General Specifications

RY8 Relay Output Card for motor start-stop

VTXUL

GS 77J06B18-01EN

GENERAL

This nest storing type relay output card insulates DCS status output card and motor driving circuit and connects them through the relay.

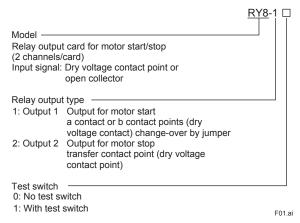
This card receives contact signal from DCS and at switching time when $OFF \rightarrow ON$ of contact signal, motor start relay contact (Output-1) should be set at ON for certain period of time.

And at switching time when $ON \rightarrow OFF$ of contact signal, motor stop relay contact (Output-2) should be set at ON for certain period of time.

Since one card stores 2 channels, start stop of 2 motors can be done by one card.

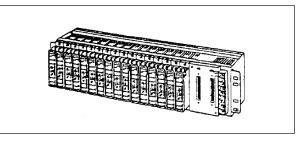
- Output contact points consist of 2 contacts: 1 for motor start and the other for motor stop.
 - Output 1: Dry voltage contact point output for motor start (a contact and b contact points change-over through jumper)
 - Output 2: Dry voltage contact point output for motor start (transfer contact point)
- Furnished with test switch convenient for debugging of DCS or operation checking and LED for status display.
- Provided with jumper to connect internally both commons of motor start stop relay contacts to simplify wiring. When common use is not needed, commons can easily be separated through internal jumper pin.

MODEL AND SUFFIX CODES





(Example) Type Code: RY8-11



SPECIFICATIONS

- Structure: Nest storing card type to connect front by terminal and rear by connector. Terminal cover furnished.
- Isolation: Between input•power supply output 1 output 2 (Non-isolation between outputs when common jumper is connected)
- Test switch: AUT (Output contact point ON/OFF through outer contact point input) OFF (Output contact point compulsorily OFF) in case of a contact. ON (Output contact point compulsorily
- ON) in case of a contact. LED indication: Light on (orange) when input is ON or test switch is ON

INPUT & OUTPUT

Input signal: Dry voltage contact point or open collector Outer contact point specs .: 24 V DC, more than 30 mA Output signal: Relay contact: 2 points Contact point rating Resistance load: 250 V AC 3.0 A 30 V DC 3.0 A 125 V DC 0.2 A Inductance load: 250 V AC 1.5 A 30 V DC 1.5 A 125 V DC 0.1 A Max. working voltage: 250 V AC/125 V DC Min. applicable load: 5 V DC 1 mA When driving inductance load, erase noise to protect contact point. Output ON time width: About 2 seconds (fixed)



STANDARD PERFORMANCE

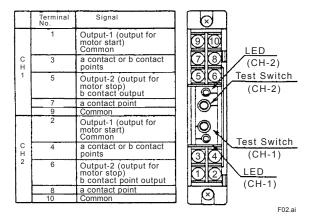
Insulation resistance: 100 M Ω (500 V DC) between [Input•power supply] - CH1 output 1 - CH2 output 1 - CH1 output 2 - CH2 output 2 - alarm terminal (Non-isolation between outputs at time when common is connected) Voltage withstand: 1500 V AC/1 minute between [Input•power supply] - CH1 output 1 - CH2 output 1 - CH1 output 2 - CH2 output 2 - alarm terminal (except between CH1 output 1 - CH1 output 2, CH2 output 1 - CH2 output 2•[Input•power supply] - alarm terminal) 500 V AC/1 minute between CH1 output 1 - CH1 output 2, CH2 output 1 - CH2 output 2•[Input•power supply] - alarm terminal (Non-isolation between outputs at time when common is connected) Temperature range: 0 to 50°C Humidity range: 5 to 90%RH (no condensation) Power supply voltage: 24 V DC±10% (ripple content below 5% p-p)

Current dissipation: 24 V DC 60 mA

MOUNTING, SHAPE & ACCESSORIES

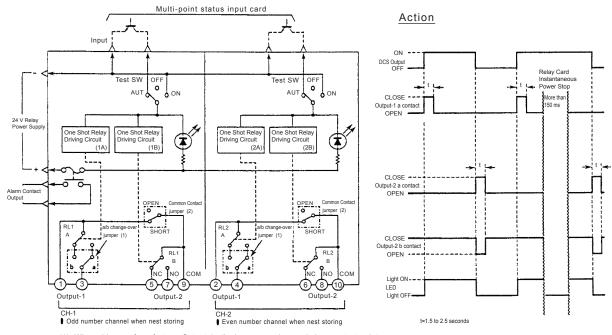
Mounting method: Store in exclusive use nest (RYH or RYV) Connection method Input: Connector connection Output 1, Output 2: M3.5 screw terminal connection Alarm terminal: Connector connection 24 V relay power supply: Connector connection Material of terminal screw: Nickel plated iron (fastening torque below 0.8 Nm) External dimension: 108 × 21.4 × 129.6 mm (H × W × D) Weight: Abt. 150 g Accessories: Tag number label 1

TERMINAL ARRANGEMENT



All Rights Reserved. Copyright © 2015, Yokogawa Electric Corporation

BLOCK DIAGRAM



When shipment from factory, Output-1 a/b change-over jumper is in a contact point
When shipment from factory, common connect jumper is in a connecting status

F03.ai

EXTERNAL DIMENSION

