

Rack-mounted DCS Signal Conditioners 18-RACK

CURRENT LOOP SUPPLY

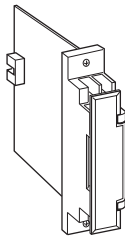
(with square root extractor)

Functions & Features

- Powering a 4 - 20 mA DC current loop
- Shortcircuit protection
- Applicable to smart transmitters
- Usable as Square Root Extractor for 4 - 20 mA DC signals
- Second channel output available at the front terminals and at the Standard Rack connector

Typical Applications

- Various 2-wire transmitters



MODEL: 18JDN-A66-R

ORDERING INFORMATION

- Code number: 18JDN-A66-R

INPUT

Current

A: 4 - 20 mA DC (Input resistance 250 Ω)

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

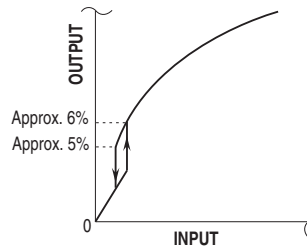
Isolation: Input to output 1 to output 2 to power

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

Adjustments: Programming Unit (model: PU-2x); (For settings programmable with JXCON, refer to its instruction manual)

- Zero and span

Low-end cutout: Output is proportional to input when the output is less than approx. 5 %



SUPPLY OUTPUT

Output voltage: 24 - 28 V DC with no load

Current rating: ≤ 22 mA DC

- Shortcircuit Protection

Current limited: Approx. 30 mA

Protected time duration: No limit

INPUT SPECIFICATIONS

- DC Current: Input resistor incorporated

OUTPUT SPECIFICATIONS

The output goes below 0 % when the input is open.

INSTALLATION

Current consumption: Approx. 85 mA

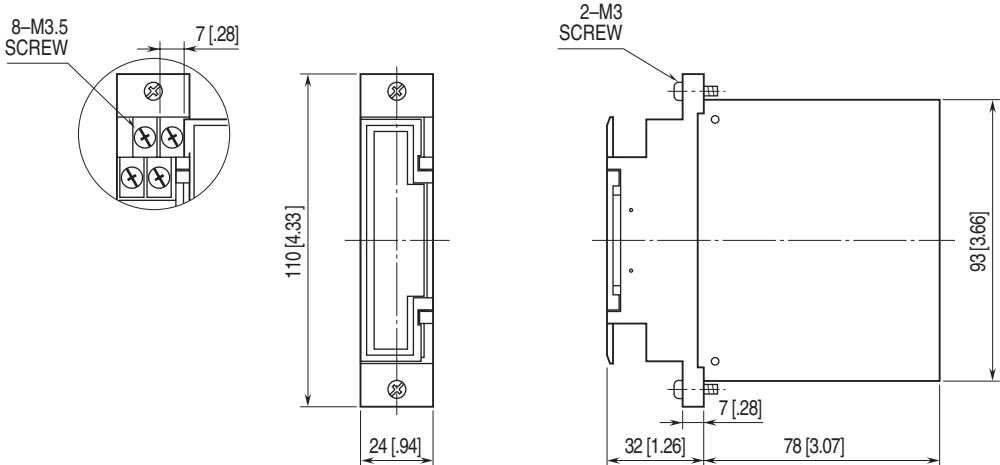
Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: Standard Rack 18BXx or 18KBXx
Weight: 150 g (0.33 lb)

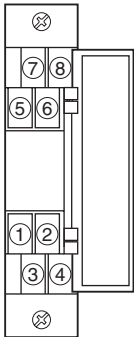
PERFORMANCE in percentage of span

Accuracy: $\pm 0.25\%$ (input 1 - 100 %)
Temp. coefficient: $\pm 0.03\%$ /°C ($\pm 0.02\%$ /°F)
Response time: ≤ 0.5 sec. (0 - 90 %)
Line voltage effect
Output signal: $\pm 0.1\%$ over voltage range
Insulation resistance: $\geq 100\text{ M}\Omega$ 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]

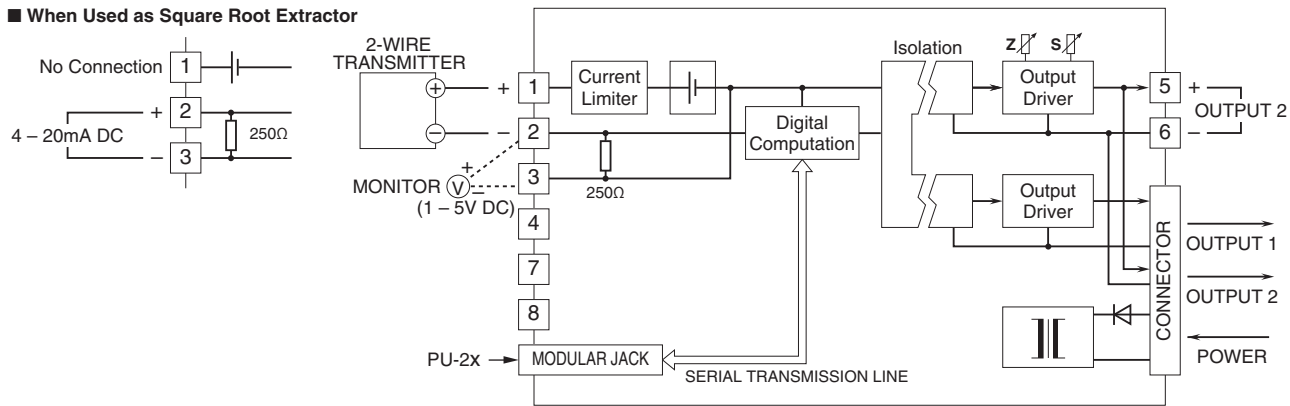


TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

■ When Used as Square Root Extractor



Specifications are subject to change without notice.