DCS Input/Output Relay Card Series

OUTPUT RELAY CARD

MODEL

38N-4

DESCRIPTIONS

The 38N-4 is a DCS-front-end use relay card installed in a dedicated 19-inch rack, used to manually turn on/off a voltage contact output to directly drive devices such like electromagnetic valve, and to automatically turn it off by an external status contact from the DCS.

- Voltage output (LED turns on at output)
- Test switch useful for the DCS test running
- 0.5A fuse for the voltage output

MODEL & SUFFIX CODE SELECTION

38N-4

MODEL -

OUTPUT CARD

4 : Manual ON / Auto OFF

ORDERING INFORMATION

Specify code number. (e.g. 38N-4)

RELATED PRODUCTS

• Standard rack (model: 38N-BY1, -BH1)

GENERAL SPECIFICATIONS

 $\textbf{Construction} \hbox{: Rack mounted; terminal access via screw}$

terminals at the front and via card-edge con-

nector at the rear

Connection: M3.5 screw terminals and card-edge connec-

tor

Screw terminal material: Nickel-plated steel

 $(torque~0.8~N{\cdot}m)$

Power input: Supplied via card-edge connector Fuse for voltage output: 0.5A incorporated

Alarm: Dry contact output at the rack terminal

when the fuse is blown.

Isolation: DCS output or external contact or power

to power for voltage output or fuse alarm

output

Indicator LED: Orange light turns on with the output ON

INPUT

■ DCS OUTPUT: Open collector

Coil rating: 24V DC @10mA (approx.)

■ EXTERNAL CONTACT (EM valve control SW): Dry

contact

Coil rating: 24V DC @20mA (approx.)

OUTPUT

■ VOLTAGE CONTACT OUTPUT

Rated load: $100V AC @0.5A (cos \emptyset = 1)$

30V DC @0.5A (resistive load) Electrical life 10⁵ cycles (rate 30/min.)

Maximum switching voltage: 125V AC or 30V DC

Maximum switching power: 50VA or 15W

Minimum load: 5V DC @10mAMechanical life: 5×10^7 cycles

External protection: Contact protection and noise quench-

ing recommended when driving an inductive

load (coil, etc.)

■ FUSE ALARM OUTPUT: Dry contact

Rated load: $50V AC @0.5A (cos \emptyset=1)$

30V DC @0.5A (resistive load)

Electrical life 10⁵ cycles (rate 30/min.)

Maximum switching voltage: $50V\,AC~or~30V~DC$

Maximum switching power: 25VA or 15W Minimum load: 5V DC @10mA

Mechanical life: 5×10^7 cycles

External protection: Contact protection and noise quench-

ing recommended when driving an inductive

load (coil, etc.)

INSTALLATION

Power input: Operational voltage range 24V DC ±10%,

ripple 10% p-p max., approx. 40mA

Operating temperature: -5 to +55°C (23 to 131°F) Operating humidity: 30 to 90% RH (non-condensing) Dimensions: W23×H149×D102 mm (0.91"×5.87"×4.02")

Weight: 150 g (0.33 lbs)

PERFORMANCE

Insulation resistance: ${\ge}100M\Omega$ with 500V DC (DCS output

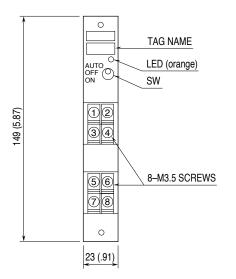
or external contact or power to power for voltage output to fuse alarm output)

Dielectric strength: 1000V AC @1 minute (DCS output or

external contact or power to power for volt-

age output to fuse alarm output)

FRONT VIEW



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

