

## Rack-mounted DCS Signal Conditioners 18-RACK

### POTENTIOMETER CONVERTER

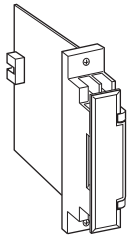
(fast response)

#### 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  $\Omega$  - 10 k $\Omega$  without affecting accuracy
- 50 % zero/span adjustments with minimal interaction
- Second channel output available at the front terminals and at the Standard Rack connector
- Fast response type

#### Typical Applications

- Tank levels
- Positions



### MODEL: 18MK-66-R

#### ORDERING INFORMATION

- Code number: 18MK-66-R

#### INPUT POTENTIOMETER

Total resistance 100  $\Omega$  - 10 k $\Omega$

#### OUTPUT 1

##### Voltage

6: 1 - 5 V DC (Load resistance 2000  $\Omega$  min.)

#### OUTPUT 2

##### Voltage

6: 1 - 5 V DC (Load resistance 2000  $\Omega$  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:** Approx. 25 msec. (0 - 90 %)

**Line voltage effect:**  $\pm$ 0.1 % over voltage range

**Insulation resistance:**  $\geq$  100 M $\Omega$  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

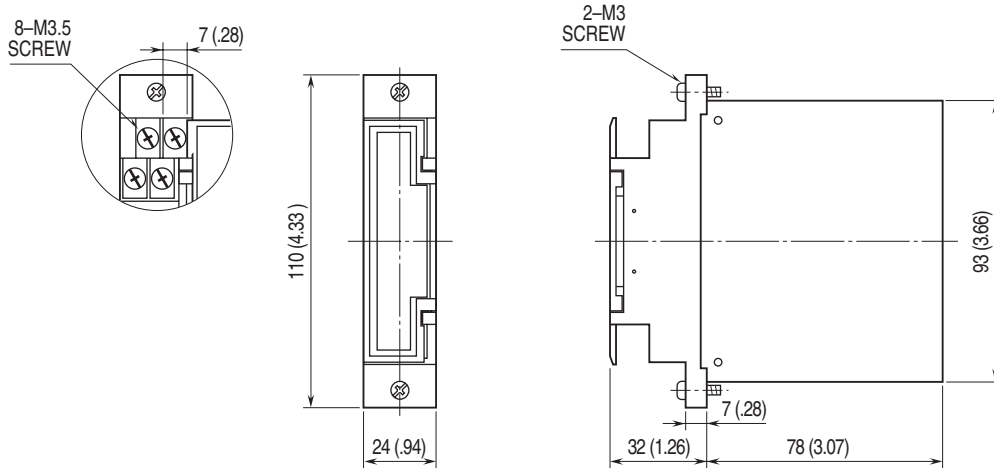
(output 1 to output 2 to power)

1500 V AC @ 1 minute

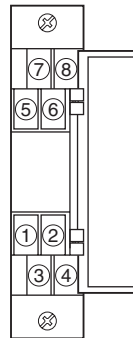
(input or output or power to ground)



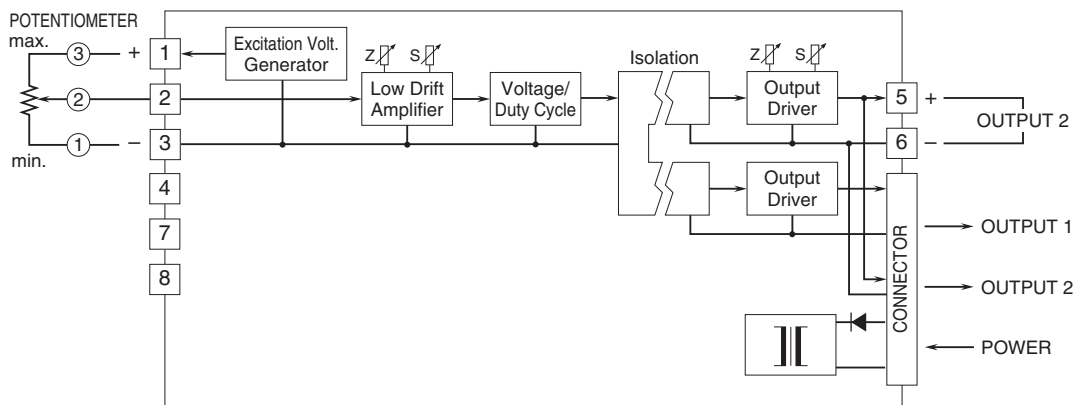
## DIMENSIONS unit: mm (inch)



## TERMINAL ASSIGNMENTS



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.