

General Specifications

RYV Relay I/O Cards Nest (Vertical Mounting Type)

JUXTA

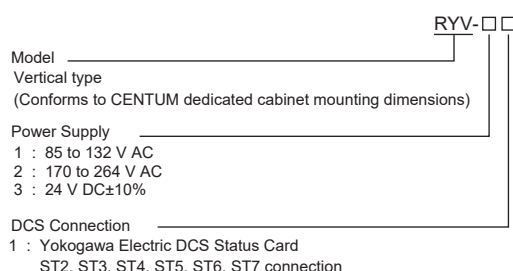
GS 77J06Y61-01EN

■ 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: RYV-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

(RYV-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

(RYV-3x) 100 MΩ (500 V DC) between [power supply·connector (CN1·2·3)] - ground
- voltage contact output power supply - alarm contact output

Voltage withstand

(RYV-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

(RYV-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

Temperature: 0 to 50°C

Humidity: 5 to 90% 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	100-120 V AC (-15%,+10%) 50 / 60 Hz 1 A	200-240 V AC (-15%,+10%) 50 / 60 Hz 0.5 A
6		N		
7		L		
8		\perp		

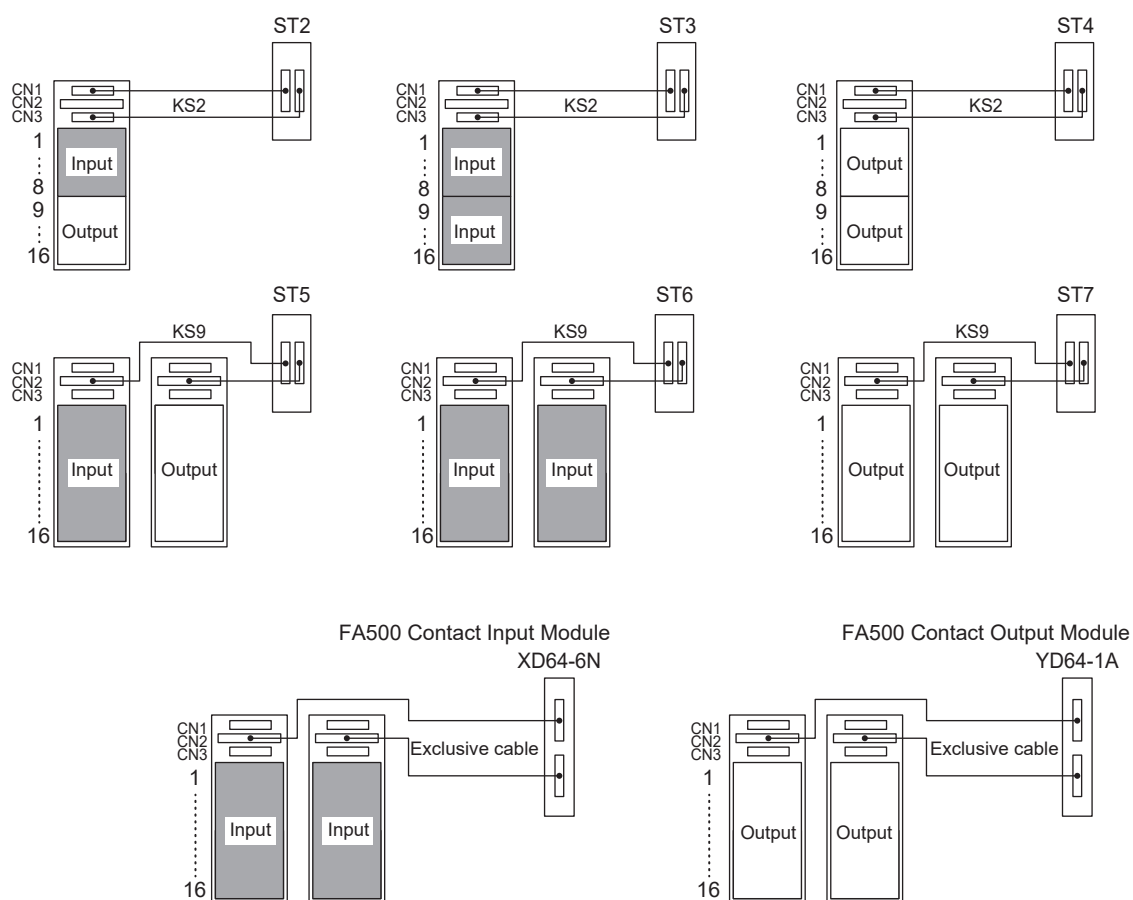
Note: For style S1.0, the specifications of the upper terminal are different as shown below.

• Screw M4

• Terminal Assignments

Terminal No.	Terminal symbol
6	L
7	N

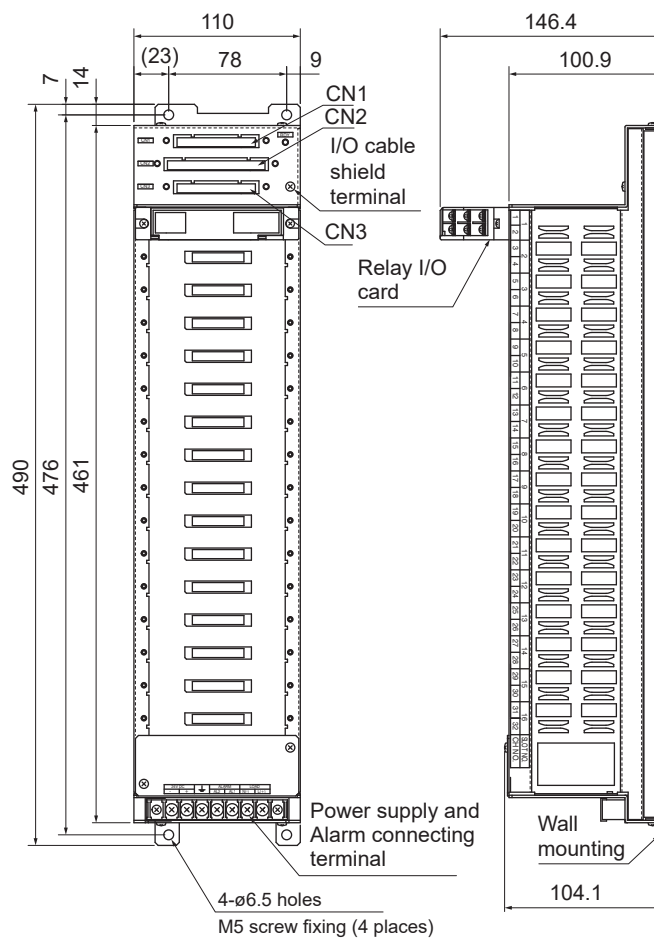
■ COMBINATION STRUCTURE



■ EXTERNAL DIMENSION

DC Power Supply (RYV-31)

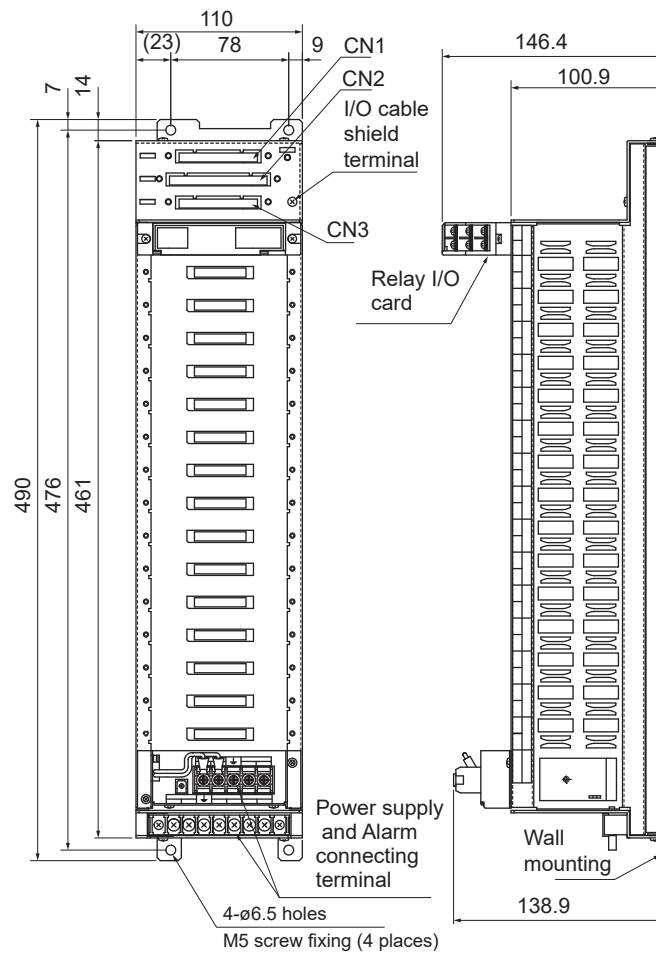
Unit: mm



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