

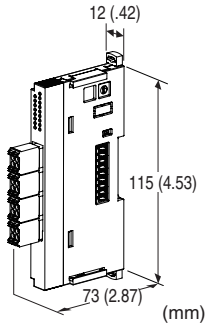
## Remote I/O R80 Series

### NPN DISCRETE INPUT MODULE, 8 points

(tension clamp terminal block)

#### Functions & Features

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



## MODEL: R80DAT8A[1]

### ORDERING INFORMATION

- Code number: R80DAT8A[1]  
Specify a code from below for [1].  
(e.g. R80DAT8A/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

**Input:** Separable tension clamp terminal

**Internal bus, internal power, excitation power supply:**

Connected to internal bus connector

**Isolation:** Input 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 input status indicators:** Green LED; Refer to the instruction manual.

### INPUT SPECIFICATIONS

**Module type:** Discrete input, 8 points

**Common:** Positive common (NPN)

**Number of input:** 8 points

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

**Rated input voltage:** 24 V DC  $\pm 10\%$ ; ripple 5 %p-p max.

**ON voltage / current:**  $\geq 15$  V DC (input - 24 V) /  $\geq 2.3$  mA

**OFF voltage / current:**  $\leq 5$  V DC (input - 24 V) /  $\leq 1$  mA

**Input current:**  $\leq 4.5$  mA per point at 24 V DC

**Input resistance:** Approx. 5.7 k $\Omega$

**ON delay:**  $\leq 0.2$  msec.

**OFF delay:**  $\leq 0.5$  msec.

**Read rate:** 100  $\mu$ sec., 400  $\mu$ sec., 800  $\mu$ sec., 4 msec., 8 msec., 16 msec., 40 msec. (Configurable with PC configurator) (Factory setting: 100  $\mu$ sec. )

### INSTALLATION

**Max. current consumption:** 100 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 (input connector):** Rated current 3 A DC (rated current 3 A for internal fuse (slow blow fuse  $i^2t$  (A<sup>2</sup>sec.) max. 5.04)

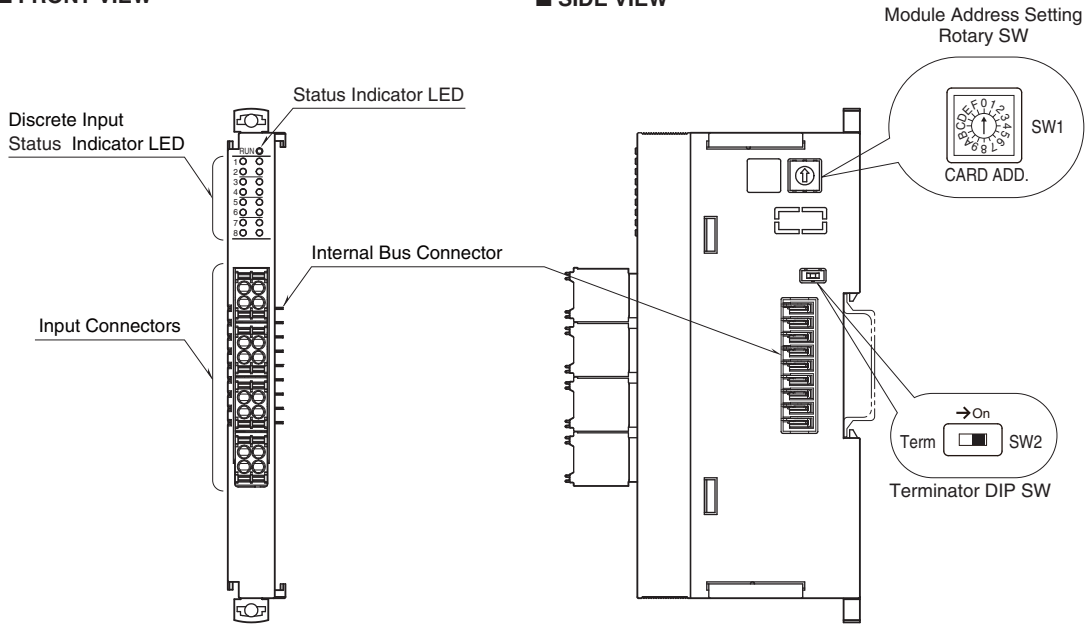
**Insulation resistance:**  $\geq 100$  M $\Omega$  with 500 V DC

**Dielectric strength:** 1500 V AC @ 1 minute  
(input or exc. supply to internal bus or internal power to ground)

**EXTERNAL VIEW**

■ FRONT VIEW

■ SIDE VIEW



## WIRING

### • INPUT 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 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)
- A1–10 1.0 mm<sup>2</sup> (Phoenix Contact)
- A1,5–10 1.5 mm<sup>2</sup> (Phoenix Contact)

		PIN No.	ID	FUNCTION
1	Di 1	1	Di 1	INPUT 1
2	Di 2	2	Di 2	INPUT 2
3	Di 3	3	Di 3	INPUT 3
4	Di 4	4	Di 4	INPUT 4
5	Di 5	5	Di 5	INPUT 5
6	Di 6	6	Di 6	INPUT 6
7	Di 7	7	Di 7	INPUT 7
8	Di 8	8	Di 8	INPUT 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

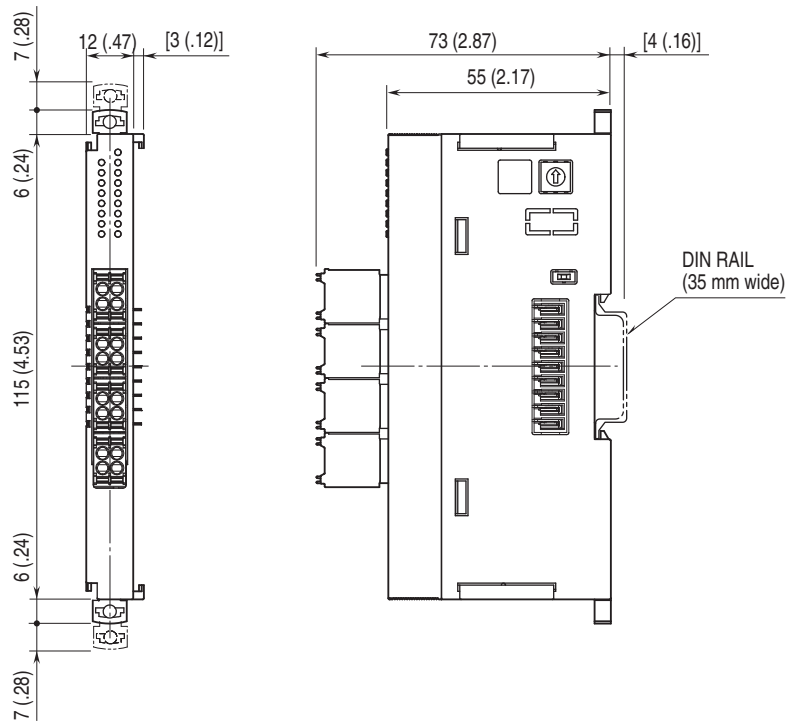
(Factory setting: 0)

### • Terminator DIP SW

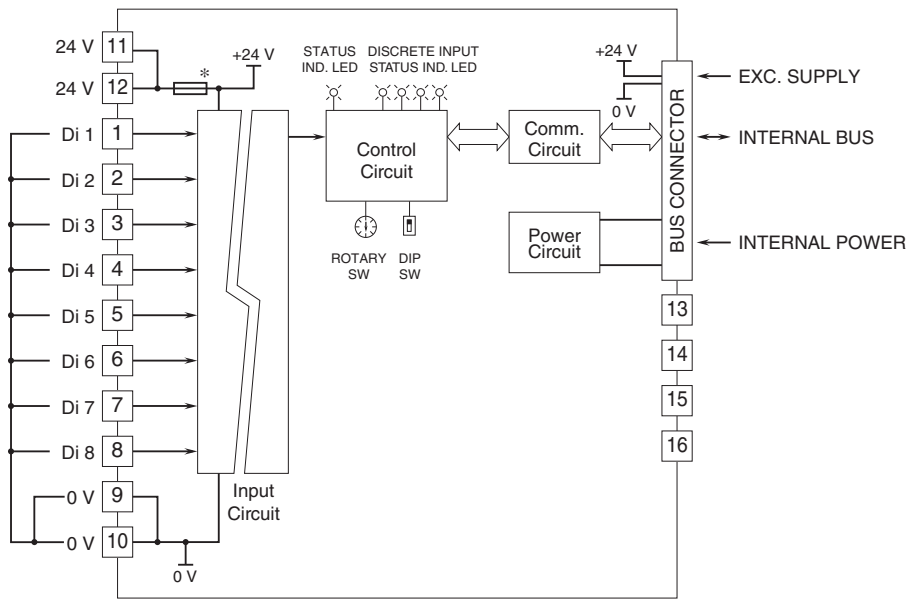
TERMINATOR SW	SW2
Without (*)	OFF
With	ON

(\*) Factory setting

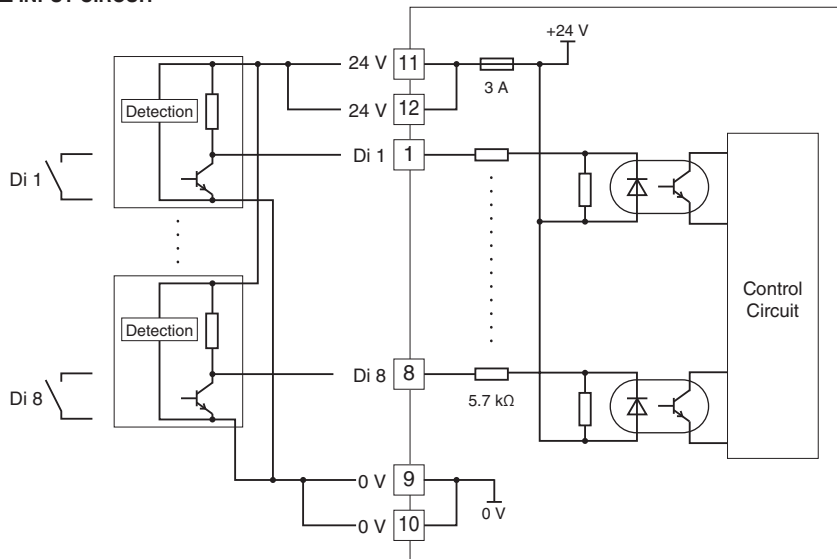
**EXTERNAL DIMENSIONS** unit: mm [inch]



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



### ■ INPUT CIRCUIT



Specifications are subject to change without notice.