

# General Specifications

## RVV Relay I/O Cards Nest (Vertical Mounting Type)

JUXTA

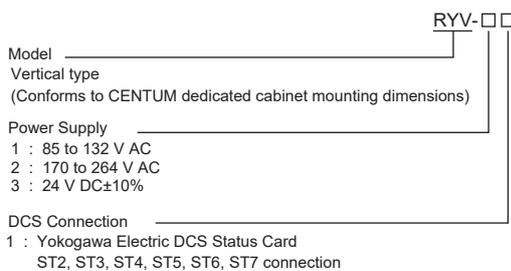
GS 77J06Y61-01EN

### ■ GENERAL

This vertical mounting type nest is used to store relay I/O cards to fit mounting dimension of the CENTUM dedicated cabinet.

- Can store up to 16 units (32 channels) relay I/O cards.
- Can make mixed store of replay input and output cards in one nest.
- Can connect between nest and DCS with connector.
- Can connect with sequencer since necessary power to receive signal between nest and sequencer is supplied from the nest.
- Non-voltage contact of nest alarm terminal becomes ON when break of fuse in relay I/O cards.

### ■ MODEL AND SUFFIX CODES



### ■ ORDERING INFORMATION

(Example) Type Code: RVV-31

### ■ SPECIFICATIONS

Number of relay I/O cards be stored  
16 units (32 channels, 2 channels per card)  
Combination: (1) Input card 16 units (32 channels)  
(2) Input card 8 units (16 channels)  
Output card 8 units (16 channels)  
(3) Output card 16 units (32 channels)  
Supply power: Supply power to 16 I/O cards in block  
Alarm: Non voltage contact outputs from alarm terminal when fuse breaks in I/O card.  
Output rating: 30 V DC, 300 mA  
(Set flash off circuit in parallel to load when connecting conduct circuit externally)

### ■ STANDARD PERFORMANCE

Insulation resistance

- (RVV-1x, 2x) 100 MΩ (500 V DC) between power supply - connector (CN1·2·3) - ground - voltage contact output power supply - connector - alarm contact output  
However, except between connector (CN1·2·3) and power supply, between connector (CN1·2·3) and ground, between power supply and ground.  
50 MΩ (500 V DC) between connector (CN1·2·3) and power supply, between connector (CN1·2·3) and ground, between power supply and ground  
(RVV-3x) 100 MΩ (500 V DC) between [power supply·connector (CN1·2·3)] - ground - voltage contact output power supply - alarm contact output

Voltage withstand

- (RVV-1x, 2x) 1500 V AC/1 minute between power supply - connector (CN1·2·3) - ground - voltage contact power supply - alarm contact output  
However, except between connector (CN1·2·3) and ground, between voltage contact output power supply and alarm contact output.  
500 V AC/1 minute between connector (CN1·2·3) - ground, between voltage contact power supply and alarm contact output  
(RVV-3x) 1500 V AC/1 minute between [power supply·connector (CN1·2·3)] - ground - voltage contact power supply - alarm contact output  
However, except between [power supply·connector (CN1·2·3)] and ground, between voltage contact power supply and alarm contact output.  
500 V AC/1 minute between [power supply·connector (CN1·2·3)] and ground, between voltage contact power supply and alarm contact output

Ambient temperature & humidity

- Normal operating condition: 0 to 50°C, 5 to 90% RH  
Operating limit: -10 to 60°C, 5 to 95% RH  
Storing condition: -40 to 70°C, 5 to 95% RH (no condensation)

Supply voltage: 24 V DC±10% (ripple content: less than 10%p-p) or 85 to 132 V AC, 170 to 264 V AC

Power supply for voltage contact output

- Less than 125 V AC/125 V DC  
Load current capacity: 32 channels (16 output cards) total less than 10 A

## ■ MOUNTING AND APPEARANCE

Mounting method: Wall mounting (Applicable to CENTUM cabinet mounting dimensions)

Connecting screw: M5 screw, 4 places

External connection:

Power supply, ground, alarm: Refer to terminal assignments

DCS side connecting cable:

ST2/ST3/ST4 card connection: KS2

ST5/ST6/ST7 card connection: KS9

Paint color: Black

External dimension

DC power supply use: 110 × 490 × 104.1 (H × W × D)

AC power supply use: 110 × 490 × 142.4 (H × W × D)

Weight: About 2 kgs (DC power supply use),  
About 2.3 kgs (AC power supply use)

## ■ ACCESSORIES

Mounting bracket: 1 pair

Nest tag number label: 1

Card tag number label: 16

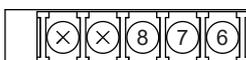
## ■ TERMINAL ASSIGNMENTS

### DC Power Supply (RYV-31)

(Screw: M4) 

| Terminal No. | Terminal symbol | RYV-31  |
|--------------|-----------------|---|
| 1            | L (+)           | Voltage contact output power supply 125 V AC/DC or less |
| 2            | N (-)           |   |
| 3            | AL1             | Relay I/O card fuse break alarm                         |
| 4            | AL2             |   |
| 5            | $\perp$         | Relay I/O card power supply 24 V DC±10%, 1.5 A          |
| 6            | +               |   |
| 7            | -               |   |

### AC Power Supply (RYV-11, RYV-21) (Style S2.0)

Upper  
(Screw: M3.5)  (Note)

Lower  
(Screw: M4) 

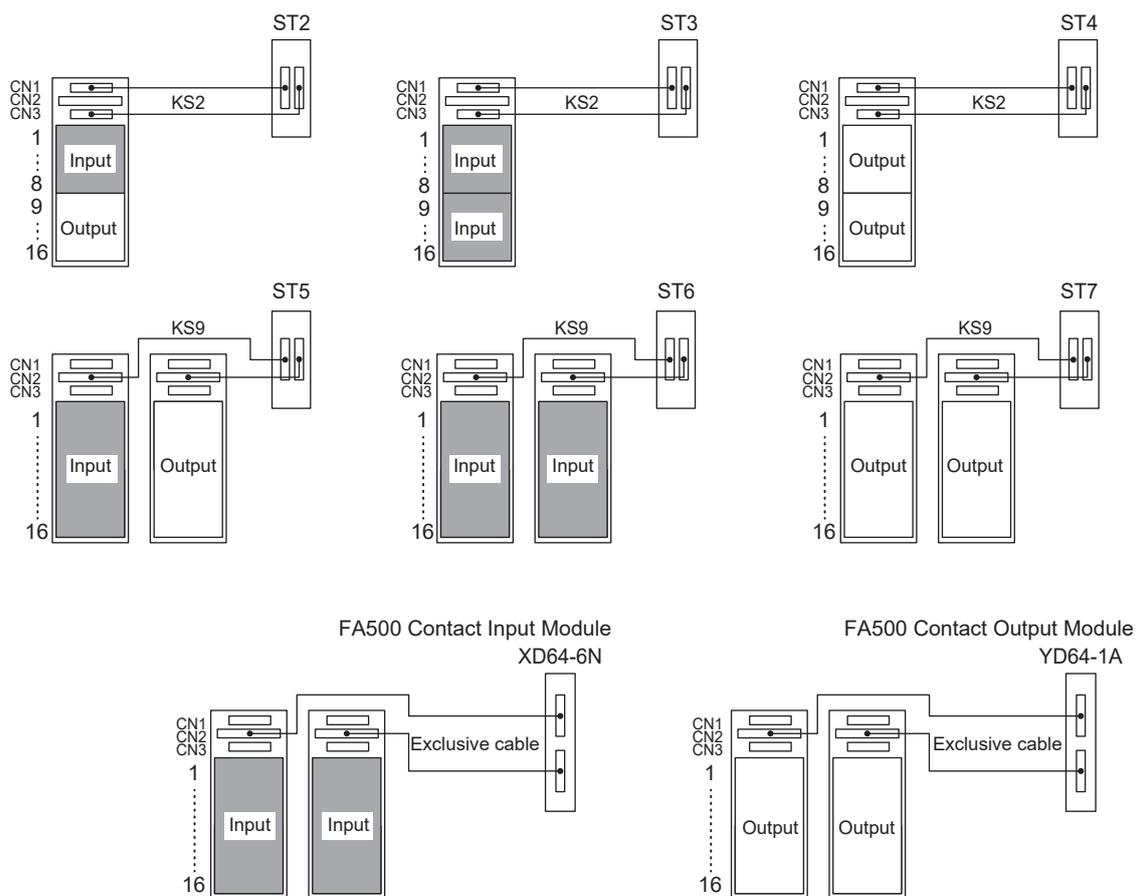
| Terminal No. |       | Terminal symbol | RYV-11  | RYV-21  |
|--------------|-------|-----------------|---|---|
| Upper        | Lower |                 |   |   |
|              | 1     | L (+)           | Voltage contact output power supply 125 V AC/DC or less |   |
|              | 2     | N (-)           |   |   |
|              | 3     | AL1             | Relay I/O card fuse break alarm                         |   |
|              | 4     | AL2             |   |   |
|              | 5     | $\perp$         |   |   |
| 6            |       | N               | 100-120 V AC<br>(-15%, +10%)<br>50 / 60 Hz<br>1 A       | 200-240 V AC<br>(-15%, +10%)<br>50 / 60 Hz<br>0.5 A |
| 7            |       | L               |   |   |
| 8            |       | $\perp$         |   |   |

Note: For style S1.0, the specifications of the upper terminal are different as shown below.

- Screw M4
- Terminal Assignments

| Terminal No. | Terminal symbol |
|--------------|-----------------|
| 6            | L               |
| 7            | N               |

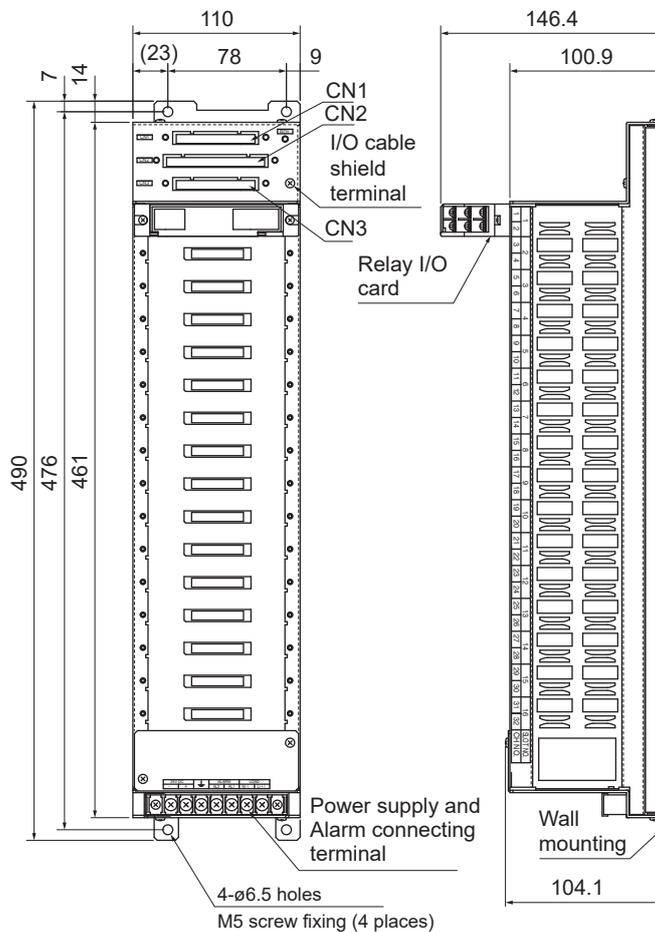
## ■ COMBINATION STRUCTURE



## EXTERNAL DIMENSION

DC Power Supply (RYV-31)

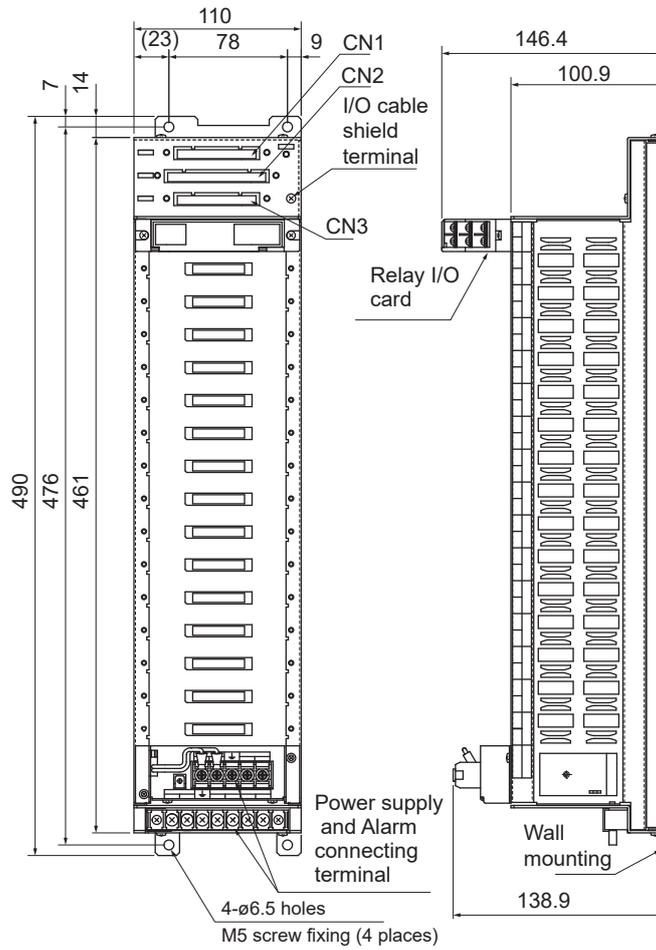
Unit: mm



Normal Allowable Deviation =  $\pm$  (Value of JIS B 0401-2016 tolerance grade IT18) / 2

AC Power Supply (RYV-11, RYV-21)

Unit: mm



Normal Allowable Deviation=  $\pm$  (Value of JIS B 0401-2016 tolerance grade IT18) / 2