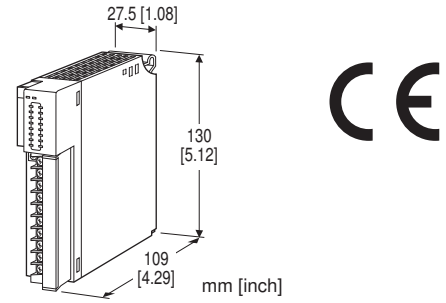
Remote I/O R3 Series

DISCRETE OUTPUT MODULE

(Do 8 points (relay))



MODEL: R3–DC8[1][2]

ORDERING INFORMATION

• Code number: R3-DC8[1][2]
Specify a code from below for each of [1] and [2].
(e.g. R3-DC8W/CE/Q)
• Specify the specification for option code /Q
(e.g. /C01)

NO. OF CHANNELS

8: 8

[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)
Output: M3 separable screw terminal (torque 0.5 N·m)
Internal power: Via the Installation Base (model: R3-BSx)
Screw terminal: Nickel-plated steel
Isolation: Output 1 to output 2 to output 3 to output 4 to output 5 to output 6 to output 7 to output 8 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:
1 to 8: Red LED; turns on with the output ON.
9 to 16: Unused

OUTPUT SPECIFICATIONS

Output: Relay contact, 8 points
Common: 1 point 1 common (8 terminals)
Maximum load current: 2.0 A per point
Relay driving power: 24 V DC ±10 %, ≥ 60 mA
Maximum outputs applicable at once: No limit (at 24 V DC)
Contact rating: 250 V AC @ 2 A (cos ø = 1)
30 V DC @ 2 A (resistive load)
(Limited to less than 50 V AC in order to conform with EU Directive)
Maximum switching voltage: 250 V AC or 30 V DC
Maximum switching power: 500 VA or 60 W
Minimum load: 24 V DC @ 5 mA
Mechanical life: 2×10^7 cycles (300 cycle/min.)
When driving an inductive load, external protection is recommended.
ON delay: ≤ 10 msec.
OFF delay: ≤ 10 msec.

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: 190 g (0.42 lb)

PERFORMANCE

Data allocation: 1
Current consumption: Approx. 60 mA
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength: 1500 V AC @ 1 minute
(output 1 to output 2 to output 3 to output 4 to output 5 to output 6 to output 7 to output 8 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

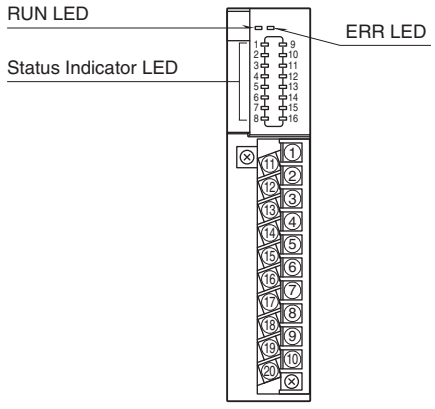
■OUTPUT HOLD or OUTPUT OFF
In normal conditions, the module outputs the signal from the preferred bus A.
When an error is detected, the output is switched to the data from the bus B.

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

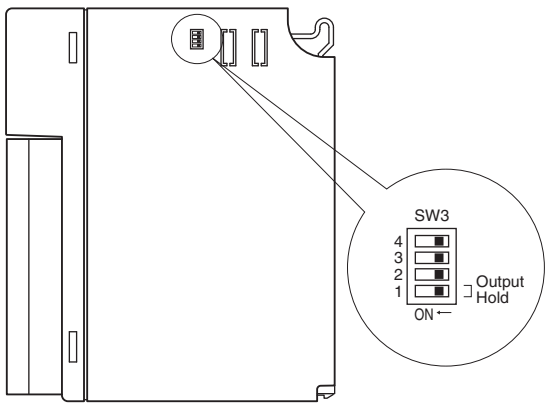
• **Output OFF**
If both are in error, the module outputs OFF signals and stands by until one of the communications recovers.
At the startup, it outputs OFF until the communication is established and normal data is received.

EXTERNAL VIEW

■ **FRONT VIEW**

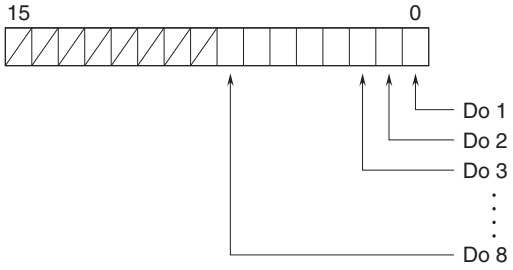


■ **SIDE VIEW**



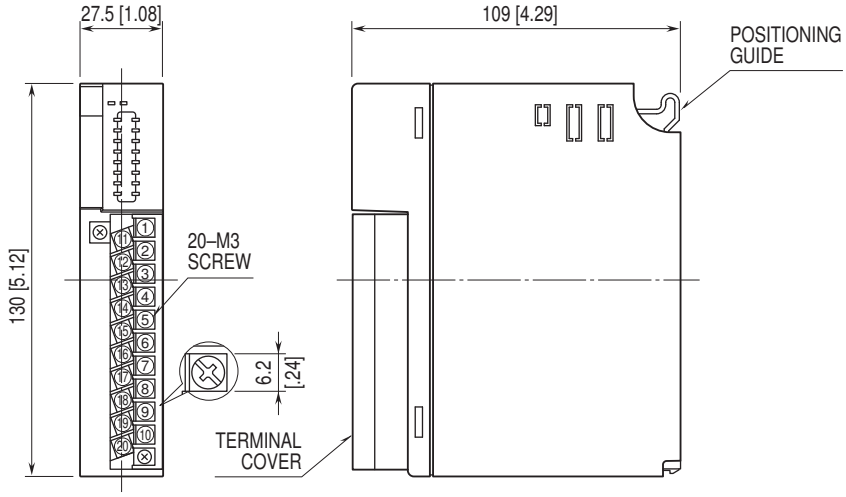
DATA ASSIGNMENT

■ **Do**

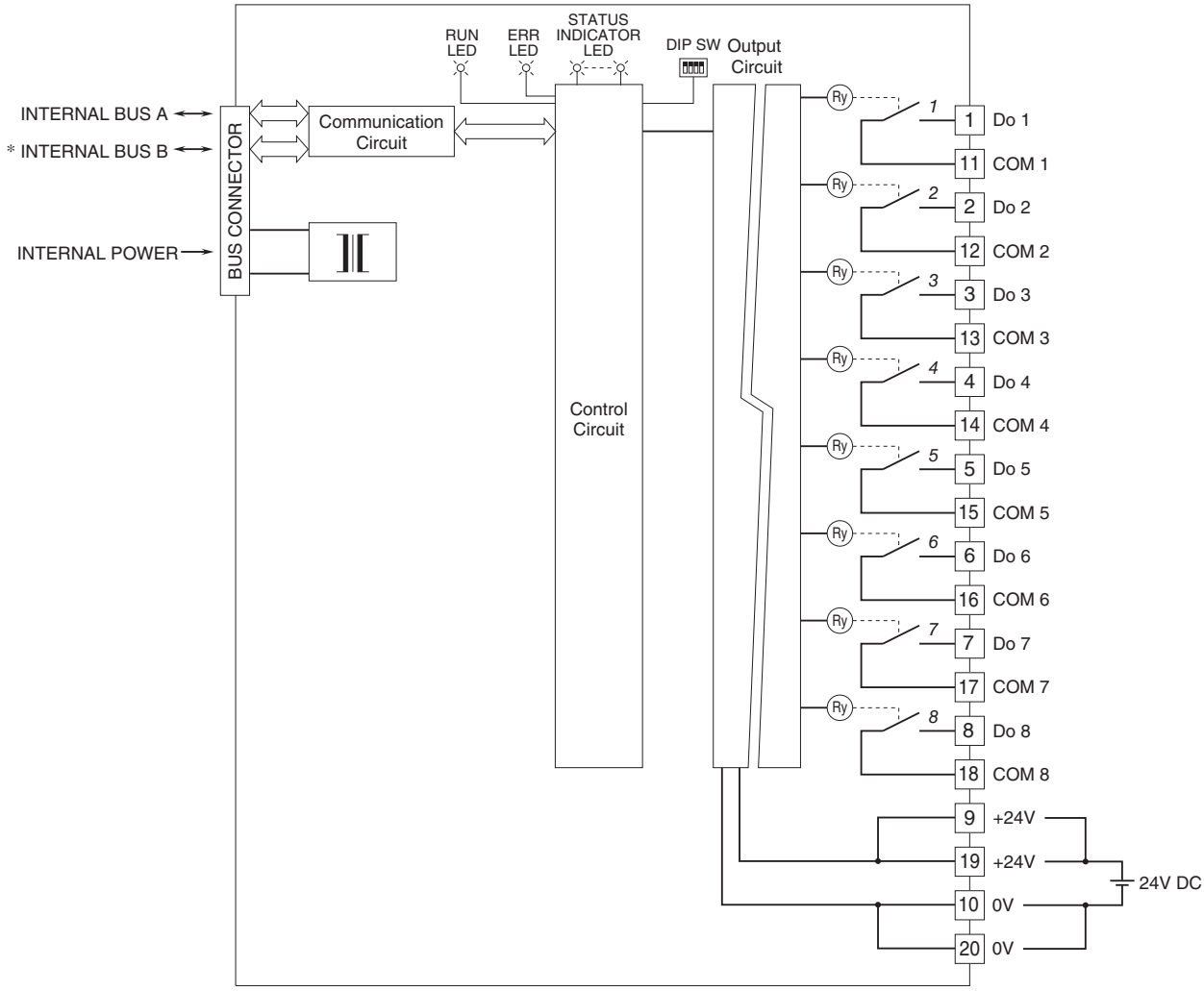


0 : OFF
1 : ON

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]

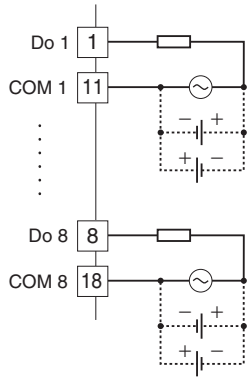


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



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

■ **Output Connection Examples**
1 point 1 common



⚠ Specifications are subject to change without notice.