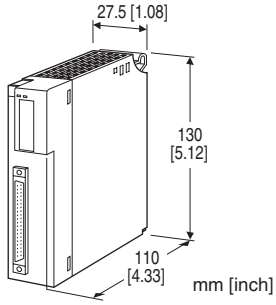
Remote I/O R3 Series

DC CURRENT OUTPUT MODULE

(4 points, isolated, connector type)



MODEL: R3Y-YS4[1][2]

ORDERING INFORMATION

• Code number: R3Y-YS4[1][2]
Specify a code from below for each of [1] and [2].
(e.g. R3Y-YS4W/H/CE/Q)
• Specify the specification for option code /Q
(e.g. /C01/SET)

NO. OF CHANNELS

4: 4

[1] COMMUNICATION MODE

S: Single
W: Dual

[2] OPTIONS (multiple selections)

Load Resistance
blank: ≤ 300 Ω
/H: ≤ 600Ω
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 (multiple selections)

COATING (For the detail, refer to our web site.)
/C01: Silicone coating
/C02: Polyurethane coating
/C03: Rubber coating
EX-FACTORY SETTING
/SET: Preset according to the Ordering Information Sheet (No. ESU-8370)

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)
Output: 40-pin connector (OTAX N365P040AU
(Fujitsu FCN-365P040-AU...discontinued))
Internal power: Via the Installation Base (model: R3-BSx)
Isolation: Output 1 to output 2 to output 3 to output 4 to internal bus or internal power
Output hold function: 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: Bi-color (red/green) LED;
Red with output abnormality;
Green in normal operating conditions.

OUTPUT SPECIFICATIONS

Output range: 4 – 20 mA DC
Load resistance: 300 Ω max. (600 Ω max. with Option /H)

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

Conversion accuracy: ±0.05 %
Data range: 0 – 10000 of the output range
Data allocation: 4
Current consumption: 180 mA (260 mA with Option /H)
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)
Response time: ≤ 0.2 sec. (0 – 90 %)
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 internal bus or internal power)
2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

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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

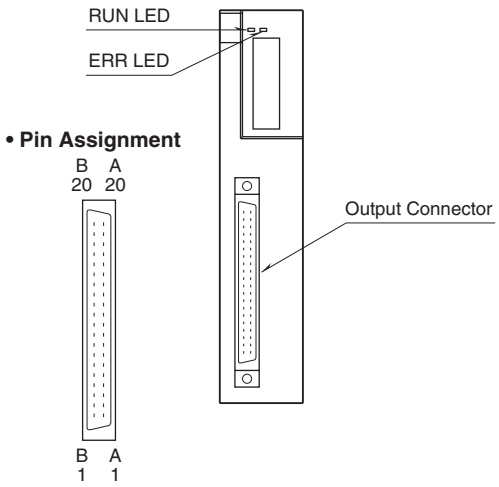
If both are in error, the module holds the signal and stands by until one of the communications recovers.

•Output OFF

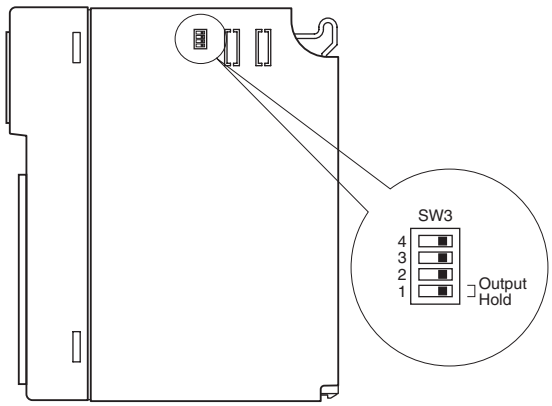
If both are in error, the module outputs -15 % and stands by until one of the communications recovers.
At the startup, it outputs -15 % until the communication is established and normal data is received.

EXTERNAL VIEW

■ FRONT VIEW



■ SIDE VIEW



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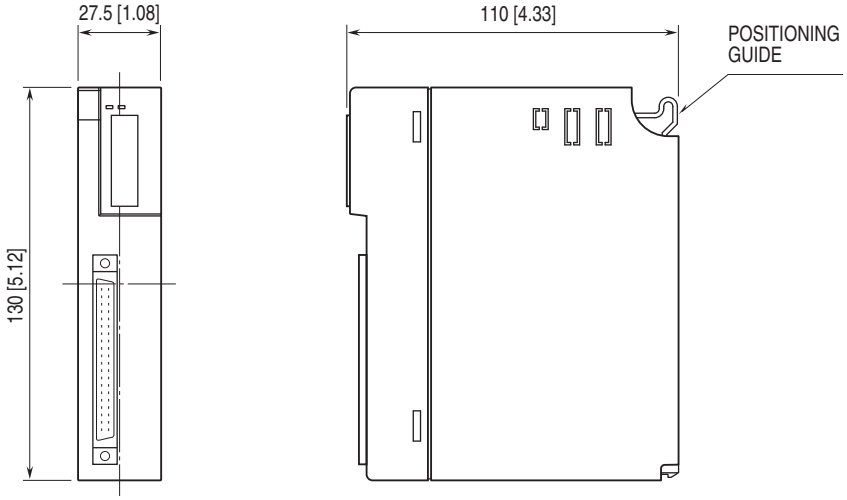
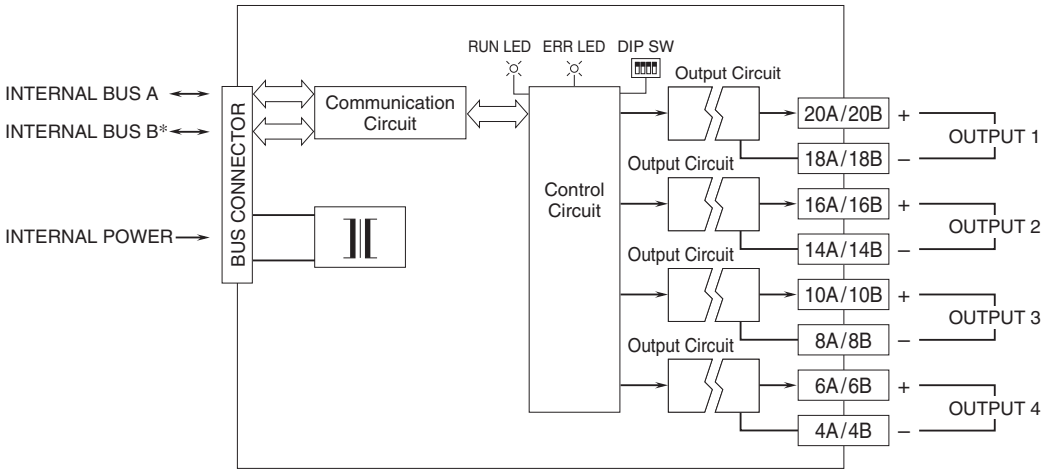
EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.

• Unused Output Channels

Close across the unused output terminals as shown below.

OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4
20A/20B	16A/16B	10A/10B	6A/6B
18A/18B	14A/14B	8A/8B	4A/4B

Unused channels left open are equal to the wire breakdown, which turns the red ERR LED on and sets a burnout flag at the PLC or the host device.

Unused channels can be specified and set so on the PC Configurator Software (model: R3CON) without needing to short at the field terminals.

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OUTPUT CONNECTOR (40-pin)

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1A	NC	1B	NC
2A	NC	2B	NC
3A	NC	3B	NC
4A	– OUT4	4B	– OUT4
5A	NC	5B	NC
6A	+ OUT4	6B	+ OUT4
7A	NC	7B	NC
8A	– OUT3	8B	– OUT3
9A	NC	9B	NC
10A	+ OUT3	10B	+ OUT3
11A	NC	11B	NC
12A	NC	12B	NC
13A	NC	13B	NC
14A	– OUT2	14B	– OUT2
15A	NC	15B	NC
16A	+ OUT2	16B	+ OUT2
17A	NC	17B	NC
18A	– OUT1	18B	– OUT1
19A	NC	19B	NC
20A	+ OUT1	20B	+ OUT1

Specifications are subject to change without notice.

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