Remote I/O R8 Series

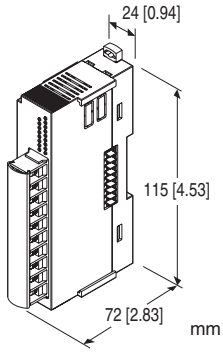
PNP TRANSISTOR OUTPUT MODULE, 8 points

(with shortcircuit protection, screw terminal block)

Functions & Features

• 8 channels for discrete output, compact size remote I/O module

• M3 screw terminal connection



CE

MODEL: R8-DCN8B2[1]

ORDERING INFORMATION

• Code number: R8-DCN8B2[1]

Specify a code from below for [1].

(e.g. R8-DCN8B2/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

• **Output**: M3 screw terminals (torque: 0.6 N·m)

• **Excitation supply, internal bus**:
Connected to internal bus connector

• **Internal power**: Via 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 mm^2 (AWG 22 to 20)

Screw terminal: Nickel-plated steel

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

Module address: With DIP switch

Output at the loss of communication: With the side DIP SW

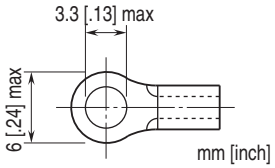
Terminating resistor: Built-in (DIP Switch, default: disable)

Configuration mode: With DIP switches on the side panel

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

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

■Recommended solderless terminal size - M3



OUTPUT SPECIFICATIONS

Common: Negative common (PNP) 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 ±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: ≤ 0.5 msec.

OFF delay: ≤ 1.5 msec.

With shortcircuit protection

With overheat protection

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

INSTALLATION

Max. current consumption: 80 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)

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PERFORMANCE

Data allocation: 1

Module addresses in use: 1

Power output (output terminal): Rated current 0.5 A DC per channel (rated current 3 A for internal fuse (slow blow fuse i^2t (A^2sec.) max. 5.04); Total: 3 A DC

Insulation resistance: ≥ 100 MΩ with 500 V DC

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

STANDARDS & APPROVALS

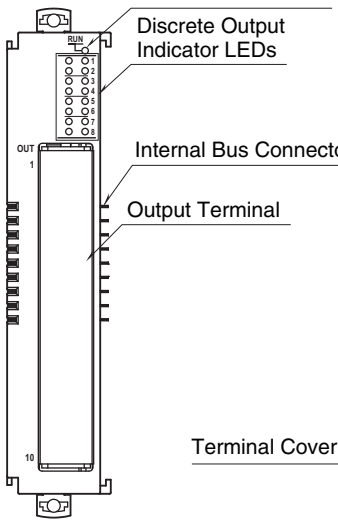
EU conformity:

EMC Directive
- EMI EN 61000-6-4
- EMS EN 61000-6-2

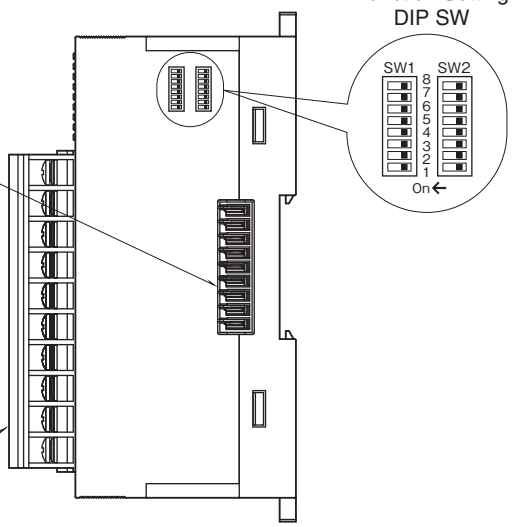
RoHS Directive

EXTERNAL VIEW

■ **FRONT VIEW**



■ **SIDE VIEW**



CONNECTION DIAGRAMS

PIN No.	ID	FUNCTION
1	Do 1	Output 1
2	Do 2	Output 2
3	Do 3	Output 3
4	Do 4	Output 4
5	Do 5	Output 5
6	Do 6	Output 6
7	Do 7	Output 7
8	Do 8	Output 8
9	24V	Excitation supply (+)
10	0V	Excitation supply (–)

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OPERATING MODE SETTING

(*) Factory setting

Note: Be sure to set unused SW2-1 through 2-4 and 2-7 to OFF.

■Module Address

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

■ Output at the Loss of Communication

OUTPUT AT THE LOSS OF COMMUNICATION	SW2
	5
Output Hold (*) (last data correctly received is hold)	OFF
Stop output (Output fixed at OFF)	ON

■ Terminator DIP SW

TERMINATOR DIP SW	SW2
	6
Without (*)	OFF
With	ON

■ Configuration Mode

CONFIGURATION MODE	SW2
	8
DIP switch setting (*)	OFF
PC Configurator and communication	ON

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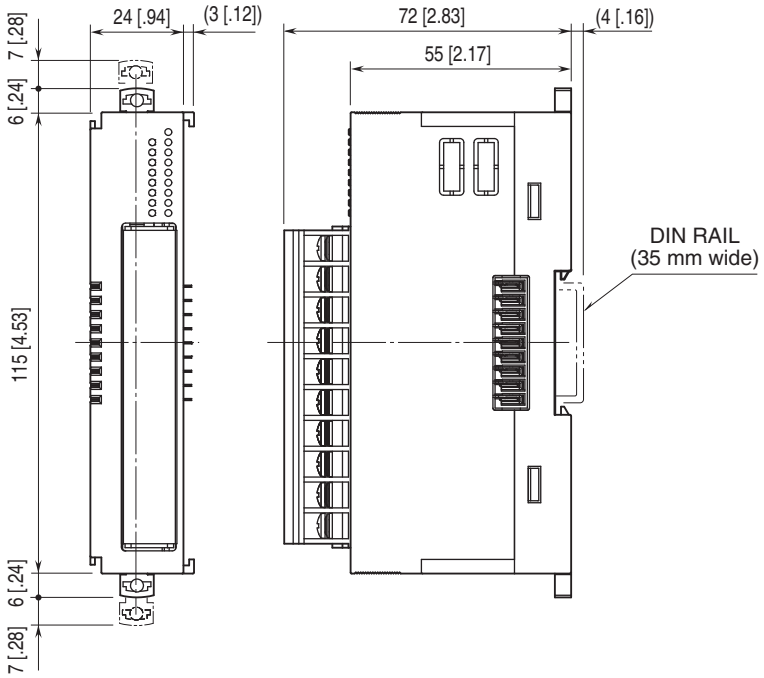
EXTERNAL DIMENSIONS unit: mm [inch]



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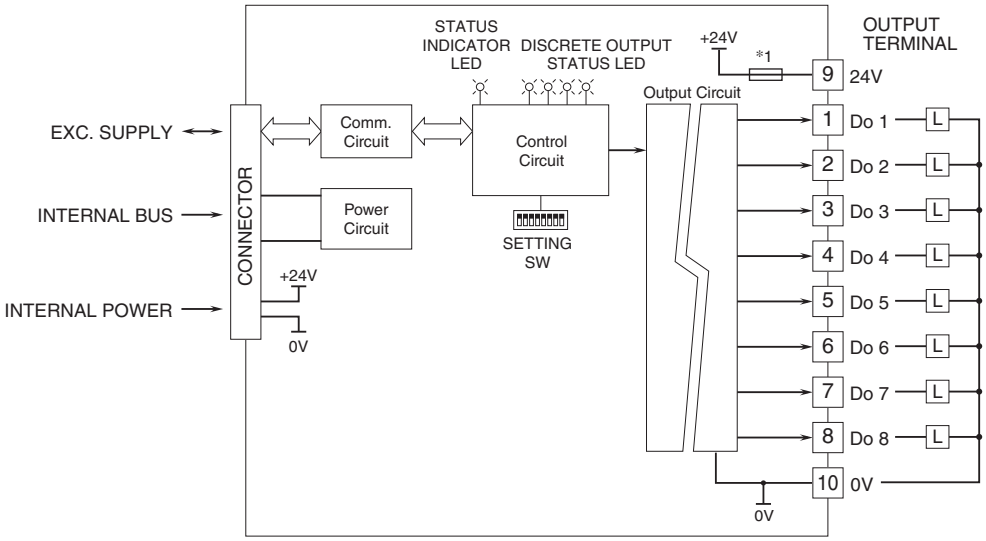
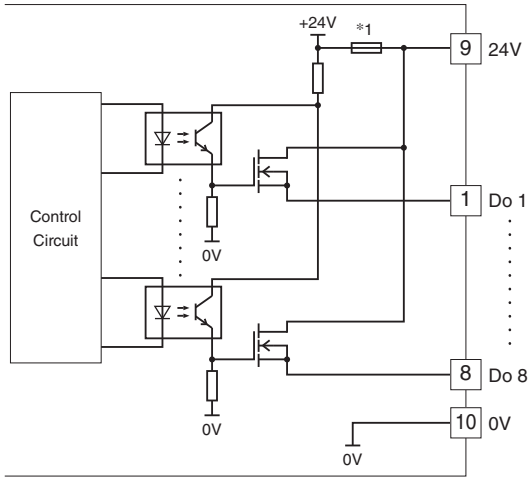
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*1. Fuse is not replaceable.

■ **OUTPUT CIRCUIT**



⚠ Specifications are subject to change without notice.

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