

Rack-mounted DCS Signal Conditioners 18-RACK

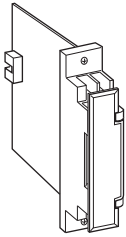
SQUARE ROOT EXTRACTOR

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 MΩ 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 ±10 %, ripple 10 %p-p max.)

RELATED PRODUCTS

- Programming Unit (model: PU-2x)
- PC configurator software (model: JXCON)

Downloadable at our web site.

A dedicated cable is required to connect the module to the PC. Please refer to the internet software download site or the users manual for the PC configurator for applicable cable types.

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

Overrange output: 0 - 105 % at 1 - 5 V

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

Current consumption: 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 lb)

PERFORMANCE in percentage of span

Accuracy: ±0.25 % (input 1 - 100 %)

Temp. coefficient: ±0.03 %/°C (±0.02 %/°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

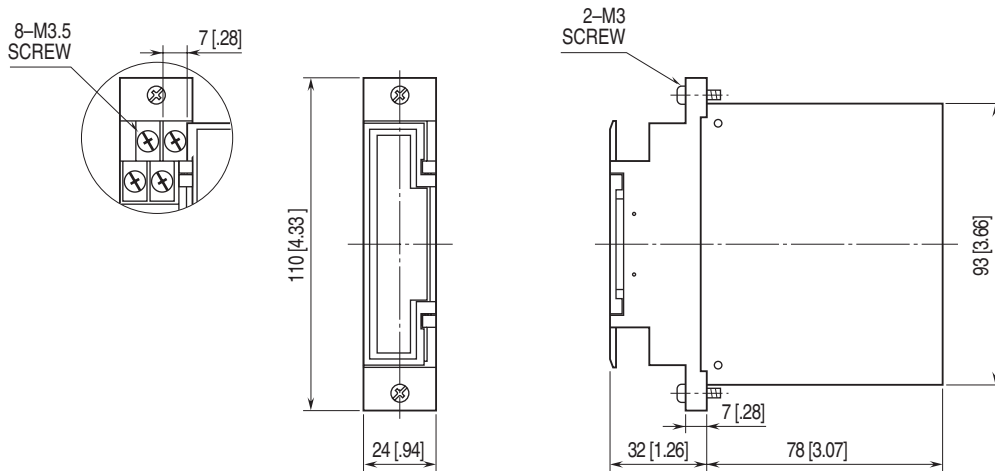
(input to output 1 or output 2 or power)

500 V AC @ 1 minute

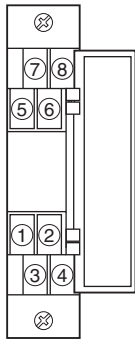
(output 1 to output 2 to power)

1500 V AC @ 1 minute
(input or output or power to ground)

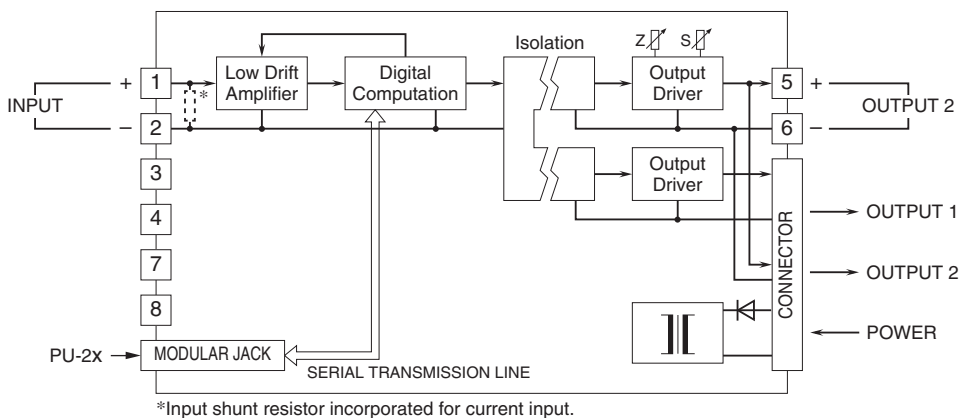
EXTERNAL DIMENSIONS unit: mm [inch]



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.