

## Rack-mounted DCS Signal Conditioners 18-RACK

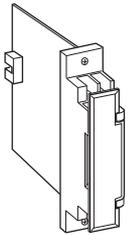
### OUTPUT ISOLATOR

#### 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

#### Typical Applications

- Isolation between control room and field instrumentation



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

#### ORDERING INFORMATION

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

**Current consumption:** 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 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 $\Omega$  with 500 V DC

**Dielectric strength:** 1500 V AC @ 1 minute

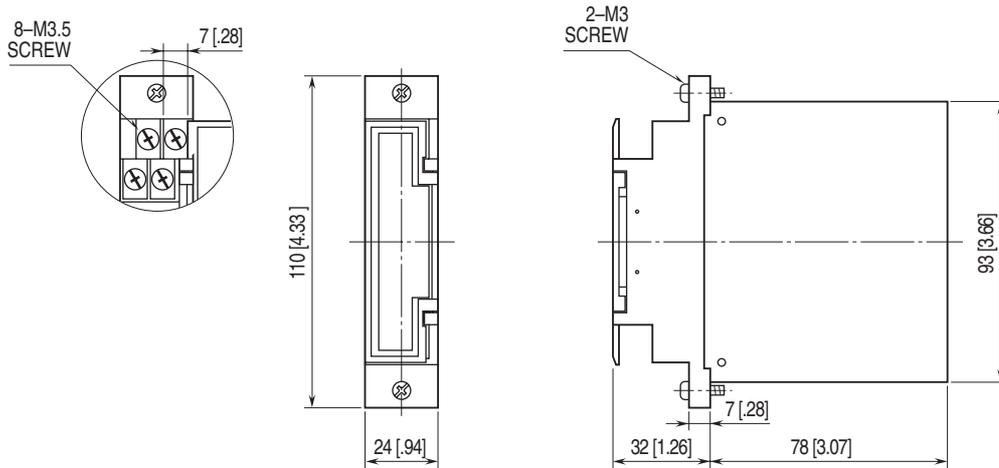
(output to input or power)

500 V AC @ 1 minute (input to power)

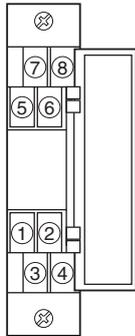
1500 V AC @ 1 minute

(input or output or power to ground)

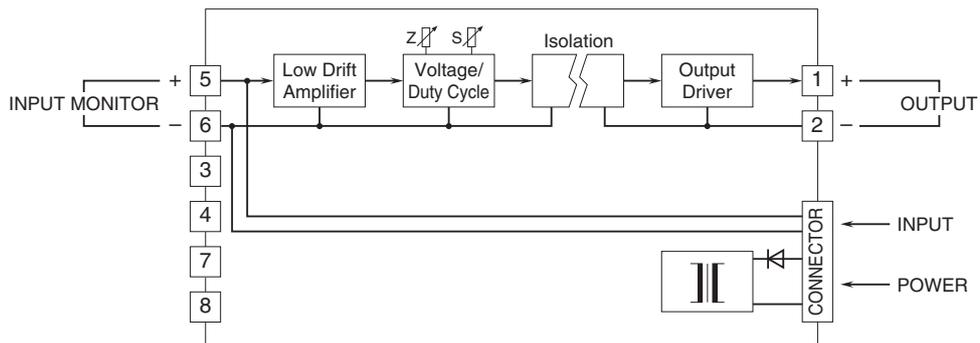
## EXTERNAL DIMENSIONS unit: mm [inch]



## TERMINAL ASSIGNMENTS



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.