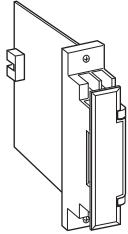


Rack-mounted DCS Signal Conditioners 18-RACK

CONTACT INPUT MODULE

Functions & Features

- Buffer relay for providing signals to a DCS system



MODEL: 18DI-1-R

ORDERING INFORMATION

- Code number: 18DI-1-R

INPUT

Dry contact or open collector

OUTPUT

Relay contact

POWER INPUT

DC Power

R: 24 V DC

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

GENERAL SPECIFICATIONS

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

Connection

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

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

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Input or power to output

Indicator LED: Red LED turns on when the coil is energized.

Test switch

AUTO: Relay energized at ON input

OFF: Forced relay de-energized

ON: Forced relay energized

INPUT SPECIFICATIONS

■ **Input:** Dry contact or open collector

Sensing: 24 V DC @ 30 mA

OUTPUT SPECIFICATIONS

■ **Output:** N.O. relay

Rating: 120 V AC @ 0.2 A (cos ϕ = 1)

30 V DC @ 0.2 A (resistive load)

Electrical life $\geq 1 \times 10^5$ cycles

Maximum switching voltage: 264 V AC or 100 V DC

Maximum switching power: 24 VA or 6 W

Minimum load: 5 V DC @ 10 mA

Mechanical life: 5×10^7 cycles

■ **Retransmitted output:** SPDT relay

Rating: 120 V AC @ 1 A (cos ϕ = 1)

30 V DC @ 1 A (resistive load)

Electrical life $\geq 1 \times 10^5$ cycles

Maximum switching voltage: 264 V AC or 100 V DC

Maximum switching power: 120 VA or 30 W

Minimum load: 5 V DC @ 10 mA

Mechanical life: 5×10^7 cycles

For maximum relay life with inductive

loads, external protection is recommended.

INSTALLATION

Current consumption: Approx. 30 mA

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

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Standard Rack 18BX or 18KBX

Weight: 150 g (0.33 lb)

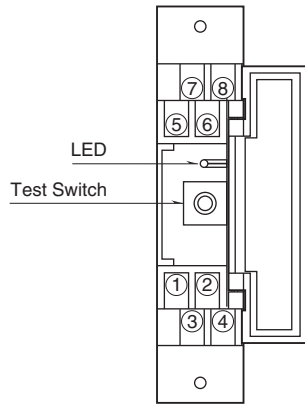
PERFORMANCE

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

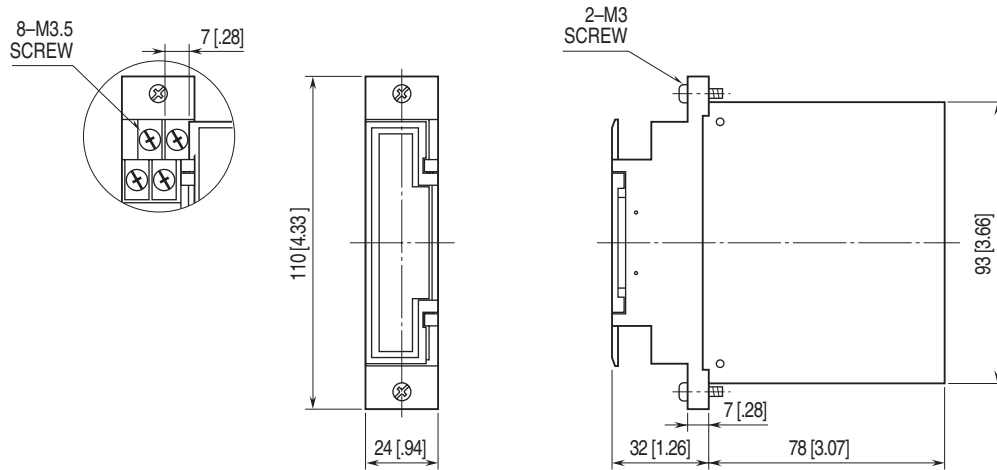
Dielectric strength: 1500 V AC @ 1 minute

(input or power to output to ground)

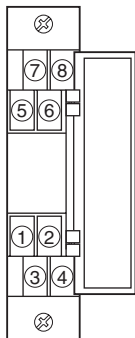
EXTERNAL VIEW



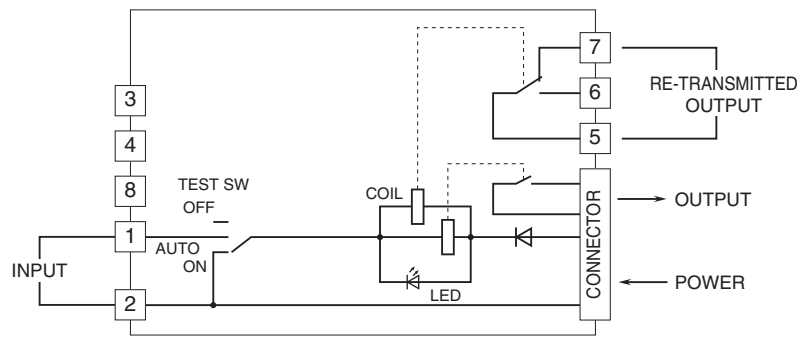
EXTERNAL DIMENSIONS unit: mm [inch]



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.