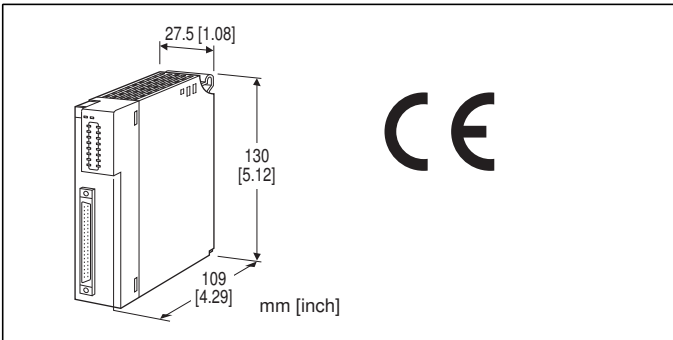


## Remote I/O R3 Series

### DISCRETE OUTPUT MODULE

(relay contact output, 16 points, connector type)



### MODEL: R3Y-DC16[1][2]

#### ORDERING INFORMATION

- Code number: R3Y-DC16[1][2]

Specify a code from below for each of [1] and [2].  
(e.g. R3Y-DC16W/CE/Q)

- Specify the specification for option code /Q  
(e.g. /C01)

#### NO. OF CHANNELS

16: 16

#### [1] COMMUNICATION MODE

S: Single  
W: Dual

#### [2] OPTIONS (multiple selections)

##### Standards & Approvals

blank: Without CE

/CE: CE marking

##### Other Options

blank: none

/Q: Option other than the above (specify the specification)

#### SPECIFICATIONS OF OPTION: Q

**COATING (For the detail, refer to M-System's web site.)**

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

#### RELATED PRODUCTS

- Connector terminal block (model: CNT)
- Special cable with 40-pin connector (model: FCN)

#### GENERAL SPECIFICATIONS

##### Connection

**Internal bus:** Via the Installation Base (model: R3-BSx)

**Output:** 40-pin connector (OTAX N365P040AU  
(Fujitsu FCN-365P040-AU...discontinued))

**Internal power:** Via the Installation Base (model: R3-BSx)

**Isolation:** Output to internal bus or internal power

**Output hold setting:** Setting for communication error with side DIP SW

**RUN indicator:** Bi-color (red/green) LED;

Red when the bus A operates normally;

Green when the bus B operates normally;

Amber when both buses operate normally.

**ERR indicator:** Green LED turns on in normal operating conditions.

**Output status indicator:** Red LED; turns on with the output ON.

#### OUTPUT SPECIFICATIONS

**Output:** Relay contact, 16 points

**Common:** All 16 points (8 terminals)

**Common current:** Max. 4A (total of 8 terminals)  
(Max. 1 A for one terminal)

**Rated load:** 250 V AC @ 0.5 A ( $\cos \phi = 1$ )

(Less than 50 V AC to conform with EU Directive)

30 V DC @ 0.5 A (resistive load)

**Maximum switching voltage:** 250 V AC or 30 V DC

**Maximum switching power:** 250 VA or 150 W

**Minimum load:** 1 V DC @ 1 mA

**Mechanical life:**  $2 \times 10^7$  cycles (300 cycles/min.)

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

#### INSTALLATION

**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:** Installation Base (model: R3-BSx)

**Weight:** 200 g (0.44 lb)

#### PERFORMANCE

**Data allocation:** 1

**Current consumption:** 180 mA

**Response time:**  $\leq 0.1$  sec.

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

**Dielectric strength:** 1500 V AC @ 1 minute

(output to internal bus or internal power)

2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

## STANDARDS & APPROVALS

### EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

## FUNCTIONS

### ■ OUTPUT HOLD or OUTPUT OFF

In normal conditions, the module outputs the signal from the preferred bus A.

When an error is detected, the output is switched to the data from the bus B.

#### • Output Hold

If both are in error, the module holds the signal and stands by until one of the communications recovers.

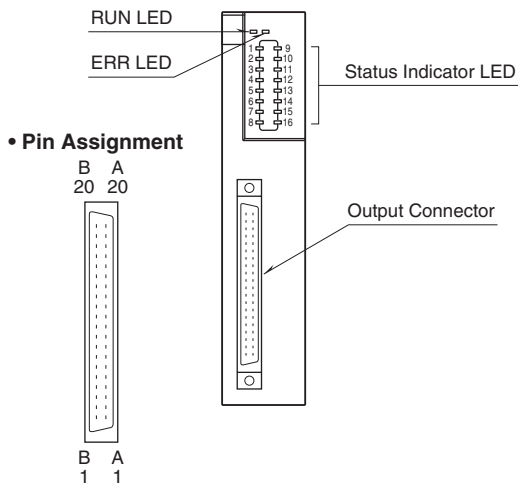
#### • Output OFF

If both are in error, the module outputs OFF signals and stands by until one of the communications recovers.

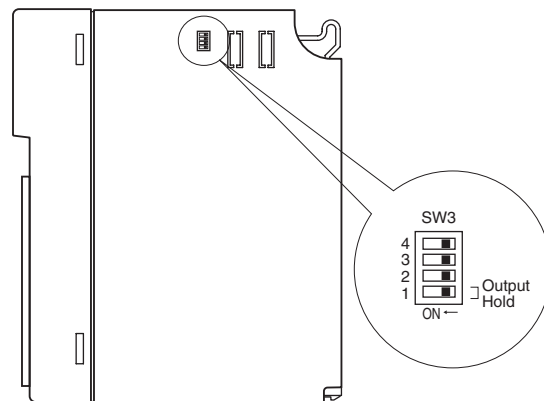
At the startup, it outputs OFF until the communication is established and normal data is received.

## EXTERNAL VIEW

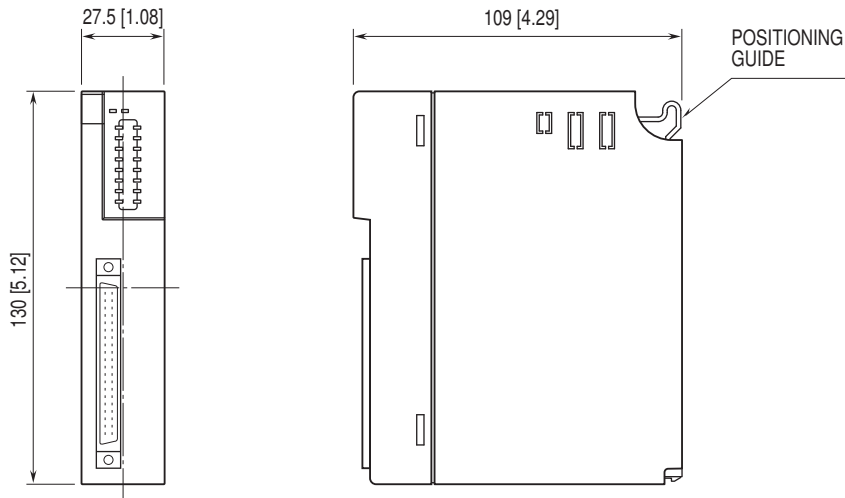
### ■ FRONT VIEW



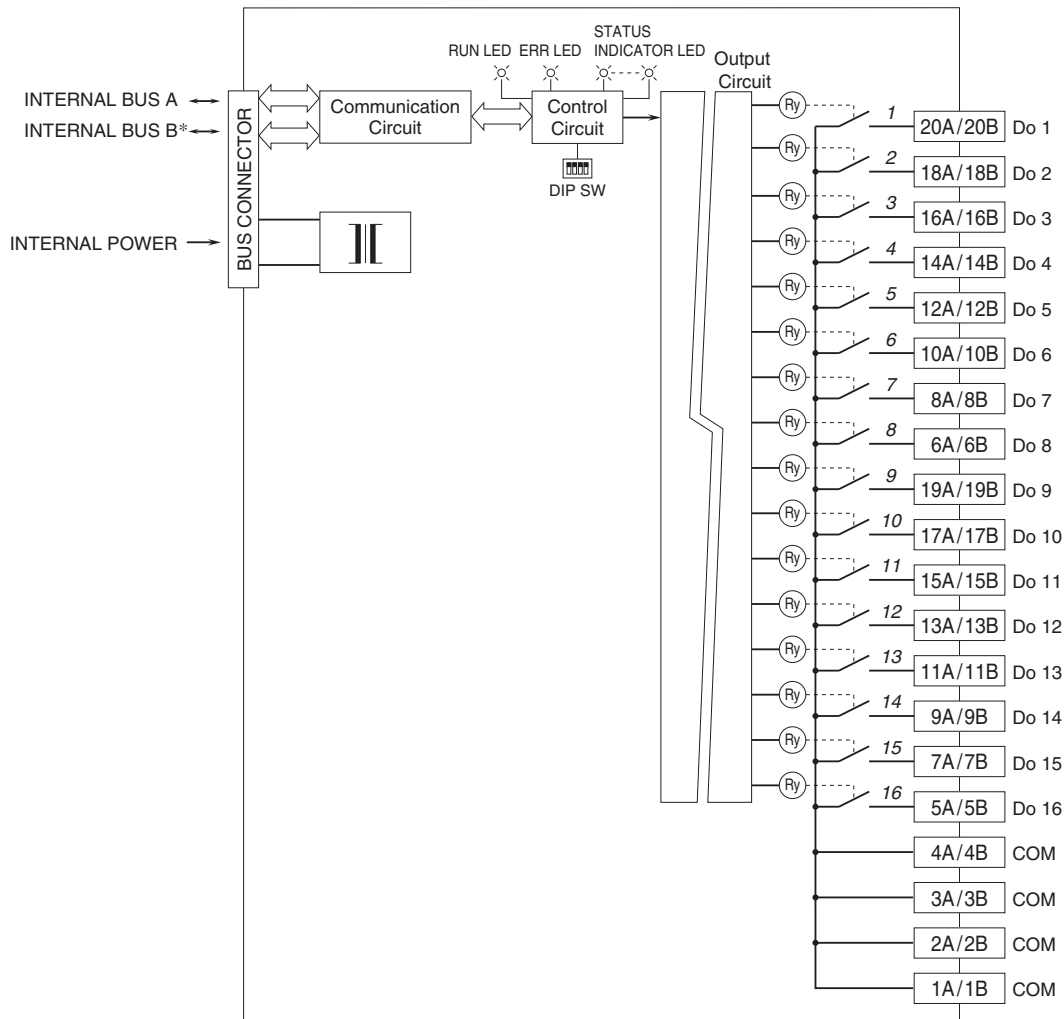
### ■ SIDE VIEW



## EXTERNAL DIMENSIONS unit: mm [inch]



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Numbers in italic indicate LED No.s assigned to the front panel LEDs.  
 \*For dual redundant communication.

**OUTPUT CONNECTOR (40-pin)**

PIN No.	ASSIGNMENT	PIN No.	ASSIGNMENT
1A	COM	1B	COM
2A	COM	2B	COM
3A	COM	3B	COM
4A	COM	4B	COM
5A	Do 16	5B	Do 16
6A	Do 8	6B	Do 8
7A	Do 15	7B	Do 15
8A	Do 7	8B	Do 7
9A	Do 14	9B	Do 14
10A	Do 6	10B	Do 6
11A	Do 13	11B	Do 13
12A	Do 5	12B	Do 5
13A	Do 12	13B	Do 12
14A	Do 4	14B	Do 4
15A	Do 11	15B	Do 11
16A	Do 3	16B	Do 3
17A	Do 10	17B	Do 10
18A	Do 2	18B	Do 2
19A	Do 9	19B	Do 9
20A	Do 1	20B	Do 1



Specifications are subject to change without notice.