

General Specifications

RY1 Relay Input Card



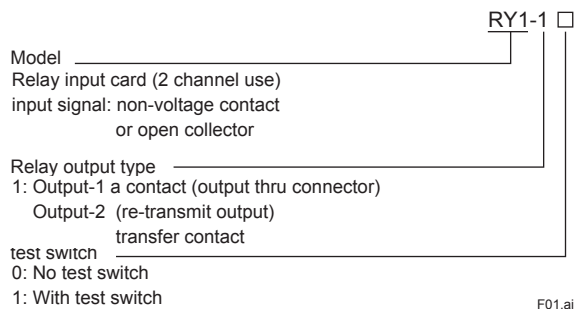
GS 77J06B01-01EN

■ GENERAL

This unit receives contact signal from the field and outputs 2 contact signals (1 for use of DCS status card input and the other is re-transmit contact signal) isolated electrically from the field. One unit stores 2 channels.

- Output contact consists of 2 contacts; 1 for DCS contact and the other for re-transmit contact (transfer contact) of current capacity 1 A.
- Electrically isolated between field input and power supply since DC/DC converter for relay driving power supply is installed.
- Furnished with test switch convenient for debugging of DCS or checking operation and LED for status display.

■ MODEL AND SUFFIX CODES



■ ORDERING INFORMATION

(Example) Type Code: RY1-11

■ DEVICE SPECIFICATIONS

- Structure: Nest storing type, connector connection structure card type, front by terminal and rear by connector. Terminal cover furnished.
- Isolation: Between input - output 1 - output 2 - alarm terminal - power supply (Isolation between input - power supply thru DC/DC converter)
- Power fuse: 0.5 A alarm fuse installed.
- Alarm: Output non voltage contact from alarm terminal when fuse break or below specified output voltage of DC/DC converter.
- Test switch:
 - AUT: Output contact ON/OFF through external contact input
 - OFF: Output contact compulsorily OFF
 - ON: Output contact compulsorily ON
- LED indication: Light on (green) when relay magnetized

■ I/O SPECIFICATIONS

- Input signal:
 - Non voltage contact or open collector
 - External contact specs: 24 V DC, more than 30 mA
 - Relay contact, 2 points
 - Output 1: DCS output
 - Output 2: Re-transmit signal output)
- Contact rating:
 - Output 1: 30 V DC 0.2 A (both resistance and inductance loads)
 - Output 2: Resistance load: 125 V AC 0.4 A
30 V DC 1 A
Inductance load: 125 V AC 0.2 A
30 V DC 0.5 A
Maximum voltage used: 250 V AC/
125 V DC
- Relay contact protection: When driving inductance load, erase the noise to protect contact

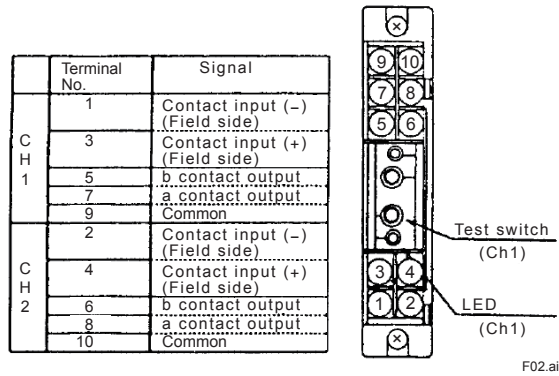
■ STANDARD PERFORMANCE

- Insulation resistance: 100 MΩ (500 V DC) between input - [CH1•CH2 output 1•power supply] - CH1 output 2 - CH2 output 2 - alarm contact output
- Voltage withstand: 1500 V AC/1 minute between input - [CH1•CH2 output 1•power supply] - CH1 output 2 - CH2 output 2 - alarm contact output
However, except between input and alarm contact output.
500 V AC/ 1 minute between input - 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)
- Power supply voltage: 24 V DC±10% (ripple content below 10% p-p)
- Current dissipation: 24 V DC 70 mA

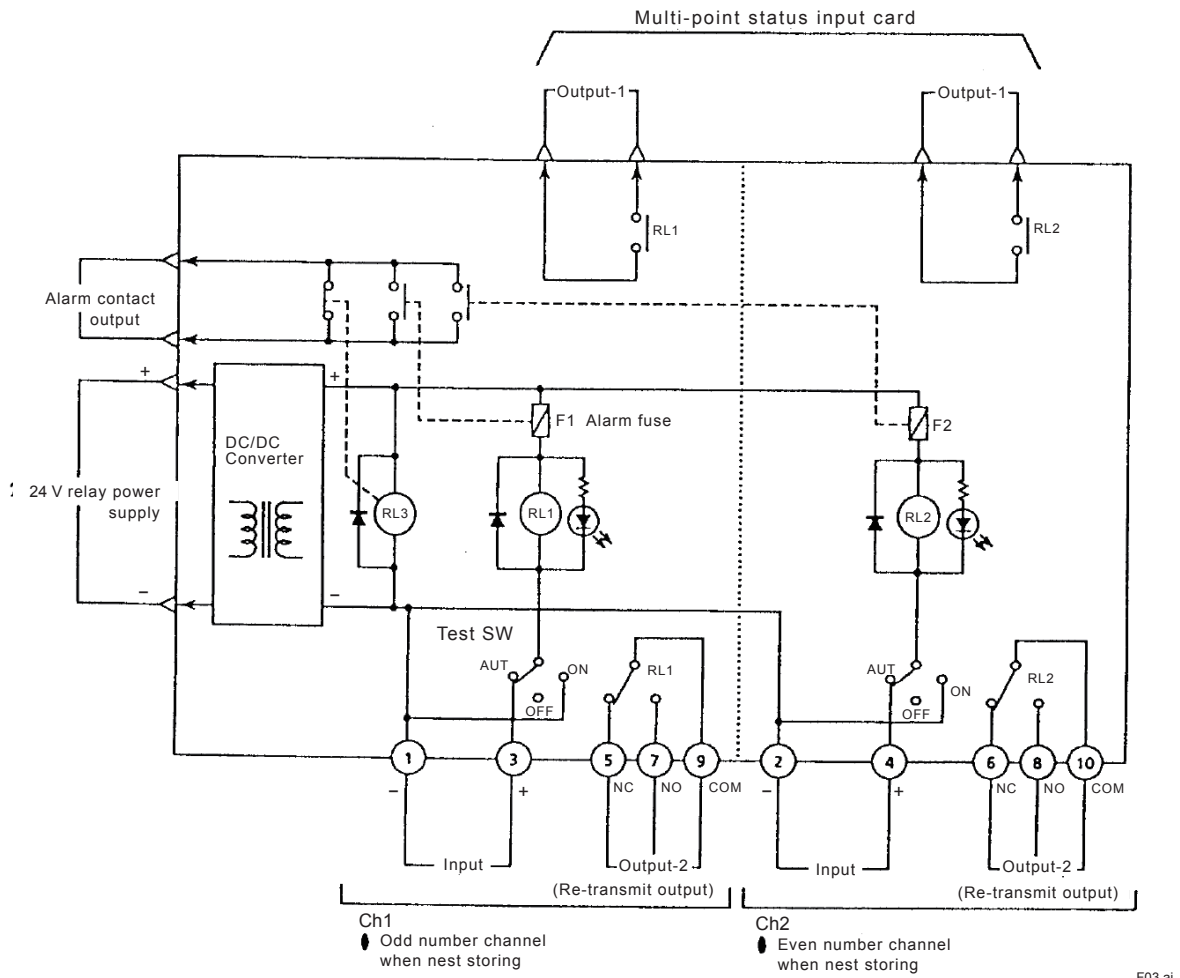
■ MOUNTING, SHAPE & ACCESSORIES

- Mounting method: Store in exclusive nest (RYH or RYV), M3 screw
- Connection method:
 - Input: M3.5 screw terminal connection
 - Output 1 (DCS output): Connector connection
 - Output 2 (re-transmit output): M3.5 screw terminal connection
 - Alarm terminal: Connector connection
 - Power supply: Connector connection
- Material of terminal screw: Nickel plated iron (fastening torque below 8 kgf.cm)
- External dimension: 108 (H) × 21.4 (W) × 129.5 (D) mm
- Weight: About 150 g
- Accessories: Tag number label 1

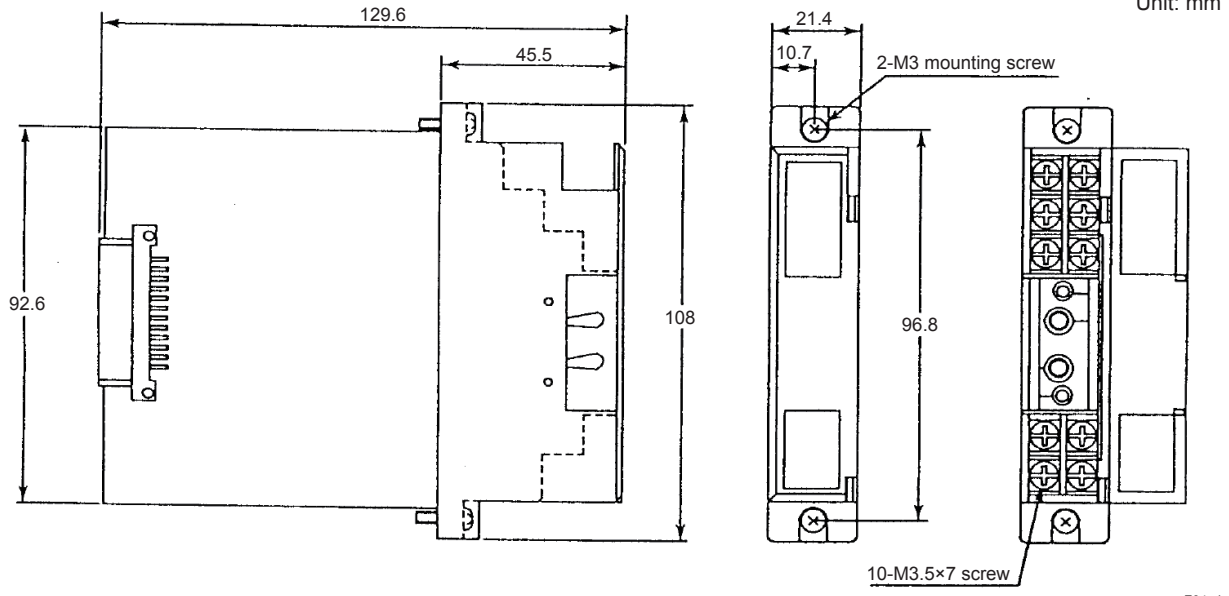
■ TERMINAL ARRANGEMENT



■ BLOCK DIAGRAM



EXTERNAL DIMENSION



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