

## Remote I/O R80 Series

/C02: Polyurethane coating

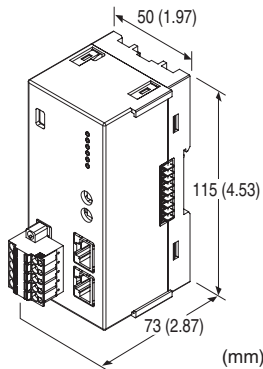
### POWER/NETWORK MODULE

(EtherCAT)

#### Functions & Features

- Free combination of analog and discrete I/O
- Space-saving

EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.



**EtherCAT**®

### MODEL: R80NECT1-R[1]

#### ORDERING INFORMATION

- Code number: R80NECT1-R[1]
- Specify a code from below for [1].  
(e.g. R80NECT1-R/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### MODULE TYPE

NECT1: EtherCAT

#### POWER INPUT

##### DC power

R: 24 V DC

(Operational voltage range:  $\pm 10\%$ ; ripple 10 %p-p max.)

#### [1] OPTIONS

blank: none

/Q: With options (specify the specification)

#### SPECIFICATIONS OF OPTION: Q

**COATING (For the detail, refer to M-System's web site.)**

/C01: Silicone coating

#### RELATED PRODUCTS

- PC configurator software (model: R80CFG)
- ESI file

The ESI file and configurator software are downloadable at M-System's web site.

For connecting to PC, use commercially available Mini-B type USB cable. (provided by user)

#### PACKAGE INCLUDES...

- Protective cover

#### GENERAL SPECIFICATIONS

##### Connection

- **Power input and excitation supply:** Tension clamp terminal block (Front Twin connection)
- **EtherCAT:** RJ-45 modular jack
- **Internal bus, internal power and excitation supply:** Via bus connector

**Max. number of I/O modules:** 16

(Max. consumption current of I/O modules: 1.6 A)

**Isolation:** Internal bus or internal power or power input to excitation supply to EtherCAT or FE1

**Status indicator LEDs:** PWR, RUN, ERR, L/A IN, L/A OUT  
(For details, refer to the operating manual.)

#### EtherCAT COMMUNICATION

**Standard:** IEEE 802.3u

**Transmission type:** 100BASE-TX

**Transmission speed:** Full-duplex 100 Mbps

**Transmission media:** 100BASE-TX (STP cable; Category 5e)

**Maximum internode length:** 100 meters

**Fixed address:** Set with rotary switches

(The master must support MDP.)

#### INSTALLATION

##### Power consumption

- **DC:** Approx. 12 W 24 V DC (@ internal power max. current 1.6 A)

##### Internal power supply (power supply for I/O module):

- DC power supply: 5 V DC
- Current capacity: 1.6 A

##### Excitation supply output (excitation for I/O module)

- **DC:** 24 V DC  $\pm 10\%$
- **Operational current:** 10 A

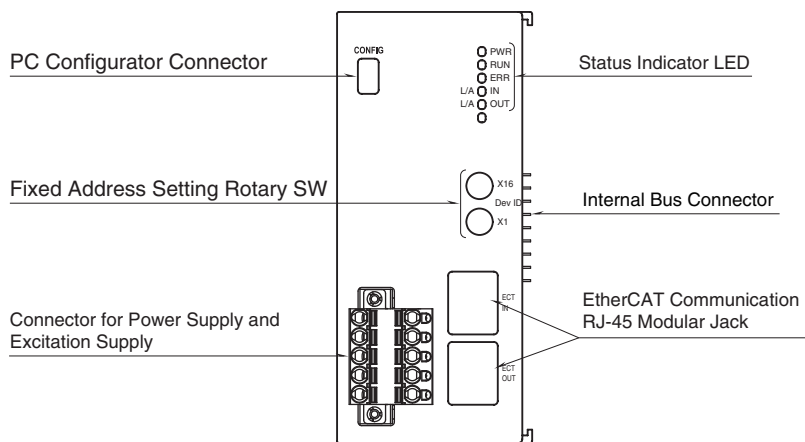
(From power and excitation supply connector, via connector for internal bus, supplied to each I/O module. Power output current consumption must be under operational current.)

**Operating temperature:** -10 to +55°C (14 to 131°F)  
**Operating humidity:** 30 to 90 %RH (non-condensing)  
**Atmosphere:** No corrosive gas or heavy dust  
**Mounting:** DIN rail  
**Weight:** 210 g (0.46 lb)

## PERFORMANCE

**Insulation resistance:**  $\geq 100 \text{ M}\Omega$  with 500 V DC  
**Dielectric strength:** 1500 V AC @ 1 minute  
 (internal bus or internal power or power input to excitation supply to EthrtCAT or FE1)

## EXTERNAL VIEW



## WIRING

### • POWER SUPPLY AND EXCITATION SUPPLY CONNECTOR

#### TERMINAL ASSIGNMENT

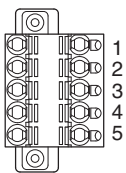
**Unit side connector:** MSTBV2,5/5-GF-5, 08AU (Phoenix Contact)

**Cable side connector:** TFKC2,5/5-STF-5, 08AU (Phoenix Contact)

**Applicable wire size:** 0.2 – 2.5 mm<sup>2</sup>; stripped length 10 mm

#### Recommended solderless terminal

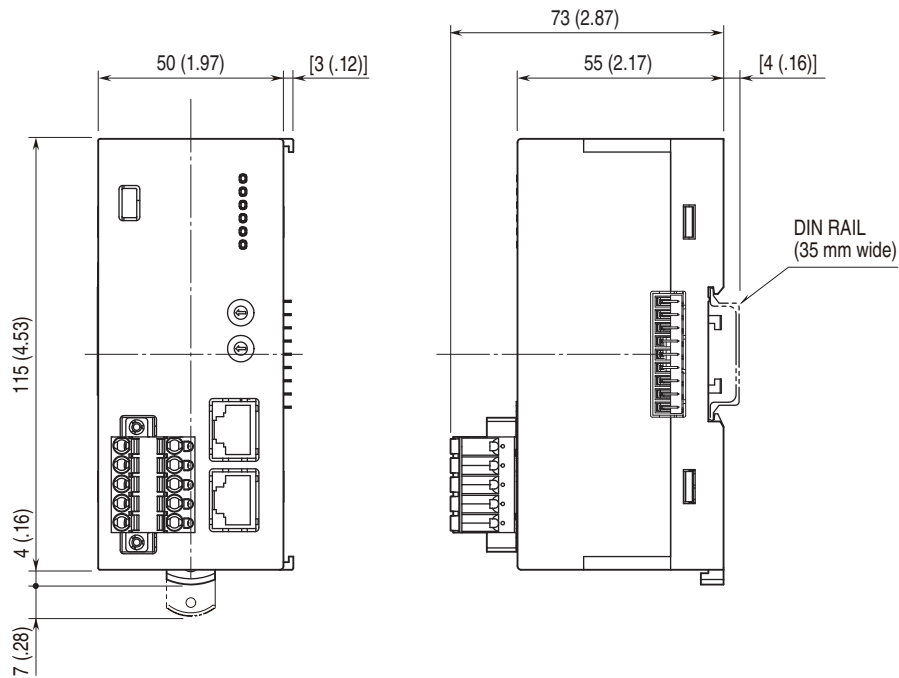
- AI0,25–10YE 0.25 mm<sup>2</sup> (Phoenix Contact)
- AI0,34–10TQ 0.34 mm<sup>2</sup> (Phoenix Contact)
- AI0,5–10WH 0.5 mm<sup>2</sup> (Phoenix Contact)
- AI0,75–10GY 0.75 mm<sup>2</sup> (Phoenix Contact)
- AI1–10RD 1.0 mm<sup>2</sup> (Phoenix Contact)
- AI1,5–10BK 1.5 mm<sup>2</sup> (Phoenix Contact)
- AI2,5–10BU 2.5 mm<sup>2</sup> (Phoenix Contact)



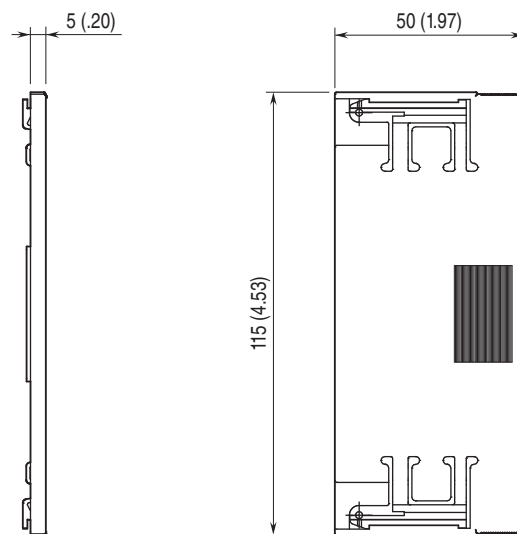
PIN No.	ID	FUNCTION
1	24 V	Power supply 24 V DC
2	0 V	Power supply 0 V DC
3	+	Excitation supply 24 V DC
4	-	Excitation supply 0 V DC
5	FE1	Grounding

## EXTERNAL DIMENSIONS unit: mm (inch)

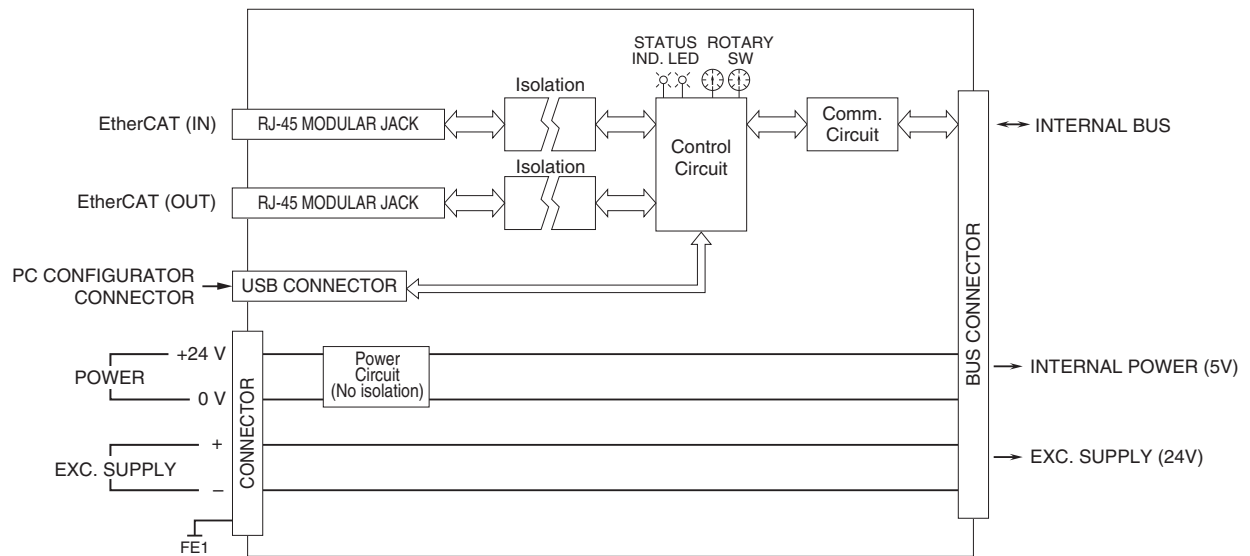
### ■UNIT



### ■PROTECTIVE COVER



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.