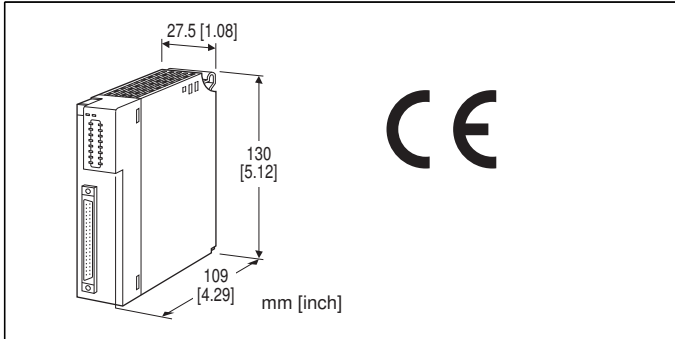


Remote I/O R3 Series

DISCRETE INPUT MODULE

(Di 16 points; with external excitation supply, connector type)



MODEL: R3Y-DA16A[1][2]

ORDERING INFORMATION

- Code number: R3Y-DA16A[1][2]
Specify a code from below for each of [1] and [2].
(e.g. R3Y-DA16AW/CE/Q)
- Specify the specification for option code /Q
(e.g. /C01)

NO. OF CHANNELS

16: 16

EXCITATION SUPPLY

A: External excitation

[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)

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

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

Isolation: Input to internal bus or internal power

Excitation monitor: Selectable with side DIP switch; ON/OFF setting available

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: Bi-color (red/green) LED;

Red with excitation abnormality;
Green in normal operating conditions.

Input status indicator: Red LED; turns on with the input ON.

Read rate: 1 / 5 / 10 / 20 / 50 / 70 / 100 / 200 msec.
selectable with DIP SW

INPUT SPECIFICATIONS

Number of input: 16 points

Isolation: Optical isolator

Input resistance: Approx. 4.4 kΩ

Common: Positive or negative common (NPN/PNP) per 16 points

Rated input voltage: 24 V DC +10/-15 %
(ripple 5 %p-p max.)

Rated input current: Approx. 5 mA

ON voltage/current: ≥ 11 V, ≥ 2.5 mA

OFF voltage/current: ≤ 6 V, ≤ 1.3 mA

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: 80 mA

Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 2000 V AC @ 1 minute
(input 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

•Excitation Monitor Active

The input is held at the last status when the loss of excitation is detected. The excitation must be connected across 4A/4B (or 3A/3B) and 2A/2B (or 1A/1B).

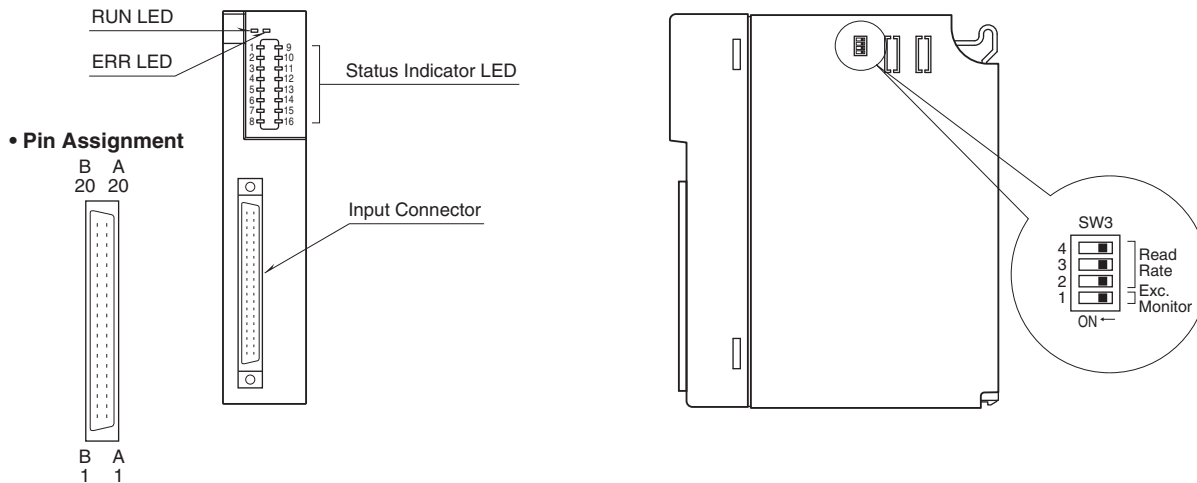
•Excitation Monitor Inactive

All input signals are turned off when the loss of excitation is detected.

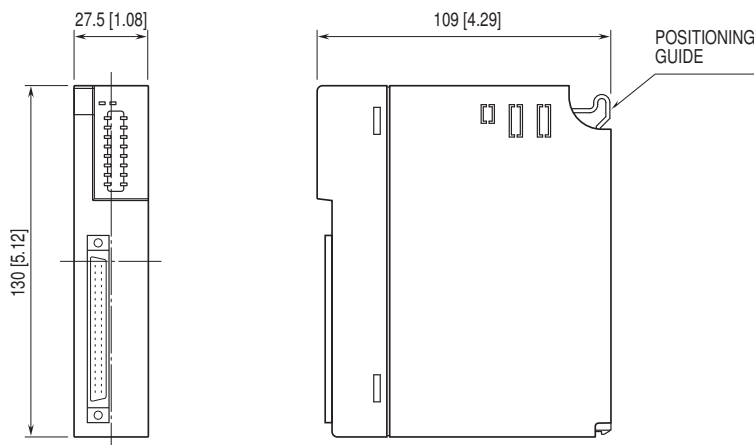
EXTERNAL VIEW

■ FRONT VIEW

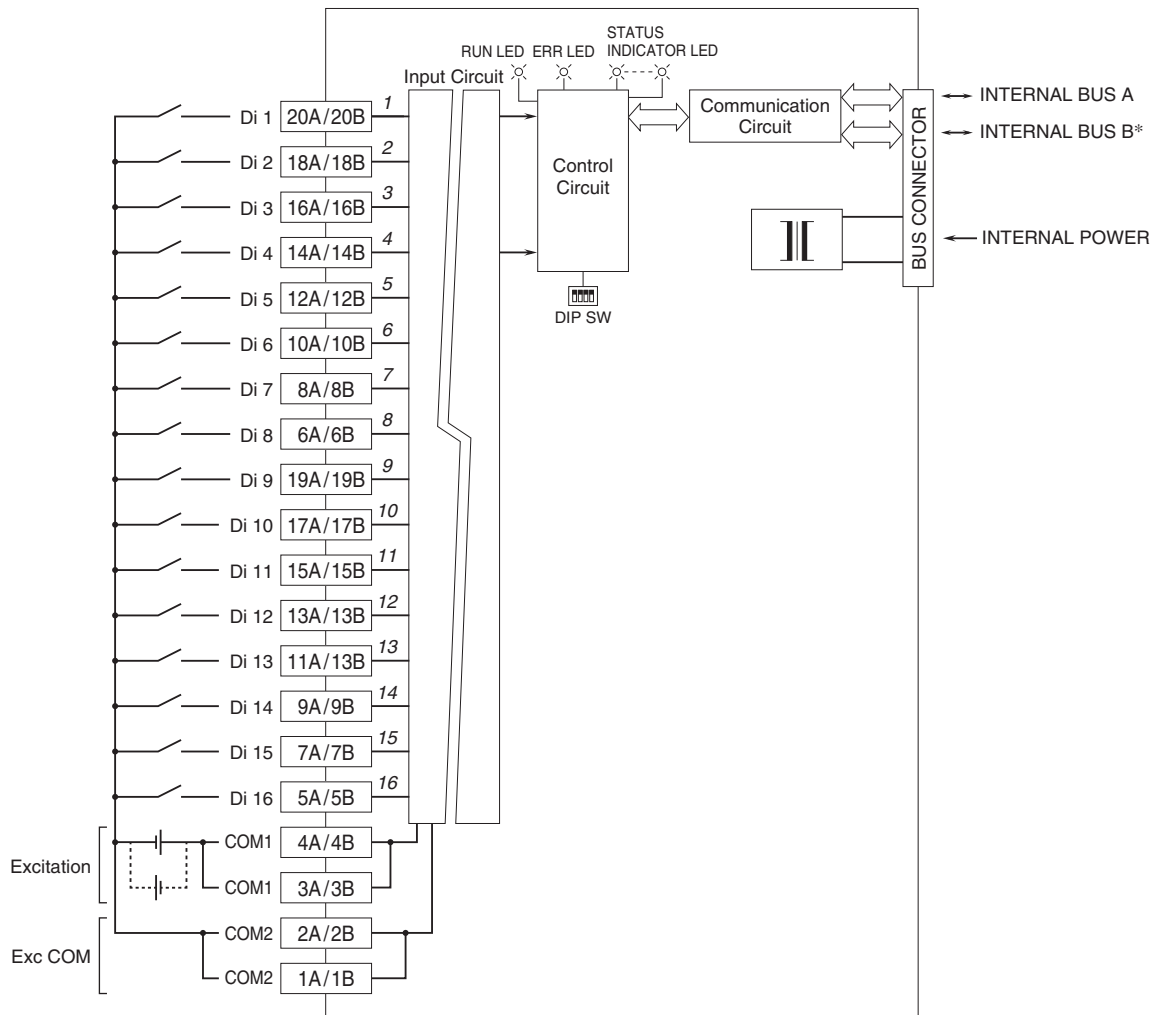
■ SIDE VIEW



EXTERNAL DIMENSIONS unit: mm [inch]

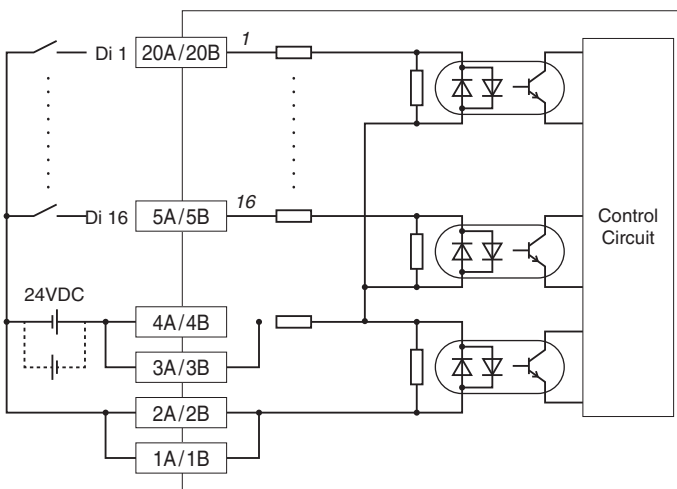


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

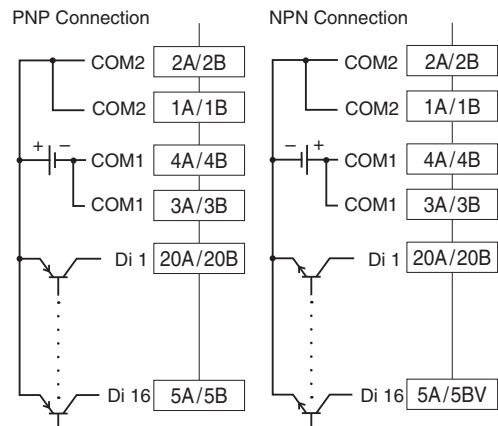


Numbers in italic indicate LED No.s assigned to the front panel LEDs.
 *For dual redundant communication.

Input Circuit



Input Connection Examples



INPUT CONNECTOR (40-pin)

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1A	0V (24V DC)	1B	0V (24V DC)
2A	0V (24V DC)	2B	0V (24V DC)
3A	24V DC (0V)	3B	24V DC (0V)
4A	24V DC (0V)	4B	24V DC (0V)
5A	Di 16	5B	Di 16
6A	Di 8	6B	Di 8
7A	Di 15	7B	Di 15
8A	Di 7	8B	Di 7
9A	Di 14	9B	Di 14
10A	Di 6	10B	Di 6
11A	Di 13	11B	Di 13
12A	Di 5	12B	Di 5
13A	Di 12	13B	Di 12
14A	Di 4	14B	Di 4
15A	Di 11	15B	Di 11
16A	Di 3	16B	Di 3
17A	Di 10	17B	Di 10
18A	Di 2	18B	Di 2
19A	Di 9	19B	Di 9
20A	Di 1	20B	Di 1



Specifications are subject to change without notice.