Brad® EtherNet/IP® HarshIO Analog Modules for Roller Drives†

Ideal for many material handling applications, Brad™ EtherNet/IP® HArshIO Analog Modules provide an IP67 rated solution for interfacing industrial controllers with conveyor rollers in harsh duty environments.

Features and Advantages

- **M12 Ultra-Lock Interface**
  Allow fast connections and changeovers. Reduce time to connect the cordsets to the module.

- **IP67 Housing**
  To use directly on the machine. Dust, water and vibration resistant. Large temperature range. No need of protective cabinet.

- **Push Buttons**
  IP address setting (Static, DHCP, Stored)

- **Roller Drive Connectivity**
  Connect up to 4 roller drives†. Control start/stop and speed of each roller.

- **IP67 Housing**
  To use directly on the machine. Dust, water and vibration resistant. Large temperature range. No need of protective cabinet.

- **Integrated 2-Port Switch**
  Daisy-chain wiring possible wire entire application without switches achieve cost savings.

- **Diagnostics**
  Diagnostic capabilities via fieldbus messaging. Visible diagnostic LEDs provide maintenance personnel with the ability to easily determine I/O, module and network status.

- **Display**
  4-digits scrolling information. Status information (Ipconfig, PLC connection, I/O diagnostic)

- **Fieldbus Ready**
  ODVA certified. Upload EDS file from module using Rockwell RSLinx

Applications

**Industrial Automation - Conveying**
- Food processing
- Warehousing & Distribution
- Industrial production
- Express parcel, postal and courier sector
- Airport logistics
- Baggage handling
- Supermarket

Baggage handling and sorting
E-Commerce distribution centers
Plant conveying system

* EtherNet/IP is a trademark of the Open DeviceNet Vendor Association (ODVA)
† INTERROLL EC310 Roller Drives
Specifications

REFERENCE INFORMATION

Hardware
IP67 housing
Dimensions: 600 x 220 x 20mm
(2.36” x 8.66” x 0.78”)

Operating Temperature: -25 to +70°C

Storage Temperature: -40 to +90°C

Relative Humidity: 10 to 95%, non-condensing

Housing Material: PBT VALOX 420 SEO Black 7701

Power Connectors

Power In: Male Mini-Change™, 5-pole

Power Out: Female, Mini-Change™, 5-pole

Protected against power crossing

I/O Connectors

Female, Ultra-Lock™ M12, A-Coded, 5-pole

Fieldbus Connectors

Female, Ultra-Lock™ M12, D-Coded, 4-pole

Ethernet Switch

2-port, 10/100 Mbps (auto-negotiation), full duplex,
Storm Protection

Diagnostic LED per port (Link / Speed / Activity)

Fieldbus

EtherNet/IP® Adapter

RPI (min): 1ms

Quick Connect: Yes (Class A)

ACD: Yes

IP Address Capabilities: DHCP, Static Address,

Stored (EtherNet/IP® 0xF5 / 0xF6 objects)

EDS file

Firmware upgradable

Power Requirements

Module logic/input power: 24V DC (-15/+20%)

Module auxiliary output power: 24V DC (-15/+20%)

Diagnostic LEDs (Logic/Input + Output) with detection of

low voltage operation

Input Digital Channel(s)

Connector: Female, Ultra-Lock™ M12, A-Coded, 5-pin

Input type: PNP, Sinking, 2/3-wire sensors

Sensor power supply: 200 mA at 20°C

Electronic short circuit protection

Diagnostic LED

Input delay: 5ms

Output Digital Channel(s)

Connector: Female, Ultra-Lock™ M12, A-Coded, 5-pole

Output type: PNP, Sourcing

Output current per channel: 2.0A per as rated, 5.0A as peak

Output Analog Channel(s)

Speed direction control of EC310 Roller Drives

Output current: 1.0mA per Channel

6 steps for speed control for EC310 Roller Drives

0-24V capability

Shock and Vibration

MIL-STD-202F, method 204D, condition A (Vibration)

MIL-STD-202F, method 213B, condition B (Mechanical

Shock)

MIL-STD-1344A (Thermal Shock)

Regulatory Approvals

ODVA certified, CE, UL / cUL, RoHS, REACH

Ordering Information

<table>
<thead>
<tr>
<th>Engineering No.</th>
<th>Order No.</th>
<th>Description</th>
<th>Digital</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCDEI-88MP-D1U-G</td>
<td>1120955118</td>
<td>HarshIO Module, EtherNet/IP for Roller Drives</td>
<td>8 Digital Inputs, 4 Digital Outputs, 4 Analog Outputs</td>
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</tbody>
</table>

www.molex.com/link/harshio.html