

Rack-mounted DCS Signal Conditioners 18-RACK

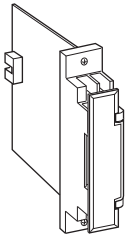
POTENTIOMETER CONVERTER

Functions & Features

- Providing two DC outputs proportional to a potentiometer or slidewire position input
- Constant voltage excitation allows use with pots with total resistances from 100 Ω - 10 k Ω without affecting accuracy
- 50 % zero/span adjustments with minimal interaction
- Second channel output available at the front terminals and at the Standard Rack connector

Typical Applications

- Tank levels
- Positions



MODEL: 18MS-66-R

ORDERING INFORMATION

- Code number: 18MS-66-R

INPUT POTENTIOMETER

Total resistance 100 Ω - 10 k Ω

OUTPUT 1

Voltage

6: 1 - 5 V DC (Load resistance 2000 Ω min.)

OUTPUT 2

Voltage

6: 1 - 5 V DC (Load resistance 2000 Ω min.)

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 1: Connector

Output 2: M3.5 screw terminals (torque 0.8 N·m) and connector

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Input to output 1 to output 2 to power

Overrange output: Approx. -10 to +120 % at 1 - 5 V

Zero adjustment: 0 - 50 % of total resistance (front)

Span adjustment: 50 - 100 % of total resistance (front)

INPUT SPECIFICATIONS

Minimum span: 50 % of total resistance

Excitation: Approx. 0.2 V DC

INSTALLATION

Power consumption

•DC: Approx. 35 mA

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

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

Mounting: Standard Rack 18BXx or 18KBXx

Weight: 150 g (0.33 lb)

PERFORMANCE in percentage of span

Accuracy: \pm 0.1 %

Temp. coefficient: \pm 0.015 %/°C (\pm 0.008 %/°F)

Response time: \leq 0.5 sec. (0 - 90 %)

Line voltage effect: \pm 0.1 % over voltage range

Insulation resistance: \geq 100 M Ω with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute

(input to output 1 or output 2 or power)

500 V AC @ 1 minute

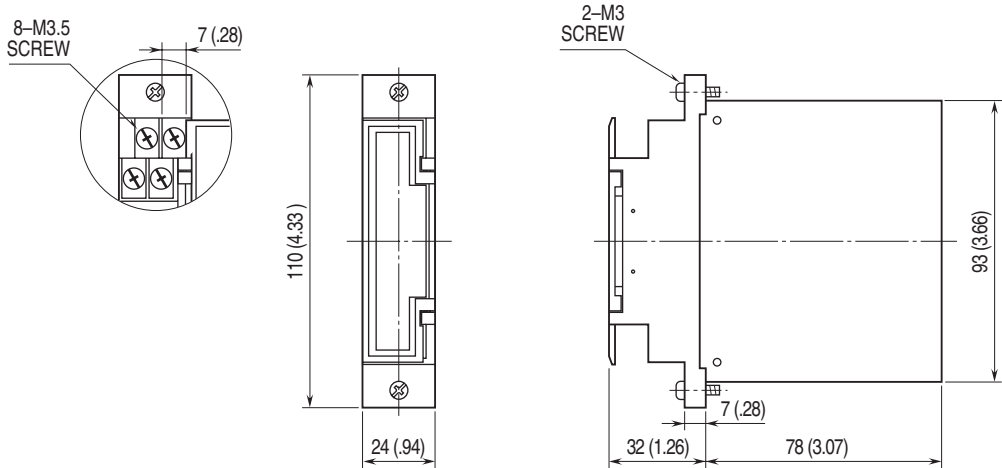
(output 1 to output 2 to power)

1500 V AC @ 1 minute

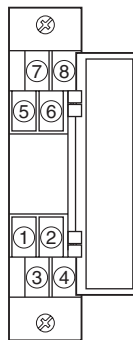
(input or output or power to ground)



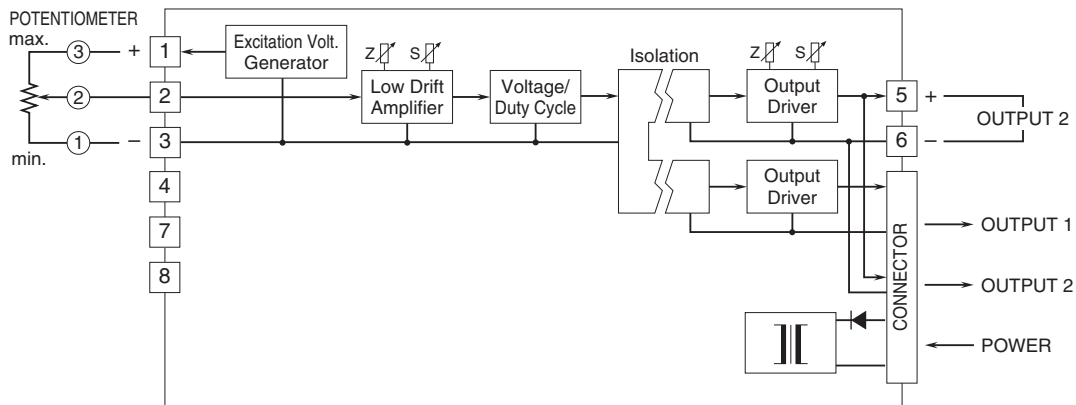
DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.

