

## Rack-mounted DCS Signal Conditioners 18-RACK

### OUTPUT ISOLATOR

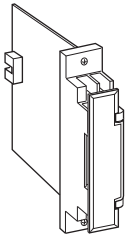
(fast response)

#### Functions & Features

- Converting a 1 - 5 V DC input into an isolated standard process signal
- Input from the Standard Rack connector can be monitored at the front terminals
- Fast response type

#### Typical Applications

- Isolation between control room and field instrumentation



### MODEL: 18YK-6[1]-R

### ORDERING INFORMATION

- Code number: 18YK-6[1]-R
- Specify a code from below for [1]  
(e.g. 18YK-66-R)

### INPUT

#### Voltage

6: 1 - 5 V DC (Input resistance 1 M $\Omega$  min.)

### [1] OUTPUT

#### Current

A: 4 - 20 mA DC (Load resistance 600  $\Omega$  max.)

#### Voltage

6: 1 - 5 V DC (Load resistance 500  $\Omega$  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:** Connector

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

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

**Power input:** Supplied from connector

**Screw terminal:** Nickel-plated steel

**Isolation:** Input to output to power

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

**Zero adjustment:** -5 to +5 % (front)

**Span adjustment:** 95 to 105 % (front)

### OUTPUT SPECIFICATIONS

The output goes below 0 % when the input is open.

### INSTALLATION

#### Power consumption

##### •DC:

Approx. 30 mA with voltage output

Approx. 50 mA with current output

**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 lbs)

### 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

(output to input or power)

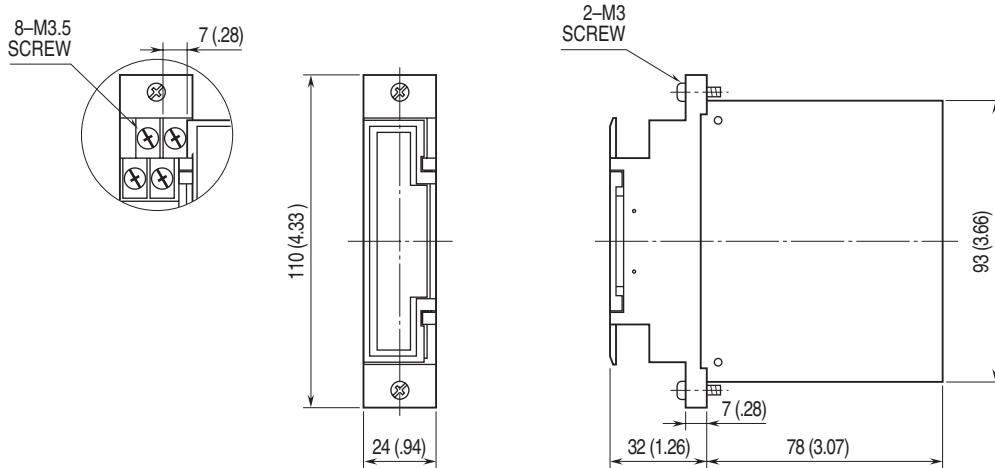
500 V AC @ 1 minute (input to power)

1500 V AC @ 1 minute

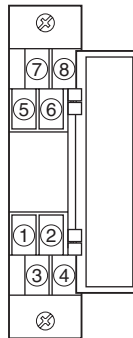
(input or output or power to ground)



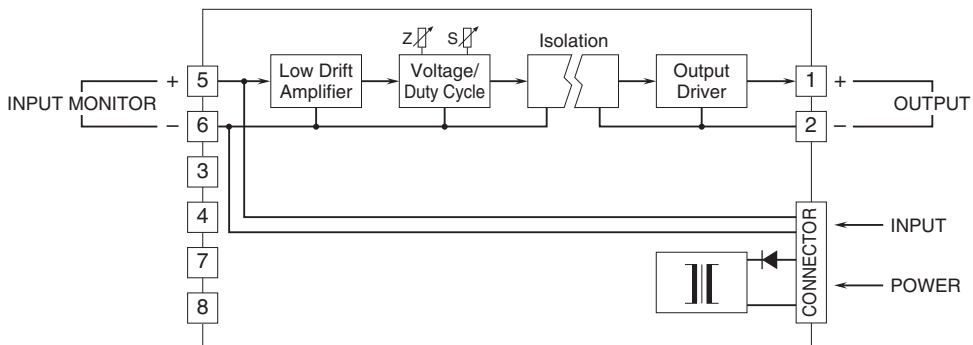
**DIMENSIONS unit: mm (inch)**




**TERMINAL ASSIGNMENTS**



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



 Specifications are subject to change without notice.

