

Rack-mounted DCS Signal Conditioners 18-RACK

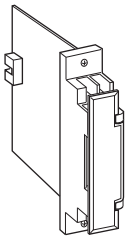
SQUARE ROOT EXTRACTOR

Functions & Features

- Providing two DC outputs proportional to the root of the input signal
- Low-end cutout
- Second channel output available at the front terminals and at the Standard Rack connector

Typical Applications

- Converting differential pressure to flow



MODEL: 18JN-[1]66-R

ORDERING INFORMATION

- Code number: 18JN-[1]66-R
- Specify a code from below for [1]
(e.g. 18JN-666-R)

[1] INPUT

Current

- A: 4 - 20 mA DC (Input resistance 250 Ω)
- H: 10 - 50 mA DC (Input resistance 100 Ω)

Voltage

- 6: 1 - 5 V DC (Input resistance 1 M Ω min.)

OUTPUT 1

Voltage

- 6: 1 - 5 V DC (Load resistance 2000 Ω min.)

OUTPUT 2

Voltage

- 6: 1 - 5 V DC (Load resistance 2000 Ω min.)

POWER INPUT

DC Power

- R: 24 V DC
- (Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

RELATED PRODUCTS

- JX configurator connection kit (model: JXCON)
- Programming Unit (model: PU-2x)

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

Adjustments: Programming Unit (model: PU-2x); zero and span, etc.

(Refer to the users manual of JXCON for the adjustments configurable with JXCON.)

INPUT SPECIFICATIONS

- **DC Current:** Input resistor incorporated

OUTPUT SPECIFICATIONS

The output turns to 0 % when the input is open.

INSTALLATION

Power consumption

- **DC:** Approx. 60 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 lbs)

PERFORMANCE in percentage of span

Accuracy: \pm 0.25 % (input 1 - 100 %)

Temp. coefficient: \pm 0.03 %/°C (\pm 0.02 %/°F)

Response time: \leq 0.5 sec. (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

(input to output 1 or output 2 or power)

500 V AC @ 1 minute

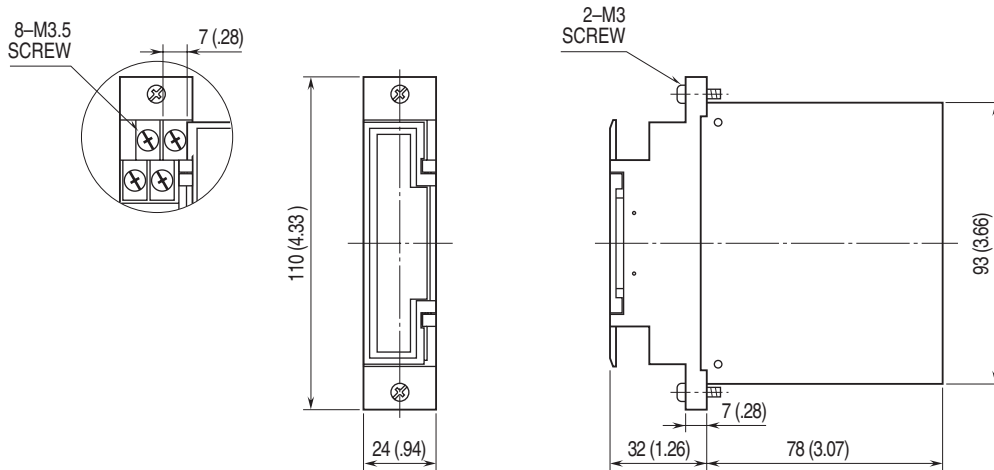
(output 1 to output 2 to power)

1500 V AC @ 1 minute

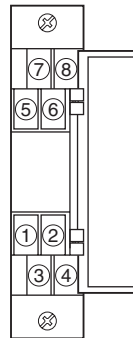
(input or output or power to ground)



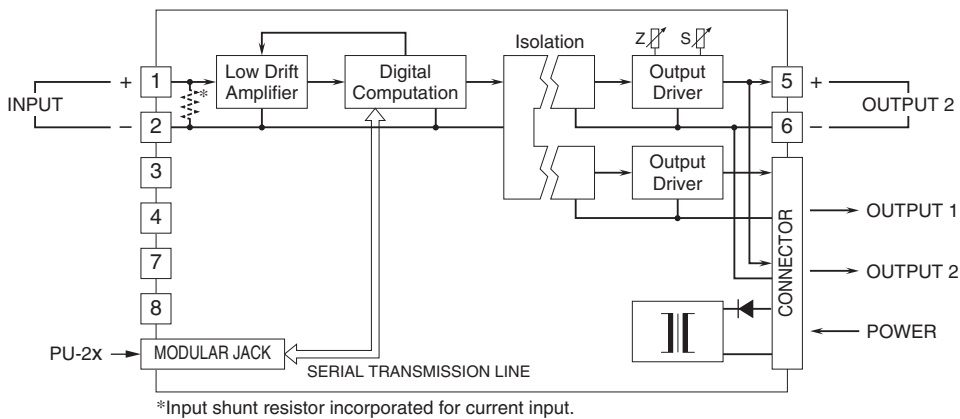
DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.