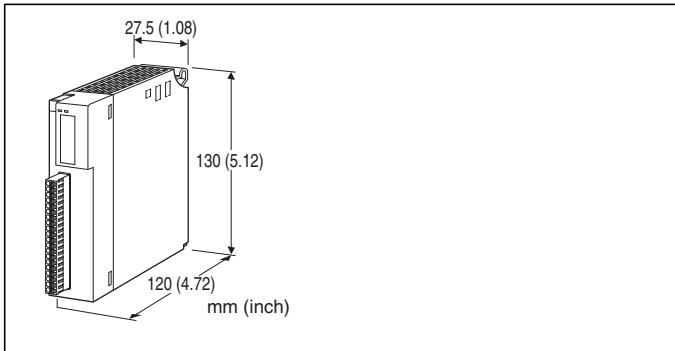


Remote I/O R3 Series

DC VOLTAGE OUTPUT MODULE

(4 points, isolated)



MODEL: R3S-YV4[1][2]

ORDERING INFORMATION

- Code number: R3S-YV4[1][2]
- Specify a code from below for each [1] and [2].
(e.g. R3S-YV4W/Q)
- Specify the specification for option code /Q
(e.g. /SET)

NO. OF CHANNELS

4: 4

[1] COMMUNICATION MODE

S: Single

W: Dual

[2] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

EX-FACTORY SETTING

/SET: Preset according to the Ordering Information Sheet
(No. ESU-8372)

GENERAL SPECIFICATIONS

Connection

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

Output: Separable tension clamp terminal

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

Applicable wire size: 0.2 to 1.25 mm², stripped length 10 mm

Isolation: Output 1 to output 2 to output 3 to output 4 to

internal bus or internal power

Output range: Selectable with the side DIP SW

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: Green LED turns on in normal operating conditions.

OUTPUT SPECIFICATIONS

■ **Narrow Span:** -1 - +1 V, 0 - 1 V DC

Load resistance: 10 kΩ min.

■ **Wide Span:** -10 - +10 V, -5 - +5 V, 0 - 10 V, 0 - 5 V, 1 - 5 V DC

Load resistance: 10 kΩ min.

■ **Output Range**

Except -10 to +10 V DC: -15 to +115 % of output range

-10 to +10 V DC: Approx. -11.5 to +11.5 V DC

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 (Range):

-10 - +10 V : ±0.05 %

-5 - +5 V : ±0.05 %

-1 - +1 V : ±0.05 %

0 - 10 V : ±0.05 %

0 - 5 V : ±0.1 %

1 - 5 V : ±0.1 %

0 - 1 V : ±0.1 %

Data range: 0 - 10000 of the output range

Data allocation: 4

Current consumption: 150 mA

Temp. coefficient: ±0.015 % /°C (±0.008 % /°F)

(±0.03 % /°C [±0.02 % /°F] with 0 - 5 V or 1 - 5 V range)

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)



FUNCTIONS

■ OUTPUT HOLD or OUTPUT OFF

Selectable with DIP switch setting.

• Output Hold

If the internal bus is in error, the module holds the signal and stands by until the communication recovers.

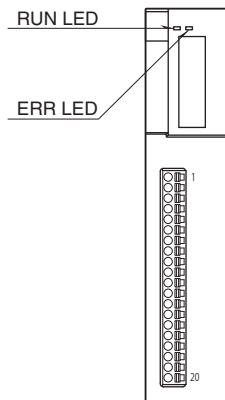
• Output OFF

If the internal bus is in error, the module outputs -15 % (or approx. -11.5 V) and stands by until the communication recovers.

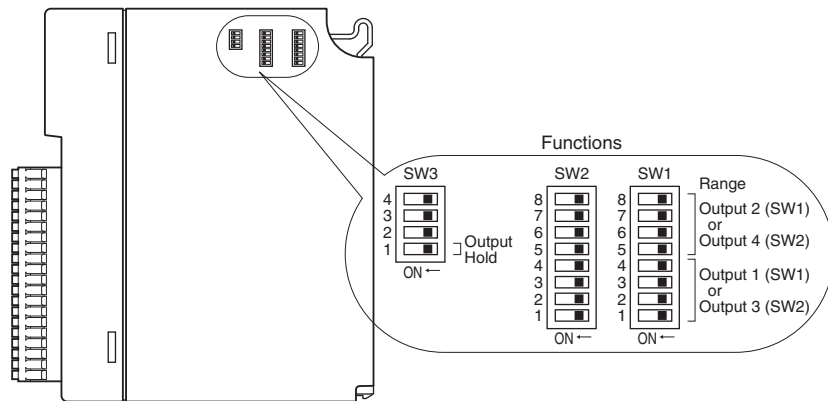
At the startup, it outputs -15 % (or approx. -11.5 V) until the communication is established and normal data is received.

EXTERNAL VIEW

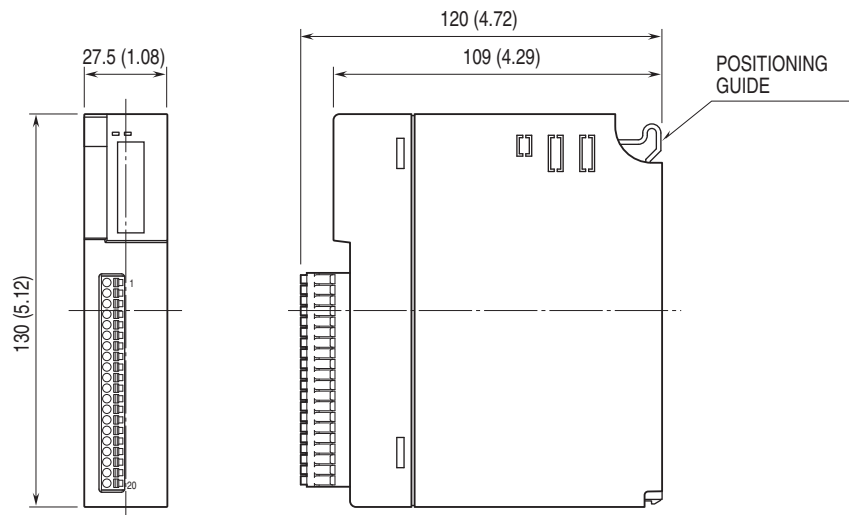
■ FRONT VIEW



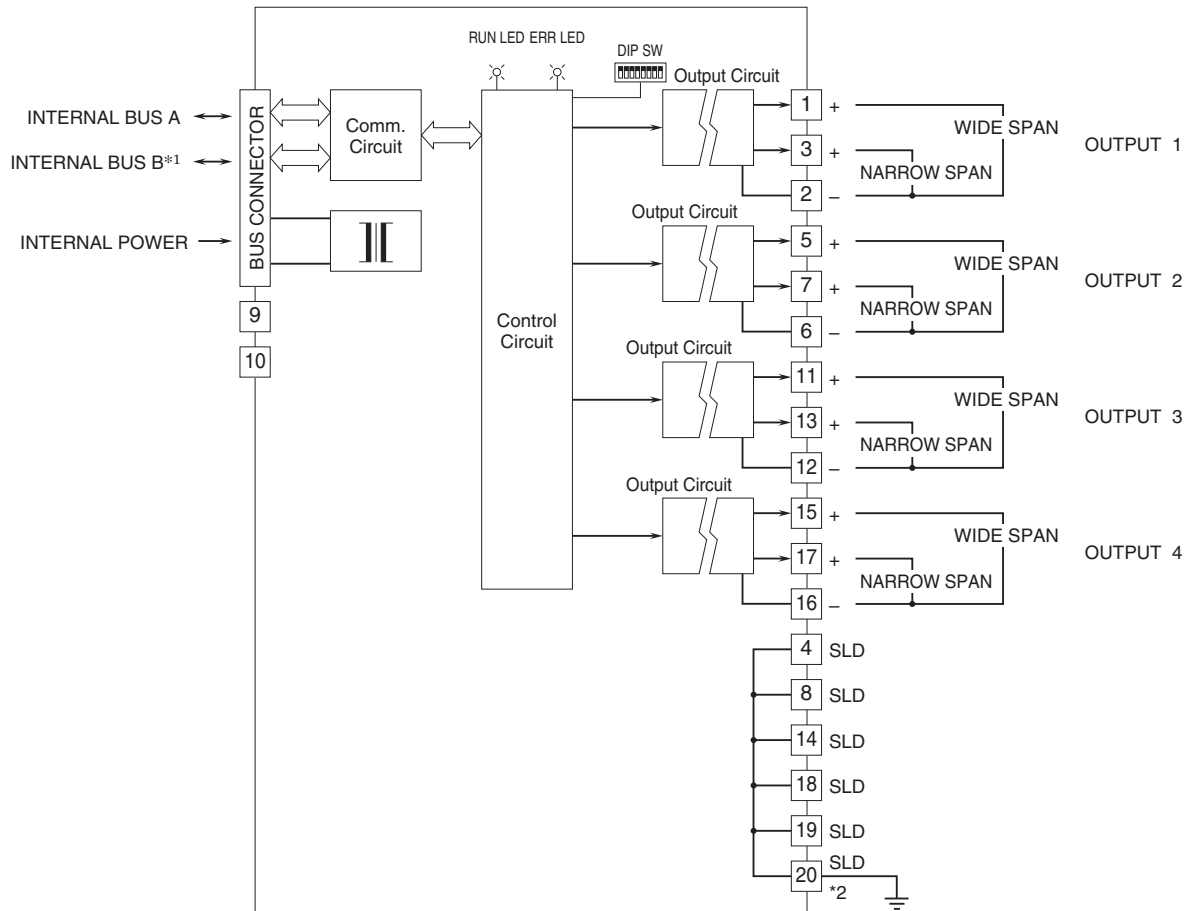
■ SIDE VIEW



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*1. For dual redundant communication.

*2. To use shield line, connect it to SLD terminal and ground the terminal 20.

Note: Do not connect wide span and narrow span simultaneously within the same channel.
Do not use void terminals.

OUTPUT CONNECTOR

PIN No.	FUNCTION
1	VH1
2	COM1
3	VL1
4	SLD
5	VH2
6	COM2
7	VL2
8	SLD
9	NC
10	NC
11	VH3
12	COM3
13	VL3
14	SLD
15	VH4
16	COM4
17	VL4
18	SLD
19	SLD
20	SLD





Specifications are subject to change without notice.

