

## Rack-mounted DCS Signal Conditioners 18-RACK

### CURRENT LOOP SUPPLY

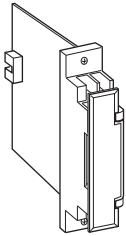
(with square root extractor)

#### 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

- 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

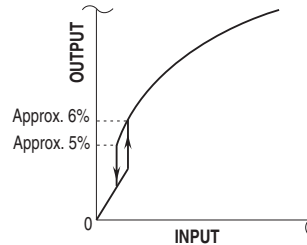
**Screw terminal:** Nickel-plated steel

**Isolation:** Input to output 1 to output 2 to power

**Adjustments:** Programming Unit (model: PU-2x); (For settings programable 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

**Power consumption**

- DC: 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

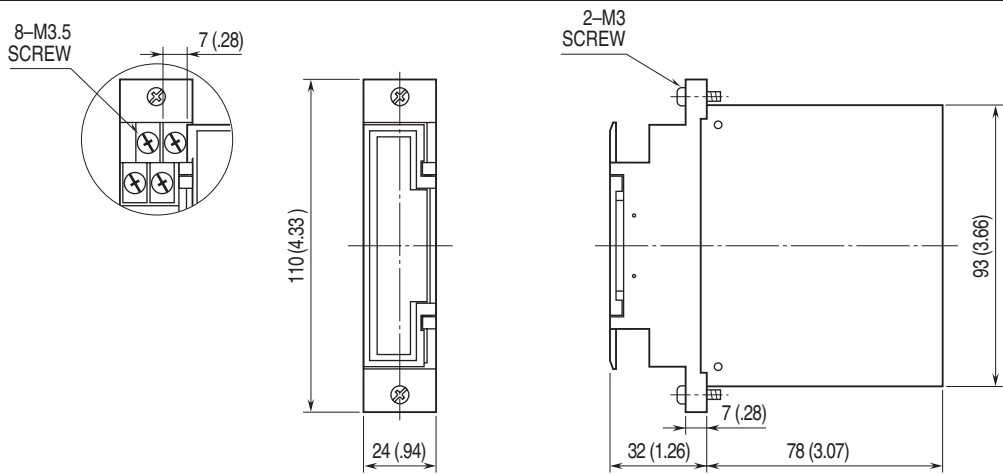
**Weight:** 150 g (0.33 lbs)



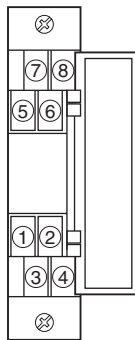
**PERFORMANCE in percentage of span**

Accuracy:  $\pm 0.25\%$   
Temp. coefficient:  $\pm 0.03\%/^{\circ}\text{C}$  ( $\pm 0.02\%/^{\circ}\text{F}$ )  
Response time:  $\leq 0.5$  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)

**DIMENSIONS unit: mm (inch)**

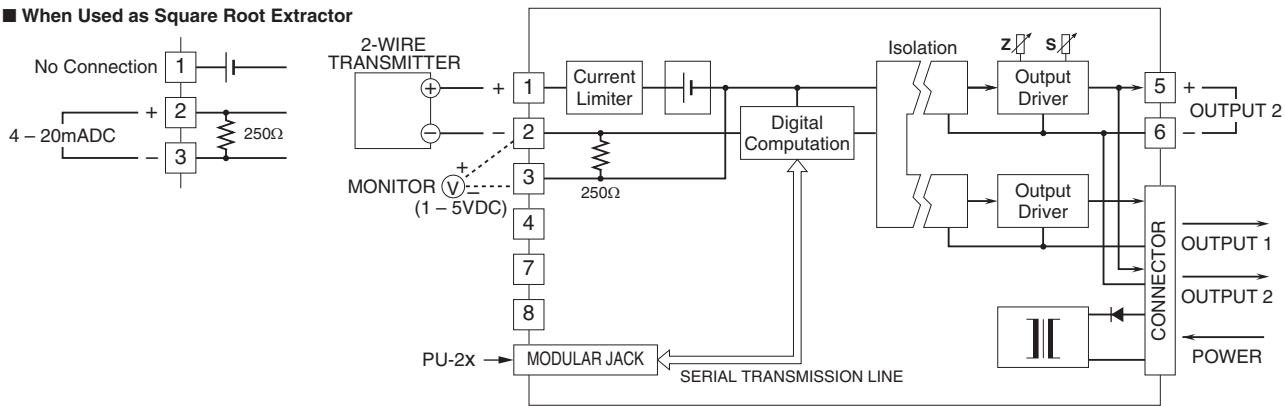


**TERMINAL ASSIGNMENTS**



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**

■ When Used as Square Root Extractor



Specifications are subject to change without notice.

