

**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**

**Construction:** Rack mounted; terminal access via screw terminals at the front and via card-edge connector at the rear

**Connection:** M3.5 screw terminals and card-edge connector

**Screw terminal material:** Nickel-plated steel (torque 0.8 N·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 (cosφ=1)  
30V DC @0.5A (resistive load)  
Electrical life 10<sup>5</sup> cycles (rate 30/min.)

**Maximum switching voltage:** 125V AC or 30V DC

**Maximum switching power:** 50VA or 15W

**Minimum load:** 5V DC @10mA

**Mechanical life:** 5 × 10<sup>7</sup> cycles

**External protection:** Contact protection and noise quenching recommended when driving an inductive load (coil, etc.)

■ **FUSE ALARM OUTPUT:** Dry contact

**Rated load:** 50V AC @0.5A (cosφ=1)  
30V DC @0.5A (resistive load)  
Electrical life 10<sup>5</sup> 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<sup>7</sup> cycles

**External protection:** Contact protection and noise quenching 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)

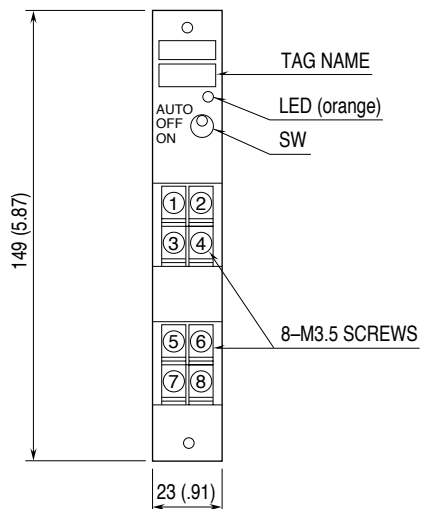
**PERFORMANCE**

**Insulation resistance:** ≥100MΩ 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 voltage output to fuse alarm output)



**FRONT VIEW**



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**

