Rack-mounted DCS Signal Conditioners 18-RACK

OUTPUT ISOLATOR

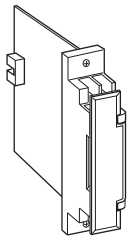
Functions & Features

• 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 MΩ 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 ±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: ±0.1 %

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

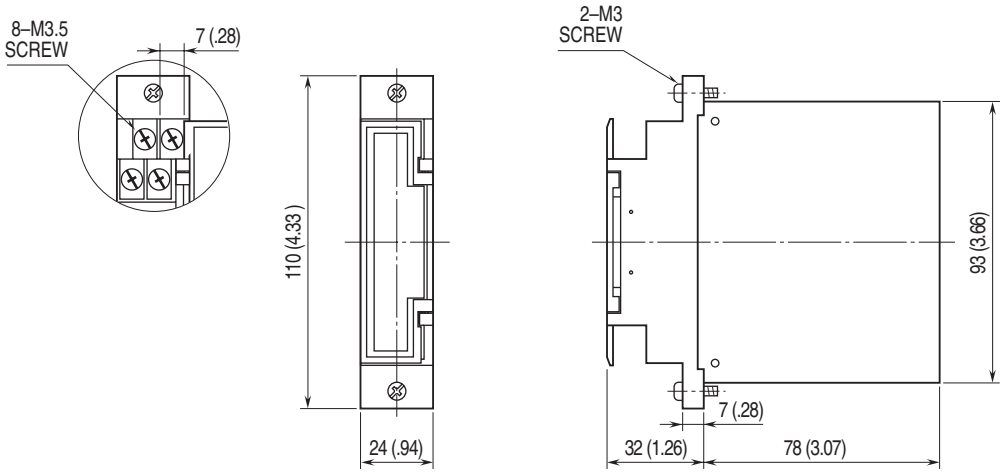
Response time: ≤ 0.5 sec. (0 – 90 %)

Line voltage effect: ±0.1 % over voltage range

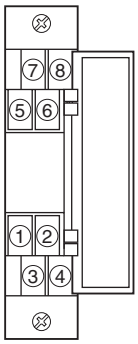
Insulation resistance: ≥ 100 MΩ with 500 V DC

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)

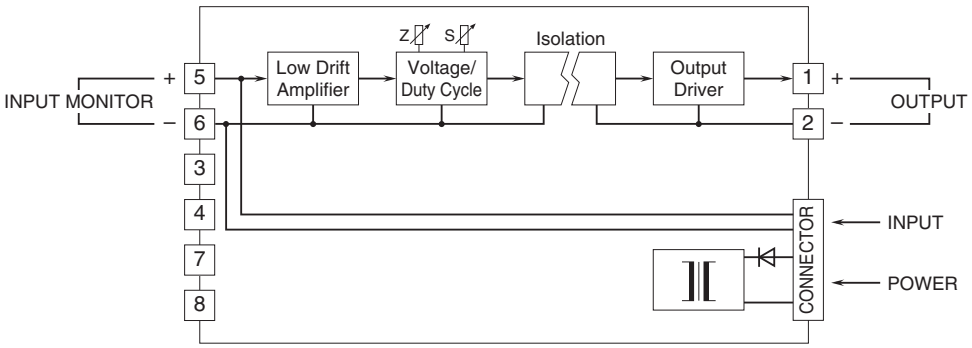
EXTERNAL DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



⚠ Specifications are subject to change without notice.