

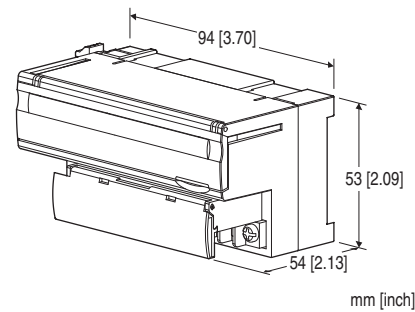
Remote I/O R7 Series

DeviceNet® I/O MODULE

(relay contact output for extension, 8 points)

Functions & Features

- 8 points relay contact output extension module connected to DeviceNet I/O module (model: R7D)



MODEL:R7D-EC8C[1]

ORDERING INFORMATION

- Code number: R7D-EC8C[1]
- Specify a code from below for [1].
(e.g. R7D-EC8C/Q)
- Specify the specification for option code /Q
(e.g. /C01)

I/O TYPE

EC8C: Relay contact output for extension, 8 points

[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
- /C03:** Rubber coating

GENERAL SPECIFICATIONS

Connection: M3 separable screw terminal (torque 0.5 N·m)

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: 0.25 to 1.65 mm² (AWG 22 to 16)

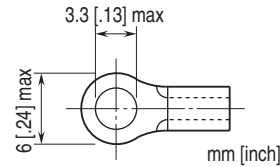
Screw terminal: Nickel-plated steel

Housing material: Flame-resistant resin (gray)

Isolation: Output to internal circuits

Discrete output status indicator LED: LED turns on with output ON

■Recommended solderless terminal



OUTPUT SPECIFICATIONS

Common: 1 common per 4 points (4 terminals)

Common current: Max. 8 A (4 terminals total)

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

Output supply voltage/current: 24 V DC ±10 %/ approx. 40 mA

Rated load: 250 V AC^{*1} @ 2 A (cos θ = 1)

30 V DC @ 2 A (resistive load)

Electrical life 10⁵ cycles (rate 30/min.)

*1. When it is used as a product relevant to EU directive, it should be used under the Installation Category I, 125 V AC or less.

Maximum switching voltage: 250 V AC, 30 V DC

Maximum switching power: 500 VA (AC), 60 W (DC)

Minimum applicable load: 24 V DC @ 5 mA

Mechanical life: 2 × 10⁷ cycles (300 cycles per min.)

When driving an inductive load, external contact protection and noise quenching recommended.

ON delay time: ≤ 10 msec.

OFF delay time: ≤ 10 msec.

INSTALLATION

Current Consumption:

Approx. 20 mA @ 24 V DC

Approx. 50 mA @ 11 V DC

Relay driving current: Approx. 40 mA

Operating temperature: -10 to +55°C (14 to 131°F)

Storage temperature: -20 to +65°C (-4 to +149°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Atmosphere: No corrosive gas or heavy dust

Mounting: DIN rail (35 mm rail)

Weight: 150 g (0.33 lb)

PERFORMANCE

Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute (output to internal circuits)

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

Low Voltage Directive

EN 61010-1, EN 61010-2-201

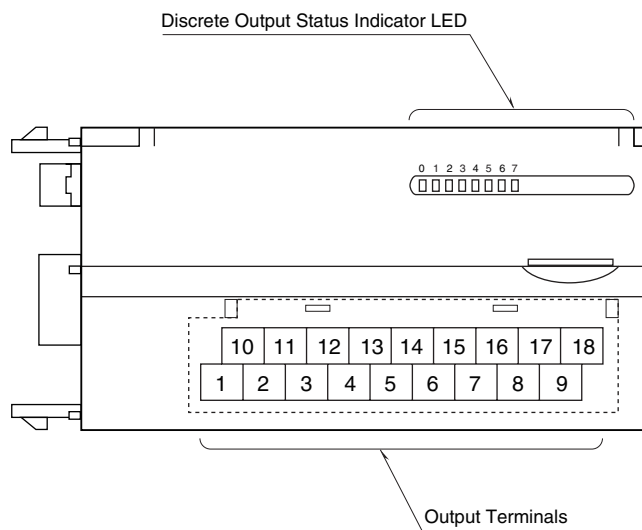
Measurement Category II (output)

Pollution Degree 2

Output to communication: Basic insulation (150 V)

RoHS Directive

EXTERNAL VIEW



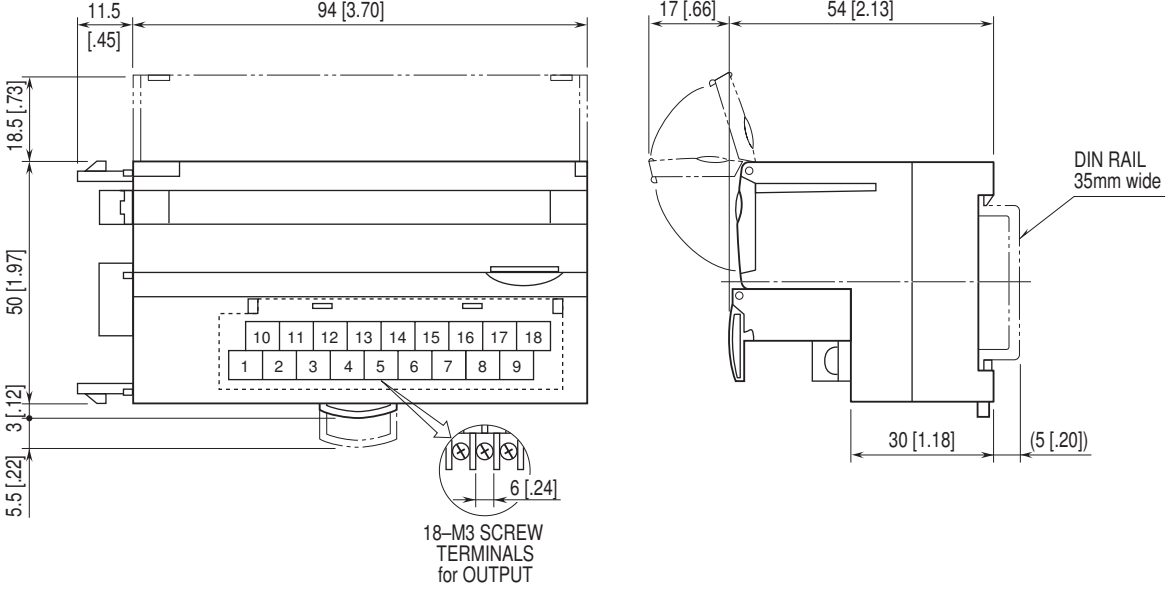
TERMINAL ASSIGNMENTS

■ OUTPUT TERMINAL ASSIGNMENT

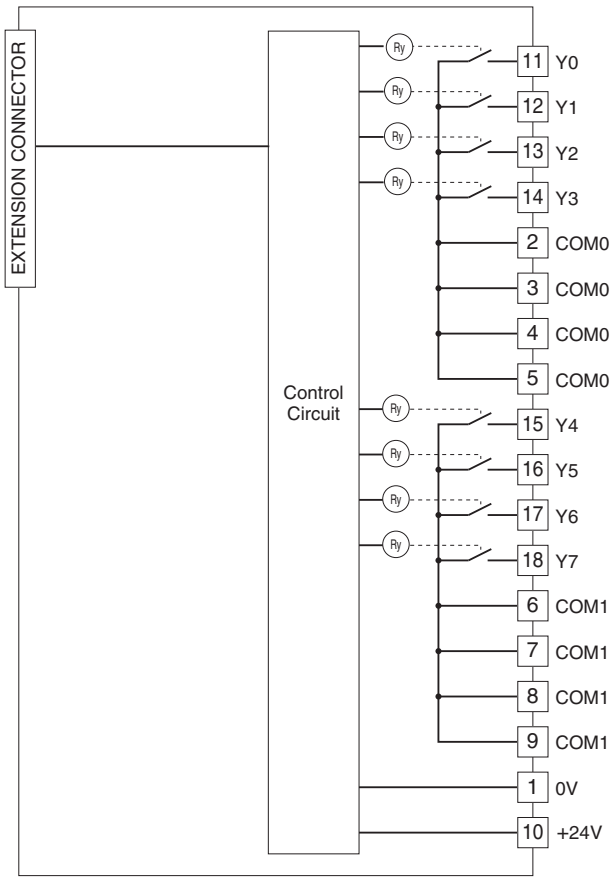
10	11	12	13	14	15	16	17	18
+24V	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
1	2	3	4	5	6	7	8	9
0V	COM0	COM0	COM0	COM0	COM1	COM1	COM1	COM1

NO.	ID	FUNCTION	NO.	ID	FUNCTION
1	0V	0V	10	+24V	24V DC
2	COM0	Common 0	11	Y0	Output 0
3	COM0	Common 0	12	Y1	Output 1
4	COM0	Common 0	13	Y2	Output 2
5	COM0	Common 0	14	Y3	Output 3
6	COM1	Common 1	15	Y4	Output 4
7	COM1	Common 1	16	Y5	Output 5
8	COM1	Common 1	17	Y6	Output 6
9	COM1	Common 1	18	Y7	Output 7

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

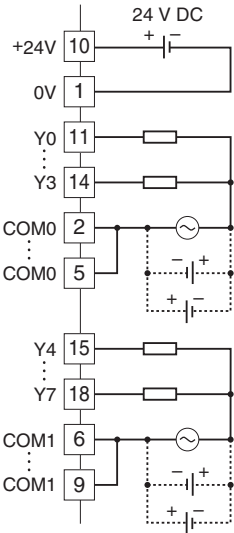


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

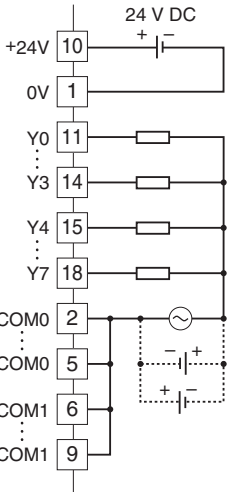


■ Output Connection Example

4 points / common



8 points / common



Specifications are subject to change without notice.