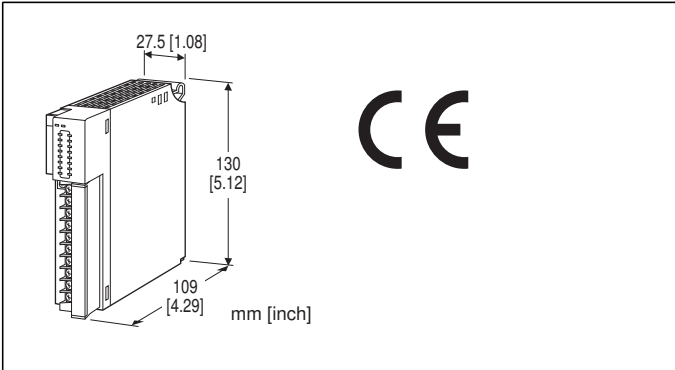


Remote I/O R3 Series

DISCRETE INPUT MODULE

(Di 8 points (3-wire), with external excitation supply)



MODEL: R3-DA8C[1][2]

ORDERING INFORMATION

- Code number: R3-DA8C[1][2]

Specify a code from below for each of [1] and [2].

- (e.g. R3-DA8CW/CE/Q)
- Specify the specification for option code /Q (e.g. /C01)

NO. OF CHANNELS

8: 8

INPUT

C: 3-wire input, with external excitation supply

[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

GENERAL SPECIFICATIONS

Connection

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

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

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

Screw terminal: Nickel-plated steel

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:

1 to 8: Red LED; Turns on with the input supplied.

9 to 16: Unused

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

INPUT SPECIFICATIONS

Number of input: 8 points

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

Isolation: Optical isolator

Input resistance: Approx. 4.4 kΩ

Common: Positive or negative common (NPN/PNP) per 8 points (3-wire)

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

Rated input current: Approx. 5 mA (24 V DC)

ON voltage/current: ≥ 11 V, ≥ 2.5 mA

OFF voltage/current: ≤ 6 V, ≤ 1.3 mA

External excitation current: ≤ 1 A per common

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: 170 g (0.37 lb)

PERFORMANCE

Data allocation: 1

Current consumption: 40 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 ON

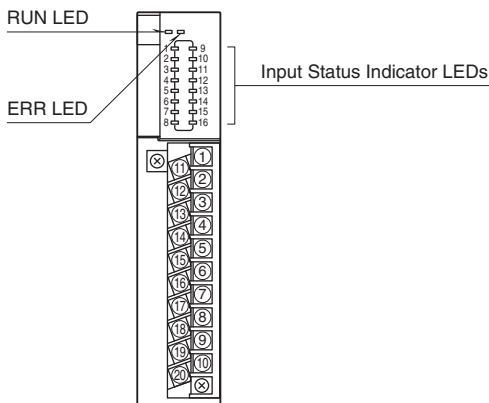
The input is held at the last status when the loss of excitation is detected. The excitation must be connected across the terminal 9 (19) and 10 (20).

•Excitation Monitor OFF

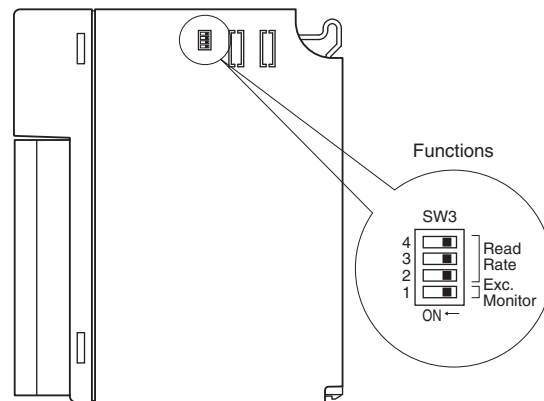
All input signals are turned off when the loss of excitation is detected.

EXTERNAL VIEW

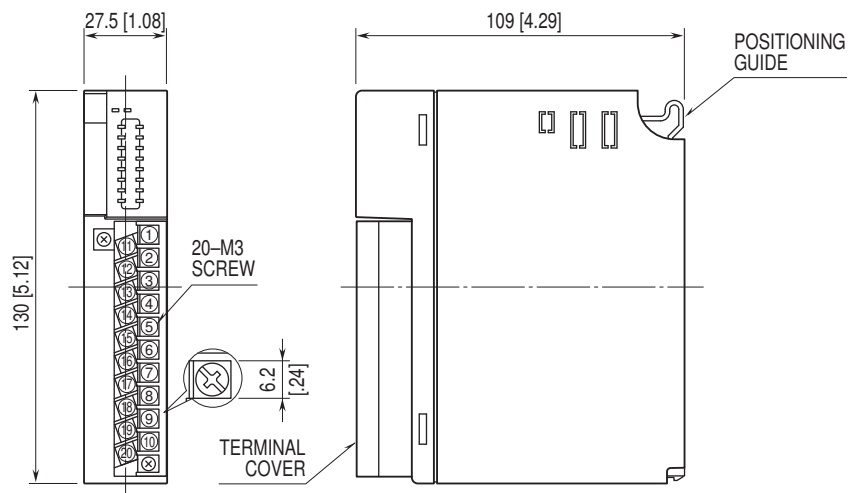
■ FRONT VIEW



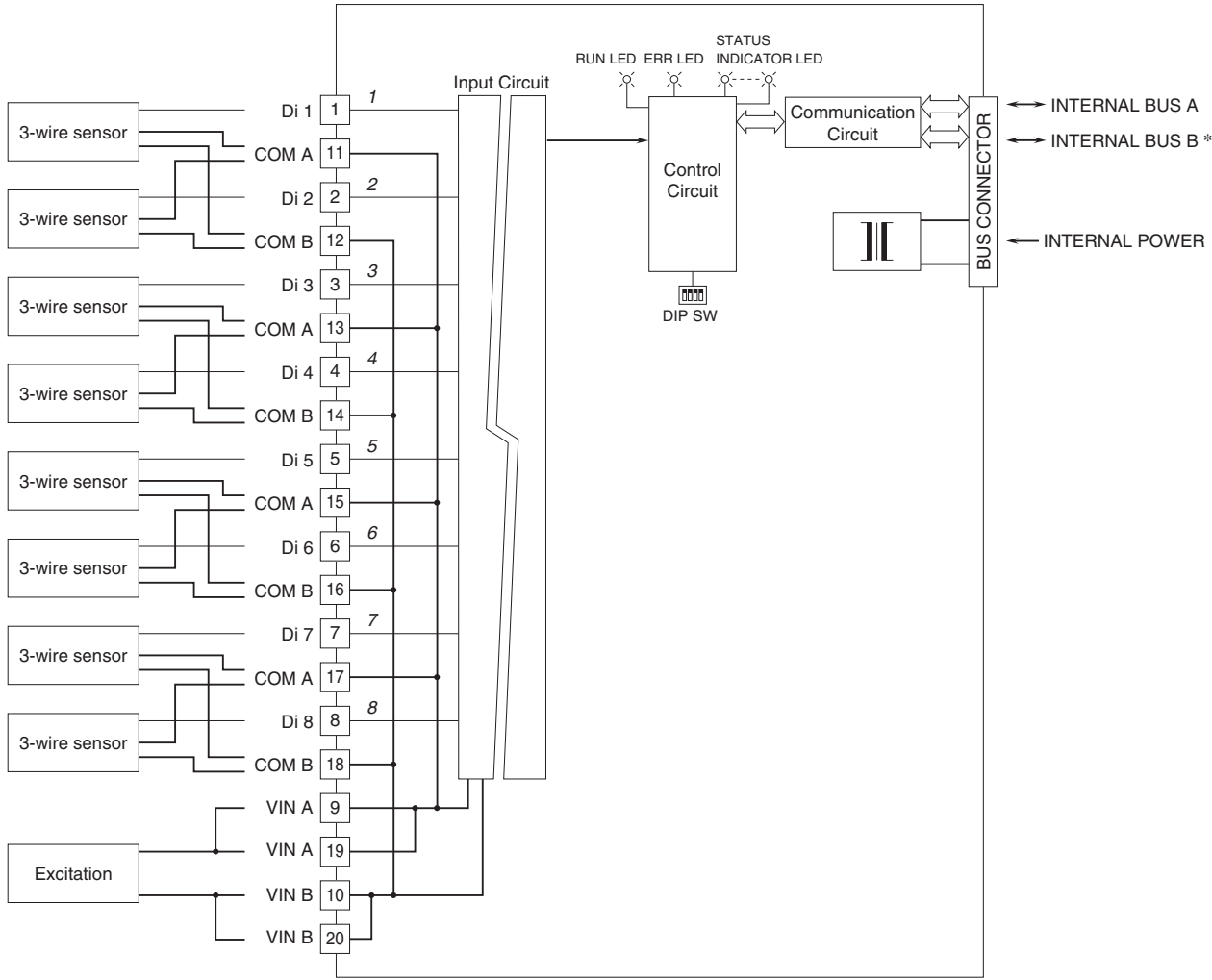
■ SIDE VIEW



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

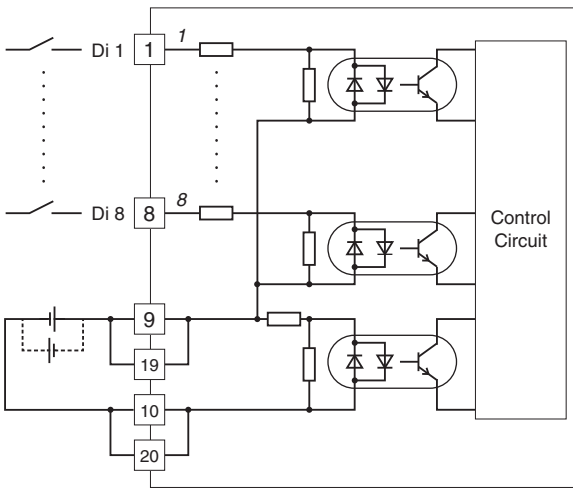


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



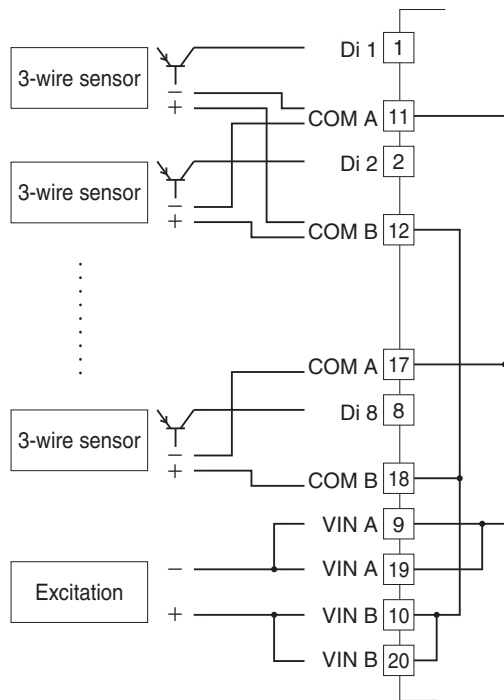
Numbers in italic indicate LED No.s assigned to the front panel LEDs.
 * For dual redundant communication.

■ Input Circuit

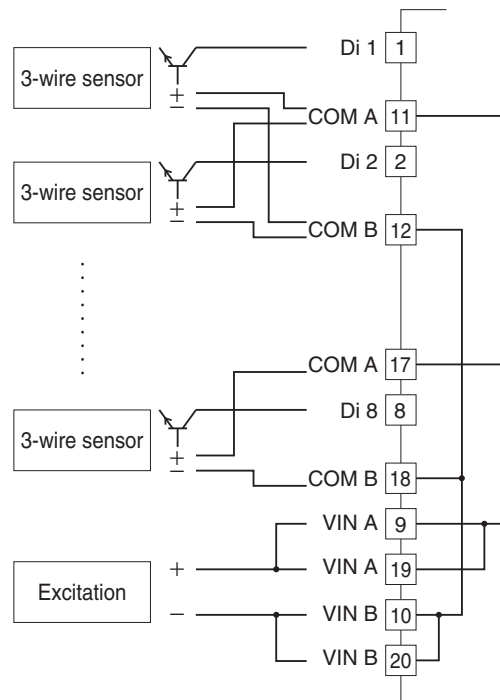


INPUT CONNECTION EXAMPLES

• PNP



• NPN



Specifications are subject to change without notice.