

Rack-mounted DCS Signal Conditioners 18-RACK

OUTPUT ISOLATOR

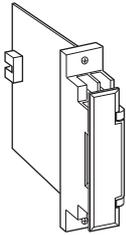
(fast response)

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 Ω min.)

[1] OUTPUT

Current

A: 4 - 20 mA DC (Load resistance 600 Ω max.)

Voltage

6: 1 - 5 V DC (Load resistance 500 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: 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: Approx. 25 msec. (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

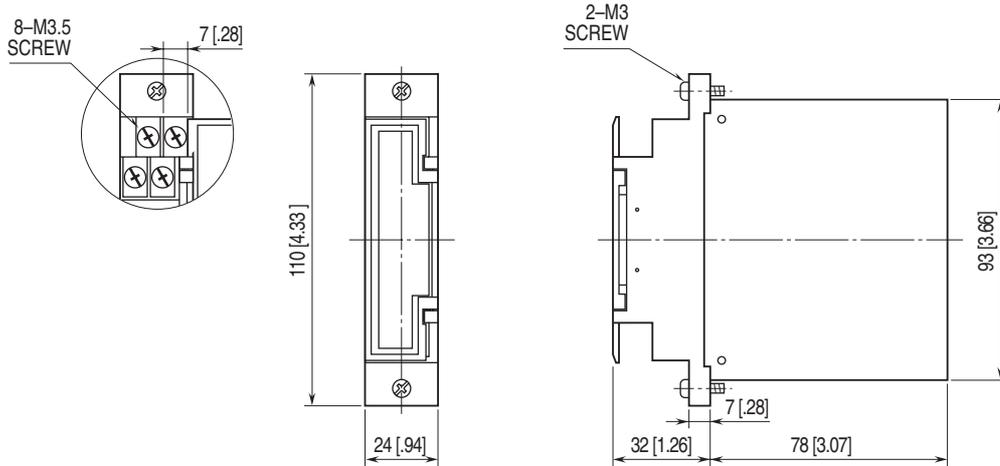
(output to input or power)

500 V AC @ 1 minute (input to power)

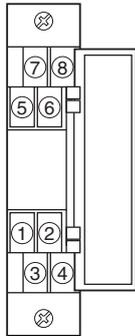
1500 V AC @ 1 minute

(input or output or power to ground)

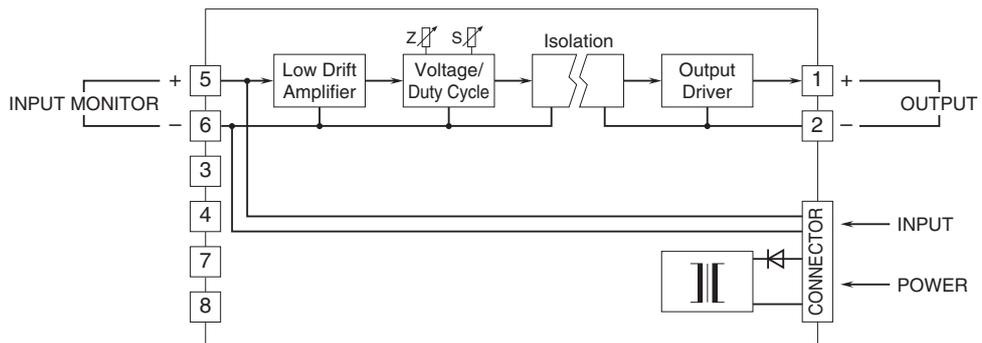
EXTERNAL DIMENSIONS unit: mm [inch]



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.