

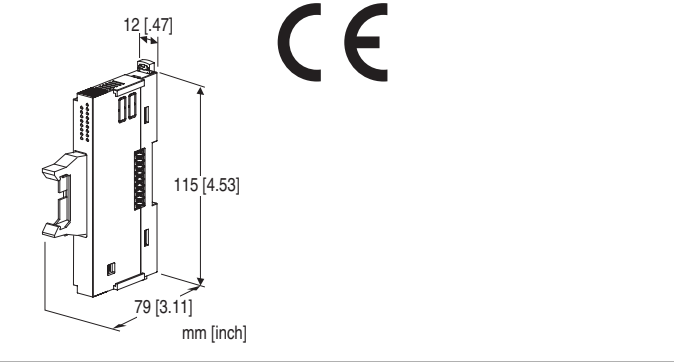
Remote I/O R8 Series

NPN TRANSISTOR OUTPUT MODULE, 16 points

(with shortcircuit protection)

Functions & Features

- 16 channels for discrete output, compact size remote I/O module
- 20 pin MIL connector



MODEL: R8-DCM16A[1]

ORDERING INFORMATION

- Code number: R8-DCM16A[1]
Specify a code from below for [1].
(e.g. R8-DCM16A/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 M-System's web site.)

/C01: Silicone coating

/C02: Polyurethane coating

RELATED PRODUCTS

- PC configurator software (model: R8CFG)
Downloadable at M-System's web site.
A dedicated cable is required to connect the module to the PC. Please refer to the internet software download site or the users manual for the PC configurator for applicable cable types.

GENERAL SPECIFICATIONS

Connection

- **Output:** 20-pin MIL connector

PWB connector (M-System)

Recommended socket XG5N-201 (Omron)

Recommended contact XG5W-0231 (Omron)

Applicable wire size AWG22, number of conductor 17, diameter of conductor 0.16 mm (The socket and contact are not included in the package. Refer to the specifications of the product.)

•Excitation supply, internal bus:

Connected to internal bus connector

•Internal power: Supplied from internal bus connector

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

Module address: With rotary switch

Output at the loss of communication: Selectable 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.

OUTPUT SPECIFICATIONS

Common: Negative common (NPN) per 16 points

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

Number of output: 16 points

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

Rated output current: 0.1 A per point, 1.6 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: 110 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: 65 g (2.3 oz)

PERFORMANCE

Data allocation: 1

Module addresses in use: 1

Power output (output connector): Rated current 3 A DC (rated current 3 A for internal fuse (slow blow fuse) i^2t (A²sec.) max. 5.04)

Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC
Dielectric strength: 1500V AC @1 minute
 (output or exc. supply to internal bus or internal power to ground)

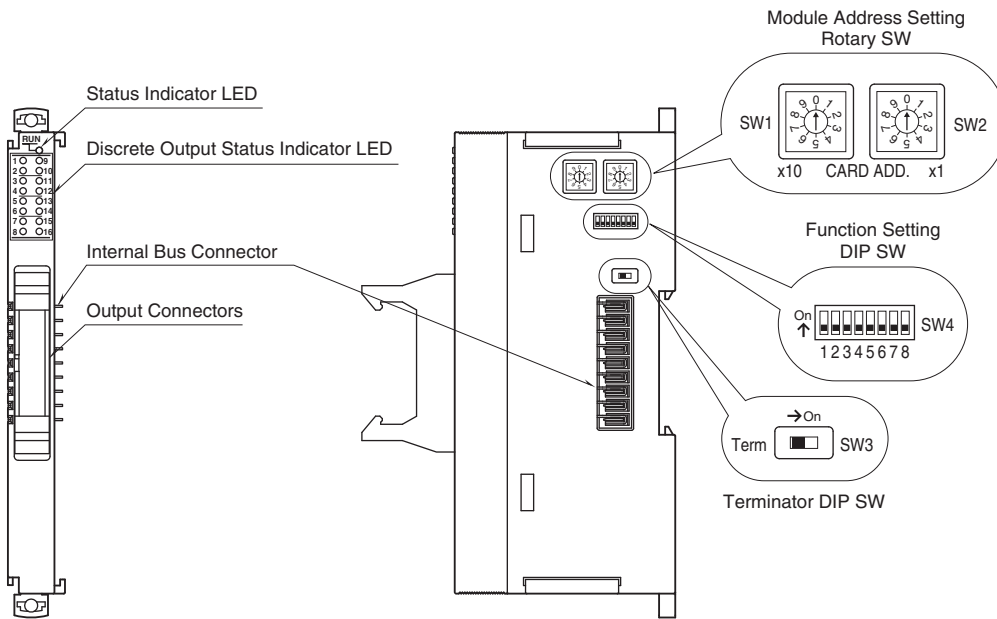
STANDARDS & APPROVALS

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

EXTERNAL VIEW

■ FRONT VIEW

■ SIDE VIEW



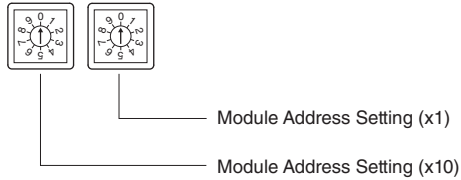
OPERATING MODE SETTING

(*) Factory setting

■ MODULE ADDRESS

The left switch determines the tenth place digit, while the right switch does the ones place digit of the address. Address is selected between 0 to 31.

(Factory setting: 0)



■ OUTPUT AT THE LOSS OF COMMUNICATION

OUTPUT AT THE LOSS OF COMMUNICATION	SW4-5
Output Hold (*) (last data correctly received is hold)	OFF
Stop output (Output fixed at OFF)	ON

Note: Be sure to set unused SW4-1 through 4, SW4-6, SW4-7

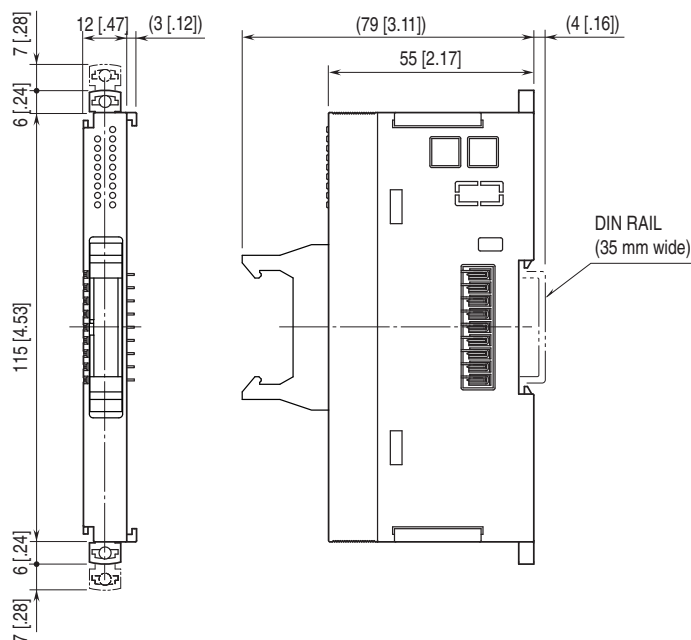
■ CONFIGURATION MODE

CONFIGURATION MODE	SW4-8
DIP switch setting (*)	OFF
PC Configurator and communicatio	ON

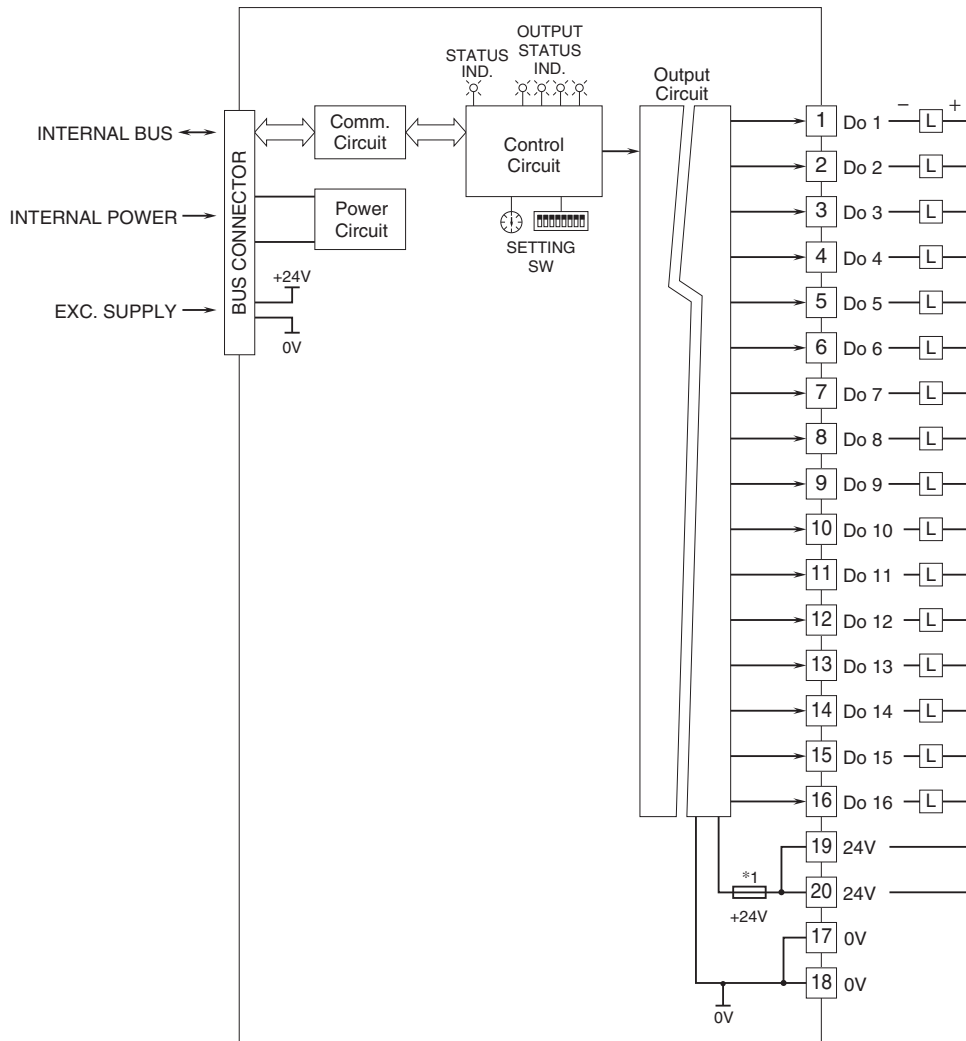
■ TERMINATOR DIP SW

TERMINATOR SW	SW3
Without (*)	OFF
With	ON

EXTERNAL DIMENSIONS unit: mm [inch]

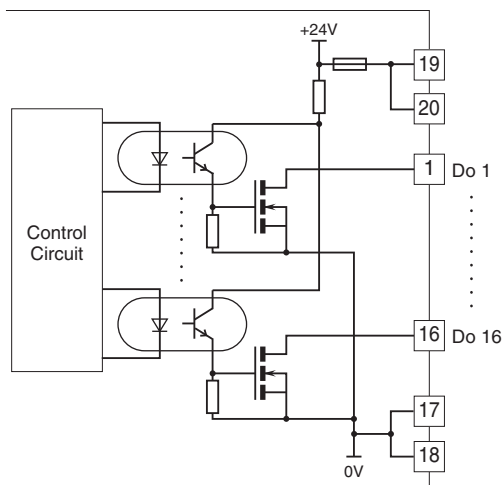


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*1. Fuse is not replaceable.

■ OUTPUT CIRCUIT





Specifications are subject to change without notice.