

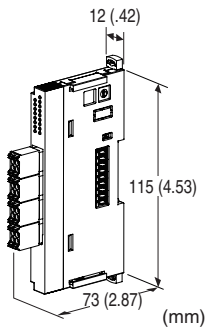
Remote I/O R80 Series

NPN TRANSISTOR OUTPUT MODULE, 8 points

(tension clamp terminal block)

Functions & Features

- 8 channels for discrete output, compact size remote I/O module
- 16 pins tension clamp connector



MODEL: R80DCT8A[1]

ORDERING INFORMATION

- Code number: R80DCT8A[1]
Specify a code from below for [1].
(e.g. R80DCT8A/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[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)
Downloadable at our web site.
For connecting to PC, use commercially available Mini-B type USB cable. (provided by user)

GENERAL SPECIFICATIONS

Connection

Output: Separable tension clamp terminal

Internal bus, internal power, excitation power supply:

Connected to internal bus connector

Isolation: Output or exc. supply to internal bus or internal power

Module address: With rotary switch

Terminating resistor: Built-in (DIP Switch, default: disable)

Status indicator: Bi-color (red/green) LED; Refer to the instruction manual.

Discrete output status indicators: Green LED; Refer to the instruction manual.

OUTPUT SPECIFICATIONS

Module type: Discrete output, 8 points

Common: Negative common (NPN) per 8 points

Maximum outputs applicable at once: No limit (at 24 V DC)

Number of output: 8 points

Rated load voltage: 24 V DC $\pm 10\%$

Rated output current: 0.1 A per point, 0.8 A per common

Residual voltage: ≤ 0.5 V

Leakage current: ≤ 0.1 mA

ON delay: ≤ 0.2 msec.

OFF delay: ≤ 0.5 msec.

With shortcircuit protection

With overheat protection

(When driving an inductive load, connect a diode in parallel with the load.)

Output when communication is lost:

Hold output (the previous output received normally is held)

Clear output (output is fixed to OFF)

(Settable with PC configurator)

(Factory setting: Hold output)

INSTALLATION

Max. current consumption: 120 mA

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: 80 g (0.18 lb)

PERFORMANCE

Power output (output connector): Rated current 3 A DC
(rated current 3 A for internal fuse (slow blow fuse i²t
(A²sec.) max. 5.04)

Insulation resistance: ≥ 100 M Ω with 500 V DC

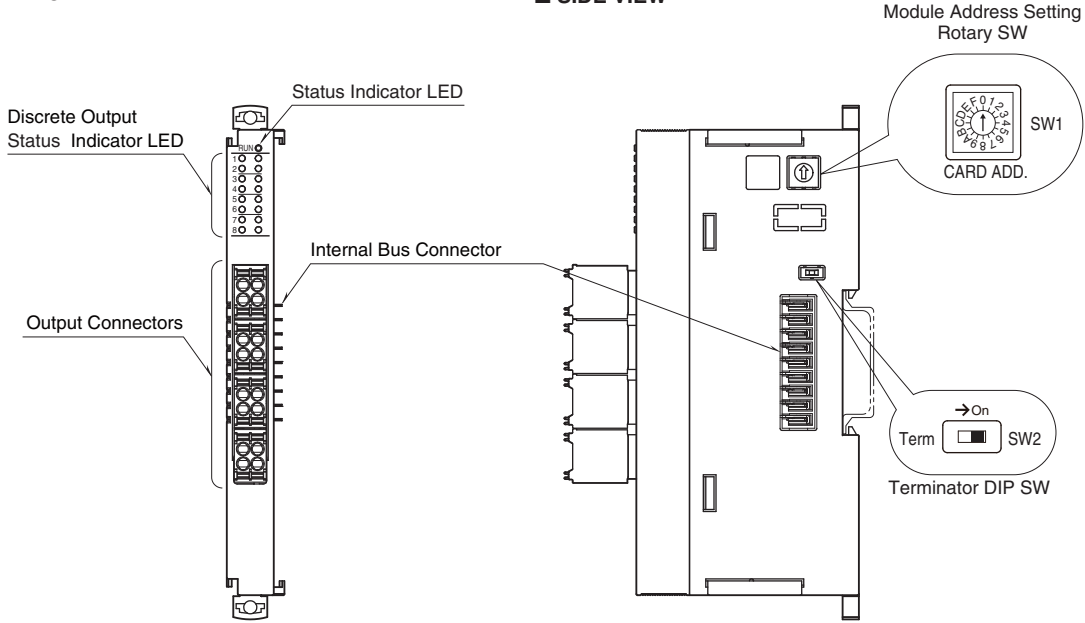
Dielectric strength: 1500V AC @1 minute

(output or exc. supply to internal bus or internal power to ground)

EXTERNAL VIEW

■ FRONT VIEW

■ SIDE VIEW



WIRING

• OUTPUT CONNECTOR

Unit side connector: Separable tension clamp terminal

Cable side connector: DFMC1,5/2-ST-3,5 (Phoenix Contact)
(included in the package)

Applicable wire size: 0.2 – 1.5 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)
- A1–10 1.0 mm² (Phoenix Contact)
- A1,5–10 1.5 mm² (Phoenix Contact)

| | | PIN No. | ID | FUNCTION |
|----|------|---------|------|---------------------------|
| 1 | Do 1 | 1 | Do 1 | OUTPUT 1 |
| 2 | Do 2 | 2 | Do 2 | OUTPUT 2 |
| 3 | Do 3 | 3 | Do 3 | OUTPUT 3 |
| 4 | Do 4 | 4 | Do 4 | OUTPUT 4 |
| 5 | Do 5 | 5 | Do 5 | OUTPUT 5 |
| 6 | Do 6 | 6 | Do 6 | OUTPUT 6 |
| 7 | Do 7 | 7 | Do 7 | OUTPUT 7 |
| 8 | Do 8 | 8 | Do 8 | OUTPUT 8 |
| 9 | 0 V | 9 | 0 V | Excitation supply 0 V DC |
| 10 | 0 V | 10 | 0 V | Excitation supply 0 V DC |
| 11 | 24 V | 11 | 24 V | Excitation supply 24 V DC |
| 12 | 24 V | 12 | 24 V | Excitation supply 24 V DC |
| 13 | NC | 13 | NC | No connection |
| 14 | NC | 14 | NC | No connection |
| 15 | NC | 15 | NC | No connection |
| 16 | NC | 16 | NC | No connection |

OPERATING MODE SETTING

• Module address setting

Module address: Selectable between 0 and F, with rotary switch

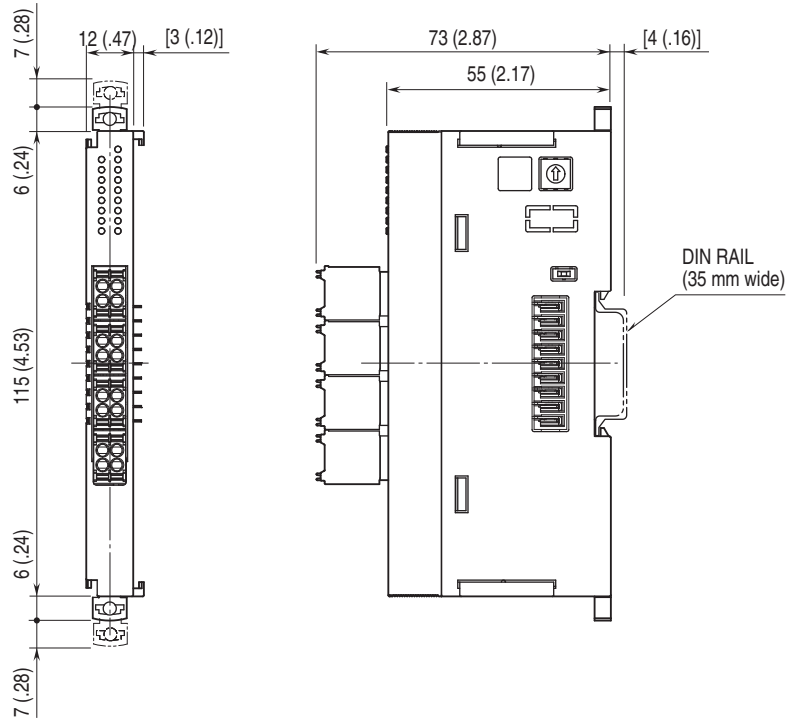
(Factory setting: 0)

• Terminator DIP SW

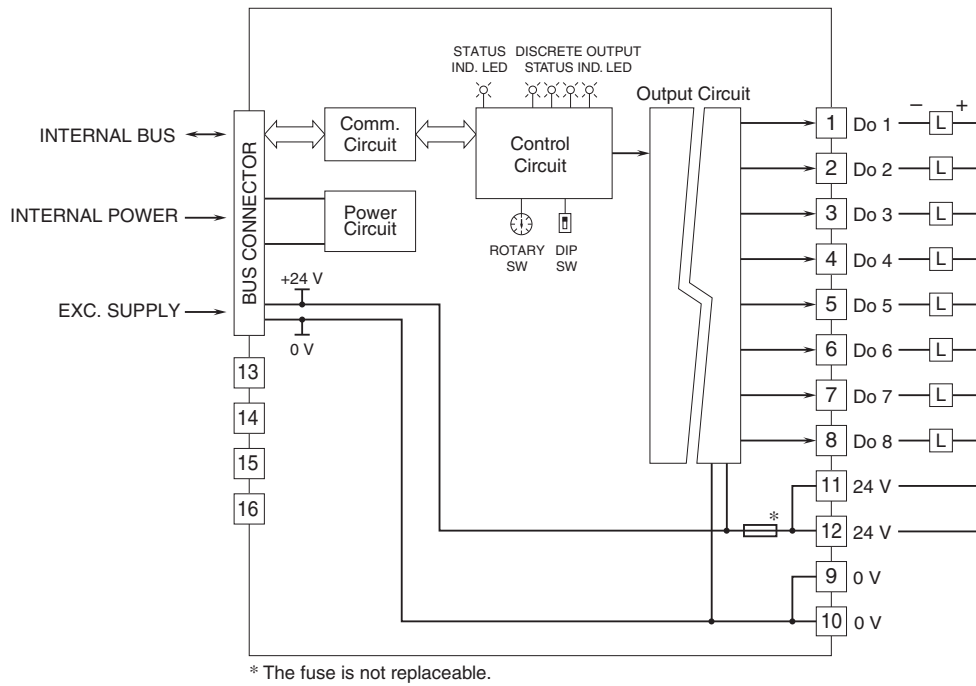
| TERMINATOR SW | SW2 |
|---------------|-----|
| Without (*) | OFF |
| With | ON |

(*) Factory setting

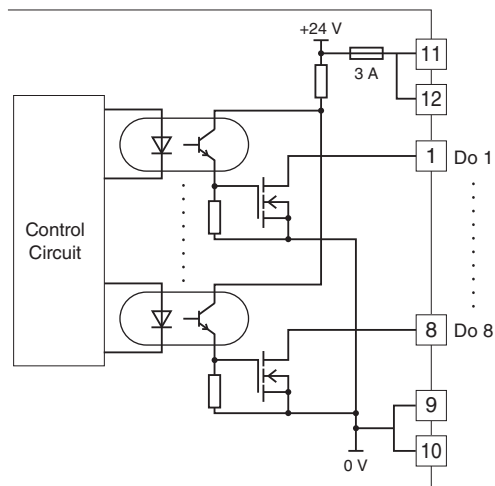
EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ OUTPUT CIRCUIT



Specifications are subject to change without notice.