

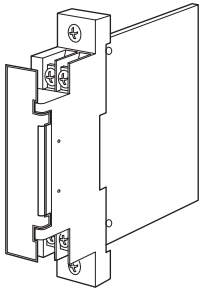
DCS Input/Output Relay Card Series

ONE-SHOT OUTPUT RELAY CARD

(with test switch)

Functions & Features

- Accepting status signals from a DCS
- With test switch
- Status LED for input
- Attaching jumper enables to switch N.O. or N.C. contact of output relay and common or separation of start and stop



MODEL: 38BSH3-[1]-R

ORDERING INFORMATION

- Code number: 38BSH3-[1]-R

Specify a code from below for [1].

(e.g. 38BSH3-0-R)

[1] TEST SWITCH

0: None

1: With

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

RELATED PRODUCTS

- Standard Rack (model: 38BXx)

GENERAL SPECIFICATIONS

Construction: Rack-mounted; terminal access via screw terminals on the front and connector on the rear; terminal cover provided

Connection

Input: Connector

Output: M3.5 screw terminals (torque 0.8 N·m)

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Housing material: Flame-resistant resin (black)

Isolation: Input or power to ch.1 to ch.2

Power interruption: Operate at \geq 150 msec.

Status LED: Turn on when input is on or test switch is on

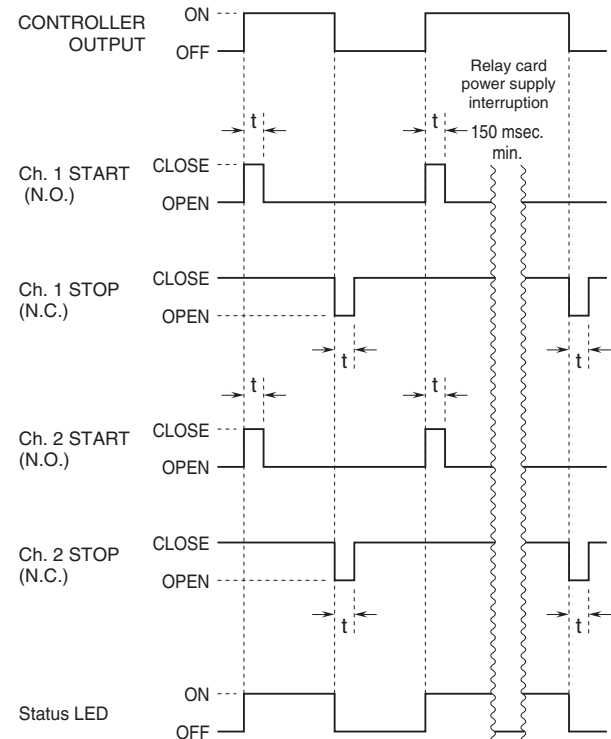
Test switch

AUTO: Output the signal by input

OFF: Forced input signal off

ON: Forced input signal on

OPERATION



$t = 1.5 - 2.5 \text{ sec.}$

N.O. or N.C. selectable with jumpers. (a or b of CH1 START, CH1 STOP, CH2 START or CH2 STOP)

INPUT SPECIFICATIONS

Input: Dry contact or open collector

Approx. 3 V DC (2.5 mA)

ON resistance: \leq 200 Ω

OFF resistance: \geq 100 k Ω

Minimum input interval: 10 sec.

OUTPUT SPECIFICATIONS

Output: Dry contact

Rating: 250 V AC @ 3 A ($\cos \phi = 1$)

30 V DC @ 3 A (resistive load)

Maximum switching voltage: 250 V AC or 120 V DC (0.2 A)

Maximum switching power: 750 VA or 90 W

Minimum switching load: 5 V DC @ 10 mA

One-shot pulse width: 1.5 – 2.5 sec. (fixed)

Relay life

Mechanical: 5×10^7 cycles

Electrical: 10^6 cycles

External protection: Recommended to protect the contact and to eliminate noise when driving an inductive load (coils, etc.)

Attaching jumper to SHORT or OPEN of CH1 COM and CH2 COM enables to switch common or separation.

INSTALLATION

Current consumption: Approx. 50 mA

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 95 %RH (non-condensing)

Mounting: Standard Rack 38BXx

Weight: 150 g (0.33 lb)

PERFORMANCE

Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute
(input or power to ch.1 to ch.2 to ground)

500 V AC @ 1 minute (ch.1 start - ch.1 stop)

500 V AC @ 1 minute (ch.2 start - ch.2 stop)

(Non-isolation when common is connected)

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

Low Voltage Directive

EN 61010-1

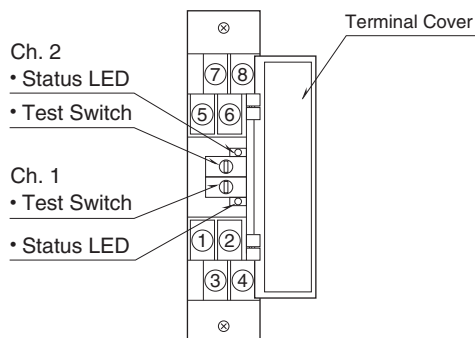
Measurement Category II (output)

Pollution Degree 2

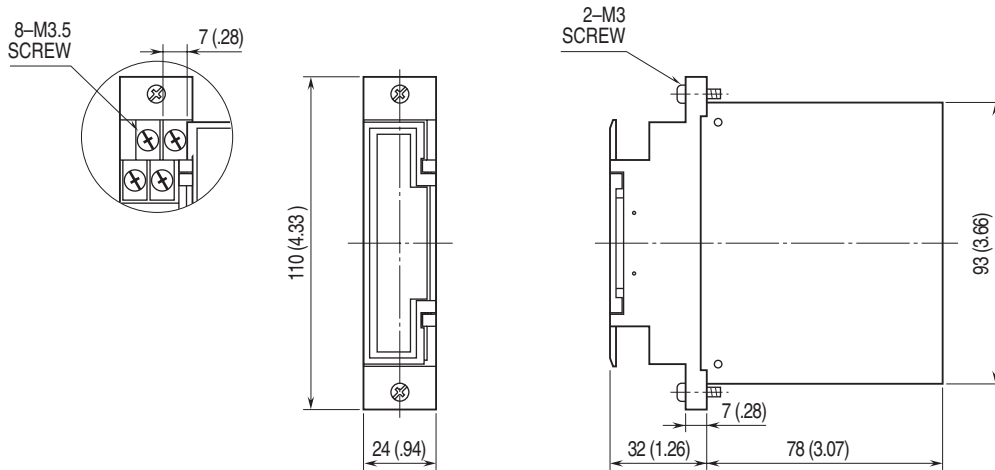
Input or power to ch.1 to ch.2: Reinforced insulation
(300 V)

RoHS Directive

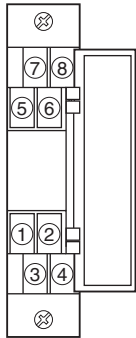
EXTERNAL VIEW



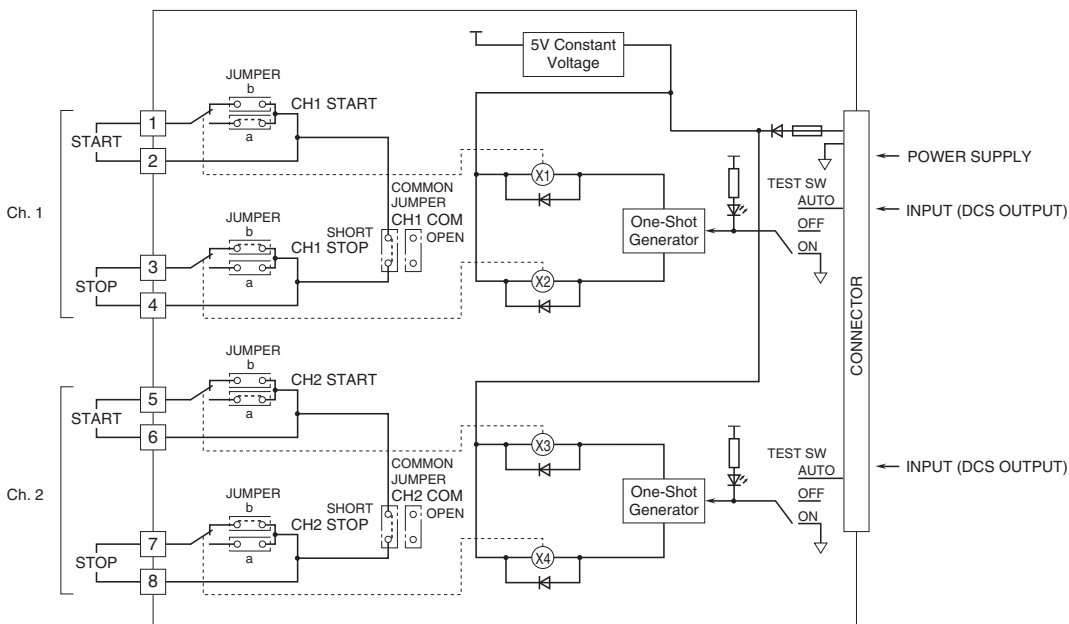
EXTERNAL DIMENSIONS unit: mm [inch]



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Jumper for start is set to N.O., jumper for stop is set to N.C. at factory default.
Common jumper is set to SHORT at factory default.



Specifications are subject to change without notice.