |
|------------------|-----|-----------------|-----------|-----------|
| ZONE | REV | BEZEICHNUNG | DATUM | GENEHMIGT |
| - | 01 | INITIAL RELEASE | 12.7.2006 | FP |



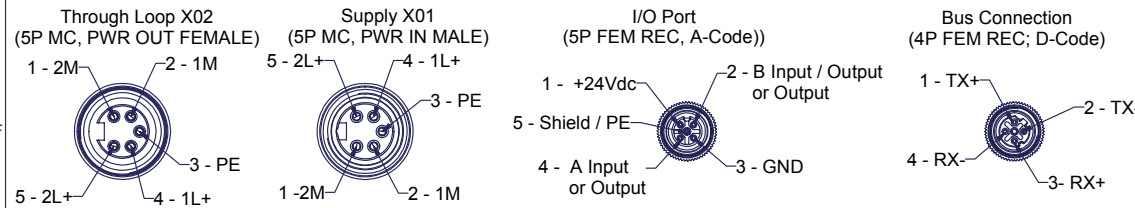
IP67 I/O connected (1:2)
Window open (105°)



- FINAL PART NUMBERS (Configured Variations):**
- TCDEI-8D0P-D1U 16 inputs PNP
 - TCDEI-8C2P-D1U 14 inputs PNP, 2 outputs sourcing (twin wired)
 - TCDEI-8B4P-D1U 12 inputs PNP, 4 outputs sourcing
 - TCDEI-888P-D1U 8 inputs PNP, 8 outputs sourcing
 - TCDEI-8D0N-D1U 16 inputs NPN
 - TCDEI-8C2N-D1U 14 inputs NP N, 2 outputs sinking (twin wired)
 - TCDEI-8B4N-D1U 12 inputs NPN, 4 outputs sinking
 - TCDEI-888N-D1U 8 inputs NPN, 8 outputs sinking
 - TCDEI-8YYX-D1U 16 User configurable input / output channels



Display
HCMS 2902
L17,78xB10,16xH5,08mm



| BOM / Stückliste | | | |
|---|--------|--|---------------|
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| UNLESS OTHERWISE SPECIFIED X = ±1 XX = ±0,1 XXX = ±0,05 Winkel = 1° | | Scale 1>1 | Dimensions mm |
| PROJECTION 1: GER | | Date 12.07.2006 | Name FP |
| PROC 12.07.2006 | | CHK Norm. | |
| Woodhead Connectivity GmbH Gewerbstraße 60 75015 Bretten-Gölshausen Tel.: 07252/8496-0 Fax: 07252/8496-199 | | IP67 Ethernet/IP I/O CLASSIC DIGITAL - 60MM HSG | |
| 01 SEE REV TABLE | | 12.07.06 | FP |
| Rev. | Change | Date | Name |
| TCDEI-8 | | | Sheet 1 |
| Filename Y:\CAD\ETHERNET ModBus IP67 I/O\DRAWINGS\TCDEM-8.lw | | | A2 |