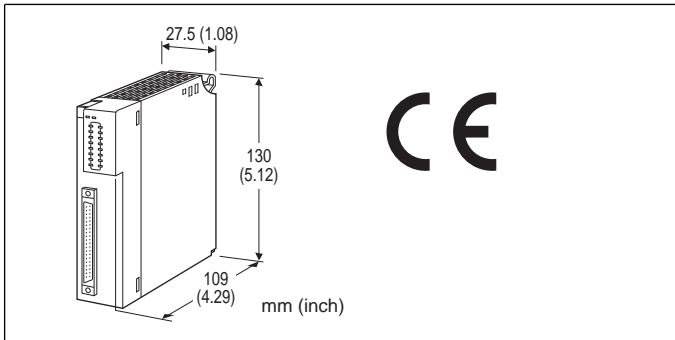


Remote I/O R3 Series

DISCRETE INPUT MODULE

(Di 16 points; with external excitation supply)



MODEL: R3Y-DA16A[1][2]

ORDERING INFORMATION

- Code number: R3Y-DA16A[1][2]
- Specify a code from below for [1], [2]
(e.g. R3Y-DA16AW/CE)

NO. OF CHANNELS

16: 16

EXCITATION SUPPLY

A: External excitation

[1] COMMUNICATION MODE

S: Single
W: Dual

[2] OPTIONS

STANDARDS & APPROVALS

blank: Without CE
/CE: CE marking

GENERAL SPECIFICATIONS

Connection

Internal bus: Via the Installation Base (model: R3-BSx)
Input: 40-pin connector (Fujitsu Model FCN-365P040-AU)
Power supply: Via the base (model: R3-BSx)
Isolation: Input to 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 the excitation abnormality;
 Green in normal operating conditions.
Input status indicator: Red LED; turns on with the inputs supplied.
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 commons, all 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 lbs)

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

STANDARDS & APPROVALS

CE conformity:
 EMC Directive (2004/108/EC)
 EMI EN 61000-6-4: 2007
 EMS EN 61000-6-2: 2005

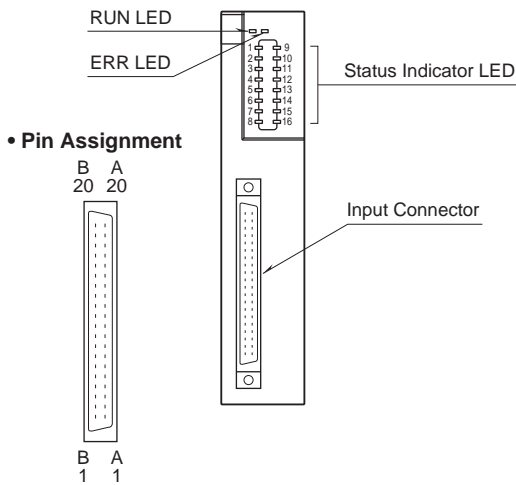
FUNCTIONS

• **Excitation Monitor ON**
 The input is held at the last status when the loss of excitation is detected. The excitation must be connected across the pin 4A/4B (3A/3B) and 2A/2B (1A/1B).
 • **Excitation Monitor OFF**
 All input signals are turned off when the loss of excitation is detected.

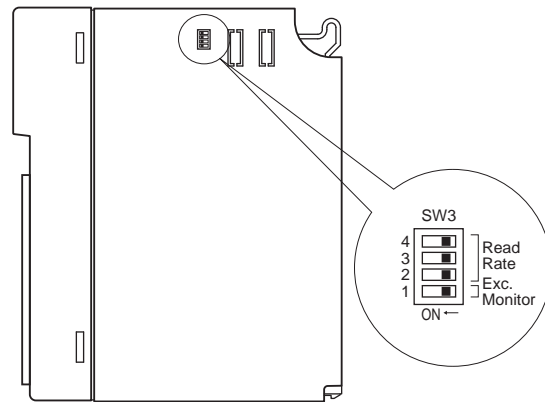


EXTERNAL VIEW

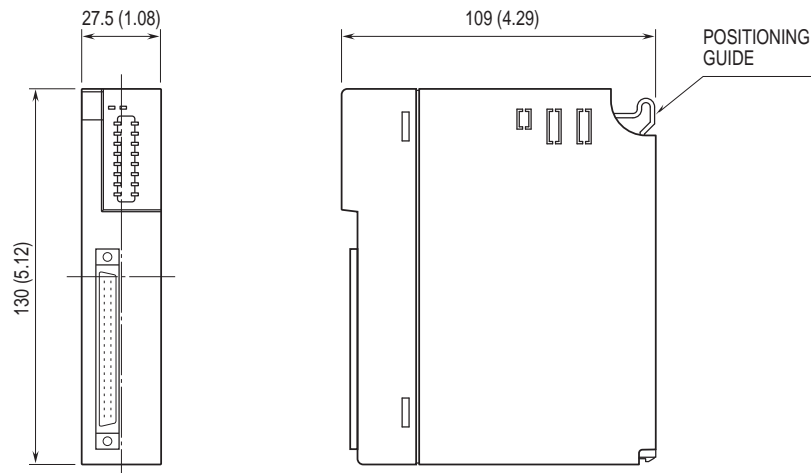
FRONT VIEW



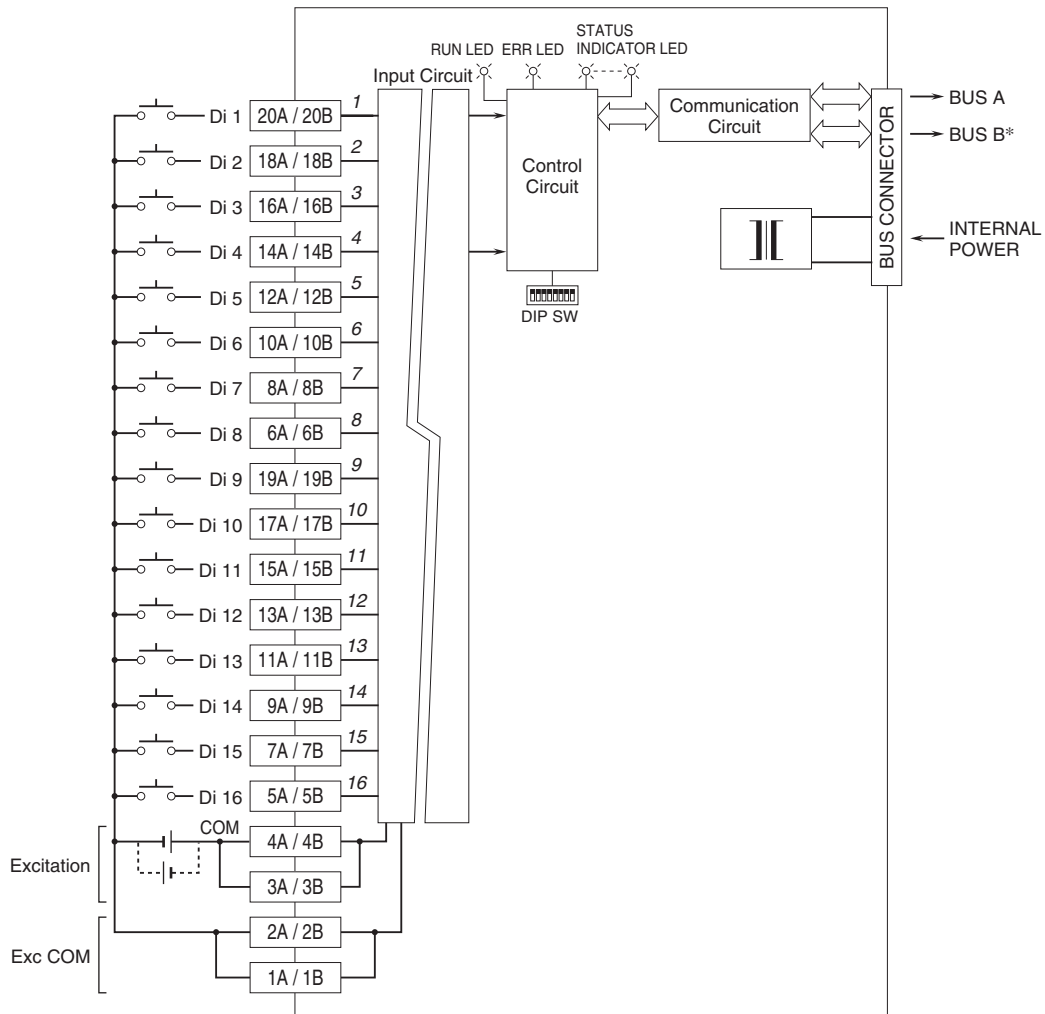
SIDE VIEW



DIMENSIONS unit: mm (inch)

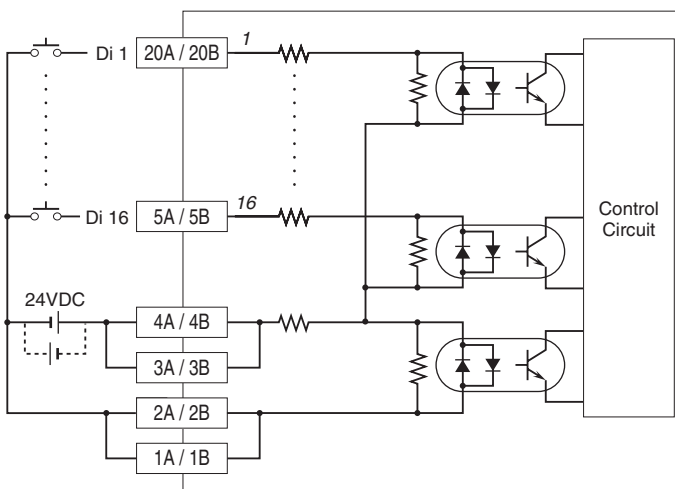


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



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

Input Circuit



INPUT 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.

