

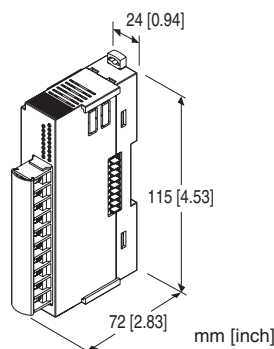
Remote I/O R8 Series

NPN DISCRETE INPUT MODULE, 8 points

(screw terminal block)

Functions & Features

- 8 channels for discrete input, compact size remote I/O module
- M3 screw terminal connection



MODEL: R8-DAN8A2[1]

ORDERING INFORMATION

- Code number: R8-DAN8A2[1]

Specify a code from below for [1].

- (e.g. R8-DAN8A2/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 cable (model: MCN-CON or COP-US)
- PC configurator software (model: R8CFG)

Downloadable at our web site.

GENERAL SPECIFICATIONS

Connection

- **Input:** M3 screw terminals (torque: 0.6 N·m)
- **Excitation supply, internal bus:**

Connected to internal bus connector

- **Internal power:** Supplied from internal bus connector

Solderless terminal: Refer to the drawing at the end of the section.

Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd., Nichifu Co., Ltd.

Applicable wire size: 0.3 to 0.75 mm² (AWG 22 to 20)

Screw terminal: Nickel-plated steel

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

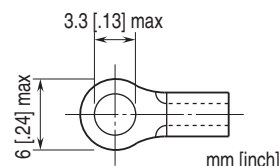
Module address: With DIP switch

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.

■ Recommended solderless terminal size - M3



INPUT SPECIFICATIONS

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: ≥ 15 V DC (input - 24V) / ≥ 2.3 mA

OFF voltage / current: ≤ 5 V DC (input - 24V) / ≤ 1 mA

Input current: ≤ 4.5 mA per point at 24 V DC

Input resistance: Approx. 5.7 k Ω

ON delay: ≤ 2.0 msec.

OFF delay: ≤ 2.0 msec.

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: 110 g (0.24 lb)

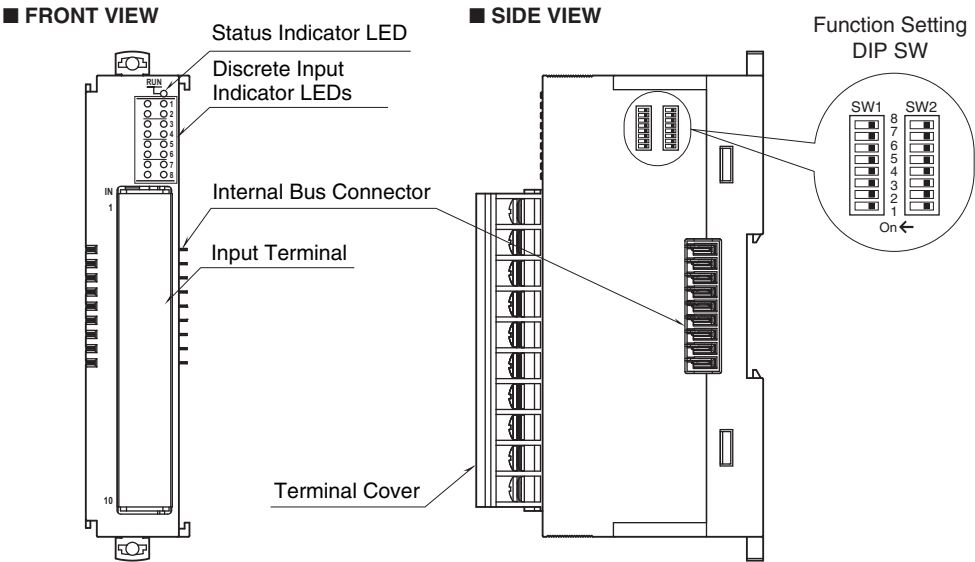
PERFORMANCE

Data allocation: 1
Module addresses in use: 1
Power output (input terminal): Rated current 0.5 A DC per channel (rated current 3 A for internal fuse (slow blow fuse i^2t (A²sec.) max. 5.04); Total: 3 A DC
Insulation resistance: $\geq 100\text{ M}\Omega$ with 500 V DC
Dielectric strength: 1500 V AC @ 1 minute
(input or exc. supply to internal bus or internal power to ground)

STANDARDS & APPROVALS

EU conformity:
EMC Directive
EMI EN 61000-6-4
EMS EN 61000-6-2
RoHS Directive

EXTERNAL VIEW



CONNECTION DIAGRAMS

	PIN No.	ID	FUNCTION
	1	Di 1	Input 1
	2	Di 2	Input 2
	3	Di 3	Input 3
	4	Di 4	Input 4
	5	Di 5	Input 5
	6	Di 6	Input 6
	7	Di 7	Input 7
	8	Di 8	Input 8
	9	24V	Excitation supply (+)
	10	0V	Excitation supply (-)

OPERATING MODE SETTING

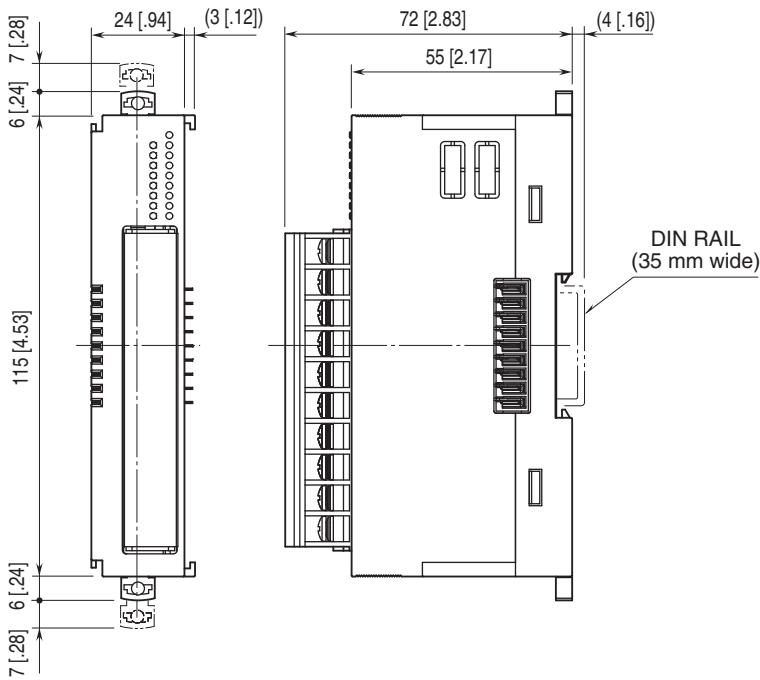
(*) Factory default setting
Note: Be sure to set unused SW2-1 through 2-5, 2-7 and 2-8 to OFF

■ MODULE ADDRESS (SW1)
SW1-1 through 1-4 determine the tenth place digit, while SW1-5 through 1-8 do the ones place digit of the module address.
Address is selected between 0 to 31.
(Factory setting: 0)

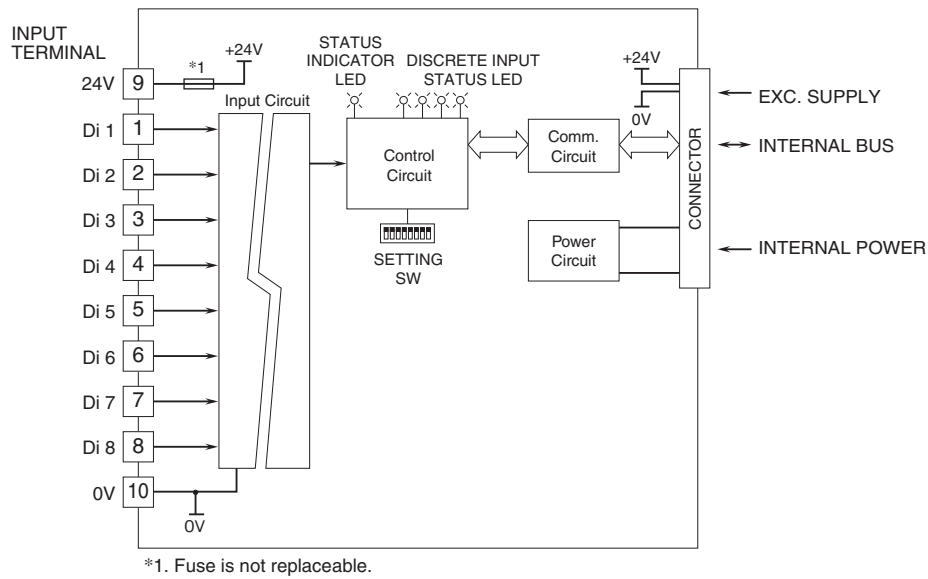
MODULE ADDRESS	SW1				
	×10	1	2	3	4
	×1	5	6	7	8
0		OFF	OFF	OFF	OFF
1		OFF	OFF	OFF	ON
2		OFF	OFF	ON	OFF
3		OFF	OFF	ON	ON
4		OFF	ON	OFF	OFF
5		OFF	ON	OFF	ON
6		OFF	ON	ON	OFF
7		OFF	ON	ON	ON
8		ON	OFF	OFF	OFF
9		ON	OFF	OFF	ON

TERMINATOR (SW2)	
TERMINATOR	SW2-6
Without (*)	OFF
With	ON

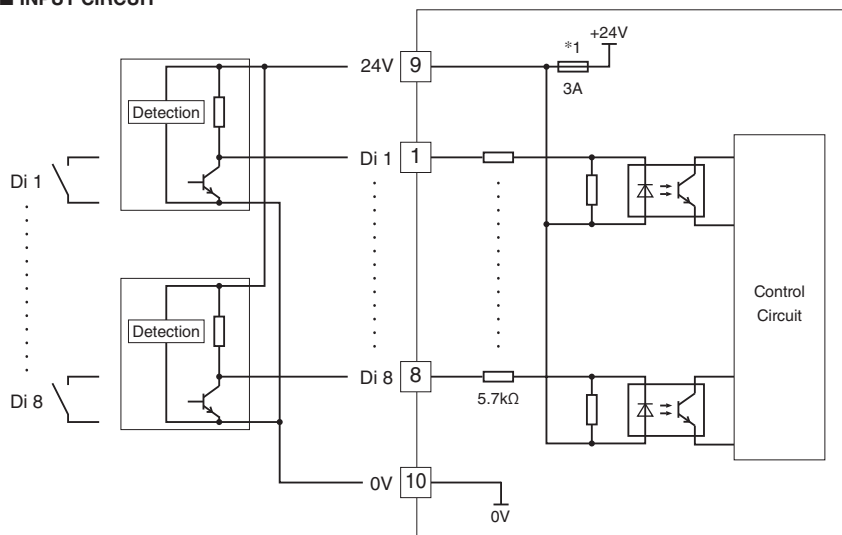
EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ INPUT CIRCUIT



Specifications are subject to change without notice.