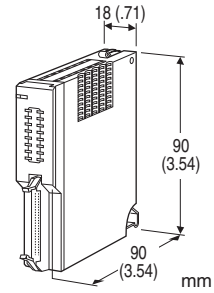
Remote I/O R5 Series

DISCRETE OUTPUT MODULE

(open collector output, 16 points)



MODEL: R5-DC16[1][2]

ORDERING INFORMATION

• Code number: R5-DC16[1][2]
Specify a code from below for each of [1] and [2].
(e.g. R5-DC16W/Q)
• Specify the specification for option code /Q
(e.g. /C01)

NO. OF CHANNELS

16: 16 points

[1] COMMUNICATION MODE

S: Single
W: Dual

[2] OPTIONS

blank: none
/Q: With options (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

• Cable (model: MCN20)
(in combination with Relay I/O output block, Omron Model: G7TC-OC16)

RELATED PRODUCTS

•Cable with connectors (OMRON)
250 mm (model: G79-O25C)
500 mm (model: G79-O50C)
•Connector/terminal block converter (OMRON)
model: XW2D-20G6

GENERAL SPECIFICATIONS

Connection
Internal bus: Via the Installation Base (model: R5-BS)
Output: 20-pin connector OMRON model: XG4A-2034
Internal power: Via the base (model: R5-BS)
Isolation: Output to internal bus or internal power
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.
Output status indicator: Red LED; turns on with the output ON.

OUTPUT SPECIFICATIONS

Output: Open collector, 16 points
Commons: All negatives
Rated load
Maximum: 30 V DC @ 100 mA (resistive load)
Continuous: 30 V DC @ 60 mA (resistive load)
Total current of the output 1 thr. 8 and the output 9 thr. 16 must respectively be 500 mA or less.
Maximum leak current at OFF: 0.01 mA
Saturation voltage: 1 V DC
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: R5-BS)
Weight: 100 g (3.53 oz)

PERFORMANCE

Data allocation: 1
Response time: ≤ 0.1 sec.
Insulation resistance: ≥ 100 MΩ 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)

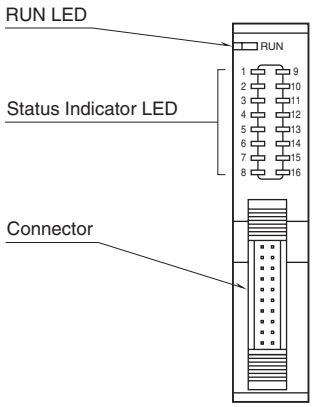
STANDARDS & APPROVALS

EU conformity:
EMC Directive
EMI EN 61000-6-4
EMS EN 61000-6-2
RoHS Directive
EN 50581

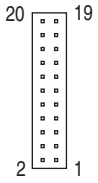
FUNCTIONS

Output hold function:
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.
If both are in error, the module holds the signal 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

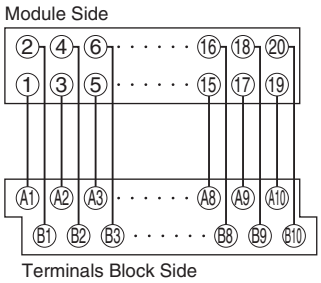


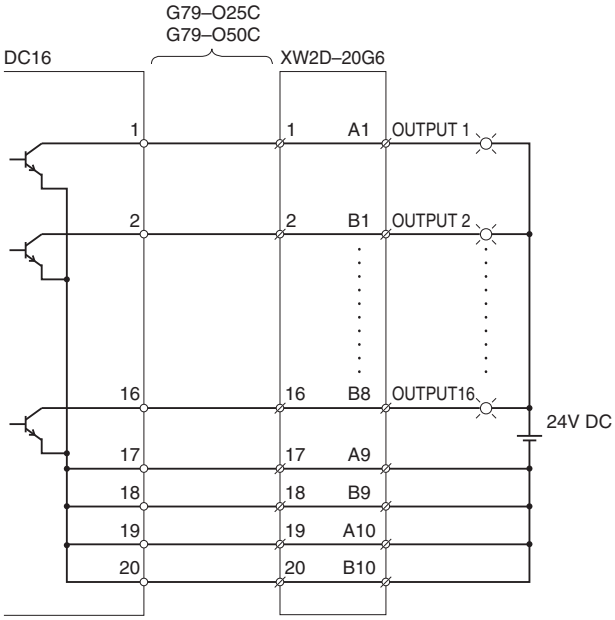
■ **PIN ASSIGNMENTS**



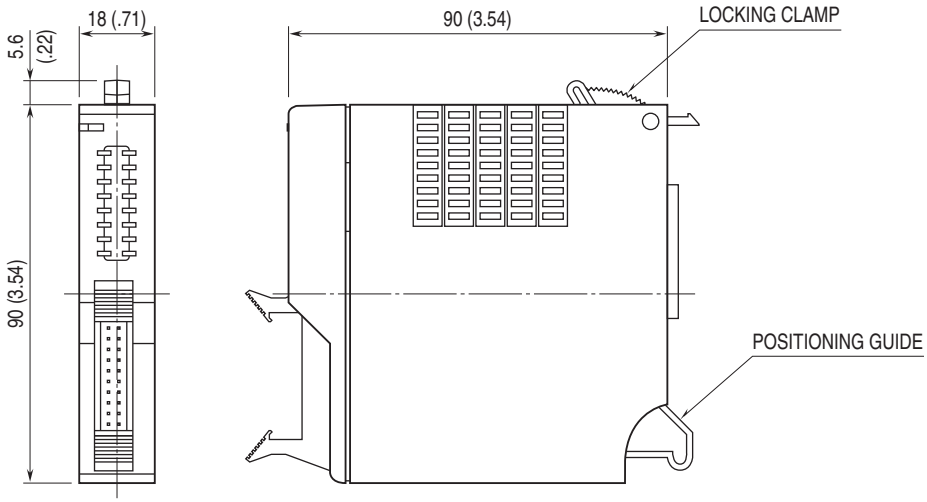
CONNECTOR PIN ASSIGNMENT

Pin assigments

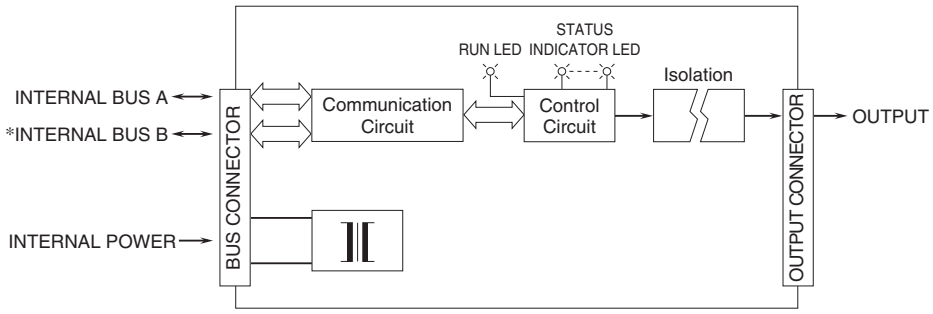




EXTERNAL DIMENSIONS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.

OUTPUT CONNECTOR

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

⚠ Specifications are subject to change without notice.