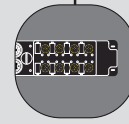# Classic 60mm I/O Modules

• 16 inputs
• 14 inputs / 2 outputs
• 12 inputs / 4 outputs
• 8 inputs / 8 outputs

BradControl™ IP67 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 material handling equipment and automated assembly machinery.
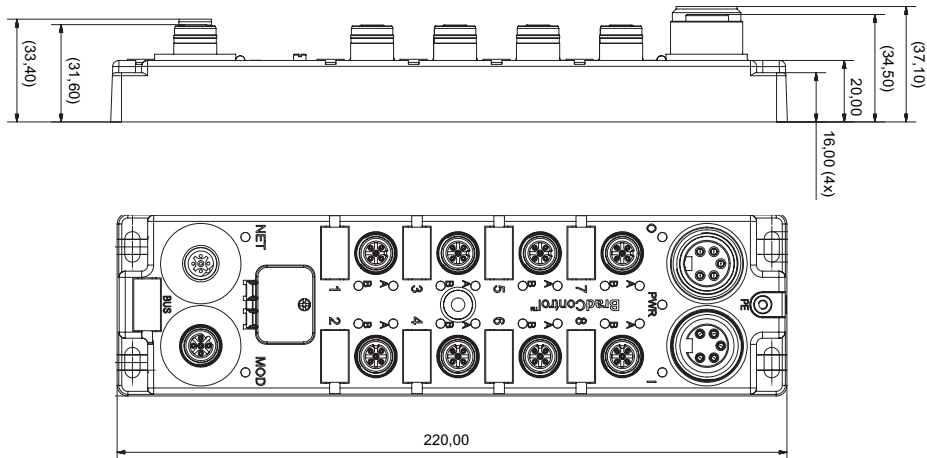
To facilitate input and output device wiring, BradControl Classic 60mm I/O modules accept standard threaded M12 connectors or the new BradConnectivity™ Ultra-Lock™ connection system, a "push-to-lock" method that provides a fast, simple and secure connection between the I/O module and I/O devices. With the 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.

• Rated IP67 for harsh environments
• Designed for space savings in direct machine mount applications
• Standard threaded M12 connectors or BradConnectivity Ultra-Lock connection system
• Standard mounting hole pattern for interchangeability with popular I/O modules
• Supports PNP and NPN inputs
• Visible LEDs provide maintenance personnel with the ability to easily determine I/O, module and network status
• Module and channel diagnostics supported through Profibus
• Supports Profibus Slave DP-V0 in accordance with EN 50170

MODULE DIMENSIONS

For product & technical information visit www.woodhead.com/eCatalog

BradControl™
from Woodhead Industries

Specifications

I/O CONFIGURATIONS	16 inputs 12 inputs / 4 outputs	14 inputs / 2 outputs 8 inputs / 8 outputs
I/O CONNECTOR	5-POLE FEMALE M12 BRAD CONNECTIVITY™ ULTRA-LOCK™. ALLOWS 2 INPUT OR 2 OUTPUT CHANNELS PER CONNECTOR.	
BUS CONNECTOR	BUS IN: MALE REVERSE-KEY M12 5-POLE, B-CODED BUS OUT: FEMALE REVERSE-KEY M12 5-POLE, B-CODED	
POWER CONNECTOR	POWER IN: MALE MINI-CHANGE® 5-POLE POWER OUT: FEMALE MINI-CHANGE 5-POLE	
EXTERNAL POWER REQUIREMENTS	MODULE & INPUT POWER: 24 Vdc, DEVICE CURRENT + MODULE OUTPUT POWER: 24 Vdc (11 TO 28 V) 8 AMP PER MODULE	
BAUD RATE SETTING	AUTO BAUD ALL PROFIBUS® BAUD RATES UP TO 12 MBaud	
ADDRESS SETTING	1 – 99 ROTARY SWITCHES, (0 = FACTORY DEFAULT OF 126) OR 1 – 125 BY SET SLAVE ADDRESS COMMAND	
INPUT TYPE	COMPATIBLE WITH DRY CONTACT AND PNP OR NPN 3-WIRE SWITCHES. ELECTRONIC SHORT CIRCUIT PROTECTION	
INPUT DELAY	3 ms	
INPUT DEVICE SUPPLY	140 mA PER PORT AT 25 C	
OUTPUT LOAD CURRENT	MAX 2.0 A PER CHANNEL, ELECTRONIC SHORT CIRCUIT PROTECTION	
MAXIMUM SWITCHING FREQUENCY	200 Hz	
HOUSING DIMENSIONS	60mm X 220mm X 20mm (2.3 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	-25 C TO 70 C (-13 TO 158 F)	
STORAGE TEMPERATURE	-25 C TO 90 C (-13 TO 194 F)	
RH OPERATING	5 TO 95% NON-CONDENSING	
EMC	IEC 61000-6-2	
PROTECTION	IEC IP67 ACCORDING TO IEC 60529	
VIBRATION	IEC 60068-2-6 CONFORMANCE	
SHOCK	10 G 11ms, 3 X	
INPUT SIGNAL VOLTAGE	0" -2V = 5 VOLTS / 11"-10 = 28 VOLTS	
OUTPUT VOLTAGE	SUPPLY VALUE LESS 1 VOLT	
APPROVALS	CE, UL, CUL, PNO CERTIFICATION	

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 ()
Green – external supply present

Output Power ()
Green – external supply present

Input / Output (M1 to 8)
Green – input / output on
Red – input / output fault

Ordering Information

PART NUMBER	PRODUCT DESCRIPTION	PART NUMBER	PRODUCT DESCRIPTION
TCDPB-8D0N-B1U	8 PORT M12 – 16 INPUTS NPN	TCDPB-8D0P-B1U	8 PORT M12 – 16 INPUTS PNP
TCDPB-8C2N-B1U	8 PORT M12 – 14 INPUTS NPN / 2 SOURCING OUTPUTS	TCDPB-8C2P-B1U	8 PORT M12 – 14 INPUTS PNP / 2 SOURCING OUTPUTS
TCDPB-8B4N-B1U	8 PORT M12 – 12 INPUTS NPN / 4 SOURCING OUTPUTS	TCDPB-8B4P-B1U	8 PORT M12 – 12 INPUTS PNP / 4 SOURCING OUTPUTS
TCDPB-888N-B1U	8 PORT M12 – 8 INPUTS NPN / 8 SOURCING OUTPUTS	TCDPB-888P-B1U	8 PORT M12 – 8 INPUTS PNP / 8 SOURCING OUTPUTS