

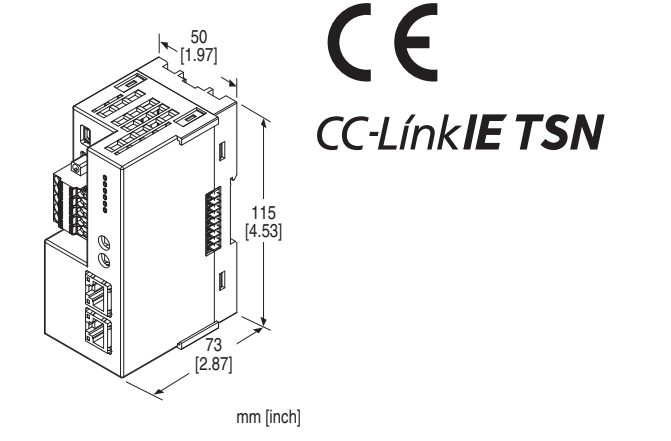
Remote I/O R80 Series

POWER/NETWORK MODULE

(CC-Link IE TSN)

Functions & Features

- Interchanges analog or discrete I/O signals with the fieldbus (CC-Link IE TSN)
- Space-saving



MODEL: R80NCIT1-R[1]

ORDERING INFORMATION

- Code number: R80NCIT1-R[1]
- Specify a code from below for [1].
(e.g. R80NCIT1-R/Q)
- Specify the specification for option code /Q
(e.g. /C01)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V \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 our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

RELATED PRODUCTS

- PC configurator software (model: R80CFG)
- CSP+ file

The configurator software and CSP+ file are downloadable

at our web site.

CSP+ file is also downloadable at CC-Link Partner Association'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)
- **CC-Link IE TSN:** RJ-45 connector
- **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 CC-Link IE TSN or FE1

Internal bus communication cycle: Approx.

65 μ s+65 μ s \times number of the modules.

Status indicator: PWR, RUN, RD, SD, D LINK, ERR, L ER, LINK (Refer to the instruction manual.)

CC-Link IE TSN

Protocol: IEEE 802.3

Transmission type: 1000BASE-T

Communication speed: 1 Gbps

Communication method: Time sharing method

Synchronization function: IEEE802.1AS and IEEE1588v2 compliant

Certification class: Class B

Network cable: Cable conformed to CC-Link IE Field

Double shielded twist pair cable (CAT5e)

RJ-45 connector

Network topology: Line, star and ring

Max. number stations: 64770 (Total master and slave station)

(Number of max. connectable slaves may vary depending on the master module. Refer to the instruction manual of the master module)

Max. station-to-station distance: 100 m

Station type: Remote station

Link device: RX/Ry 112 points, RWw/RWr 64 points

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)

Storage humidity: -20 to +65 % RH (non-condensing)

Atmosphere: No corrosive gas or heavy dust

Mounting: DIN rail

Weight: 230 g (0.51 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 CC-Link IE TSN or FE1)

STANDARDS & APPROVALS

Refer to the manuals to comply with the standards.

EU conformity:

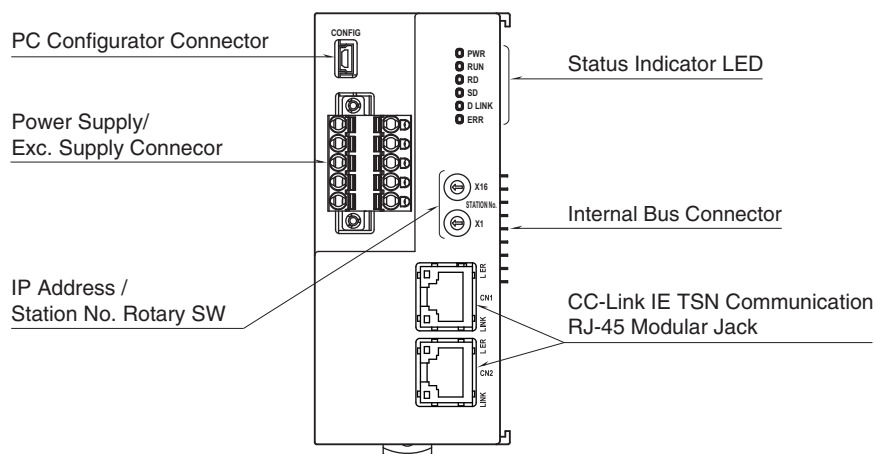
EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

EXTERNAL VIEW



WIRING

• POWER SUPPLY AND EXCITATION SUPPLY CONNECTOR TERMINAL ASSIGNMENT

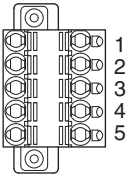
Unit side connector: MSTBV2,5/5-GF-5, 08AU (Phoenix Contact)

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

Applicable wire size: 0.2 – 2.5 mm²; stripped length 10 mm

Recommended solderless terminal

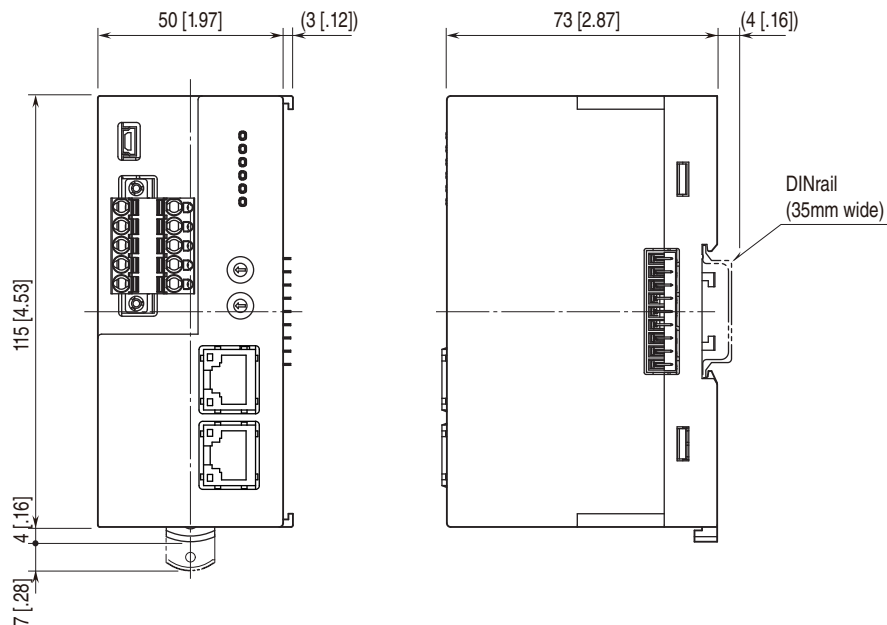
- AI0,25–10YE 0.25 mm² (Phoenix Contact)
- AI0,34–10TQ 0.34 mm² (Phoenix Contact)
- AI0,5–10WH 0.5 mm² (Phoenix Contact)
- AI0,75–10GY 0.75 mm² (Phoenix Contact)
- AI1–10RD 1.0 mm² (Phoenix Contact)
- AI1,5–10BK 1.5 mm² (Phoenix Contact)
- AI2,5–10BU 2.5 mm² (Phoenix Contact)



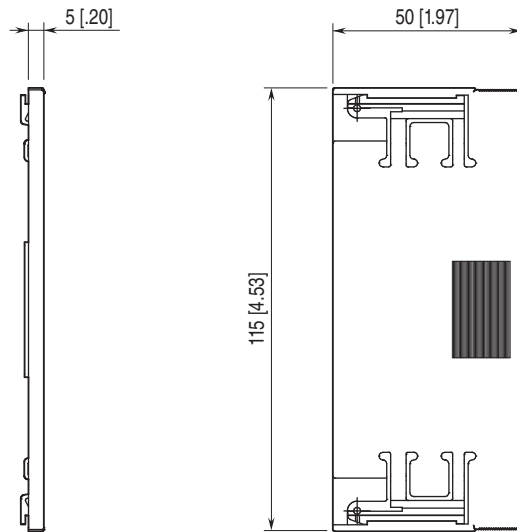
PIN No.	ID	FUNCTION
1	24 V	Power supply 24 V DC
2	0 V	Power supply 0 V DC
3	+	Excitation supply 24 V DC
4	-	Excitation supply 0 V DC
5	FE1	Grounding

EXTERNAL DIMENSIONS unit: mm [inch]

■UNIT



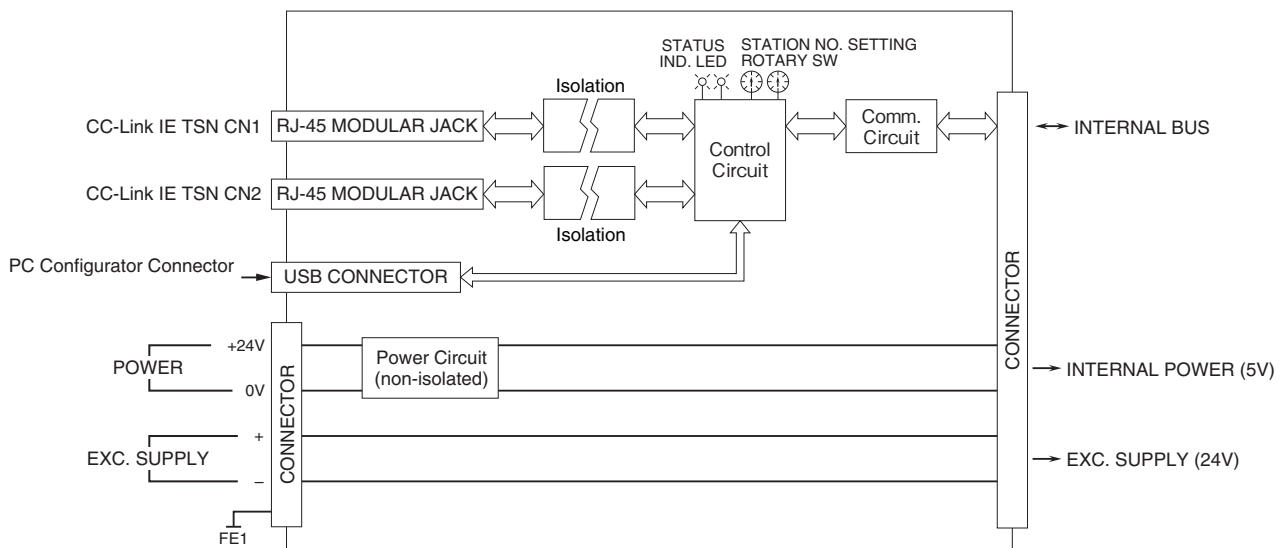
PROTECTIVE COVER



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

Note: In order to improve EMC performance, bond the FE1 terminal to ground.

Caution: FE1 terminal is NOT a protective conductor terminal.



Regarding CN1 and CN2 of RJ-45 connector for CC-Link IE TSN network, there is no restriction for connection order



Specifications are subject to change without notice.