

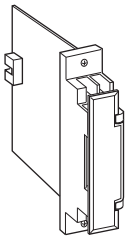
Rack-mounted DCS Signal Conditioners 18-RACK

SIGNAL TRANSMITTER

(field-programmable)

Functions & Features

- Converting a DC input into two standard process signals
- Micro-processor based
- Field-programmable input range
- Loop testing via hand-held programmer PU-2x
- Second channel output available at the front terminals and at the Standard Rack connector



MODEL: 18JV-[1]66-R

ORDERING INFORMATION

- Code number: 18JV-[1]66-R
- Specify a code from below for [1]
(e.g. 18JV-U166-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.)

U1: Range ±100 mV;

(Minimum span 3 mV, Input resistance 20 kΩ min.)

U2: Range ±1000 mV;

(Minimum span 30 mV, Input resistance 20 kΩ min.)

U3: Range ±10 V;

(Minimum span 0.3 V, 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

- 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

Overrange output: Approx. -10 to +120 %

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

(Input range can be changed with Codes U1, U2 or U3 and limited within ranges of each code type.)

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

INPUT SPECIFICATIONS

■ **DC Current:** Input resistor incorporated

■ **DC Voltage:** -10 - +10 V DC

Minimum span: 3 mV

Offset: Max. 3 times span

Default setting will be used if not otherwise specified.

U1: 0 - 100 mV DC

U2: 0 - 1 V DC

U3: 0 - 10 V DC

OUTPUT SPECIFICATIONS

With the input voltage code 6, U3 (0 % ≥ 0 V) and current, the output goes below 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: ±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

(input to output 1 or output 2 or power)

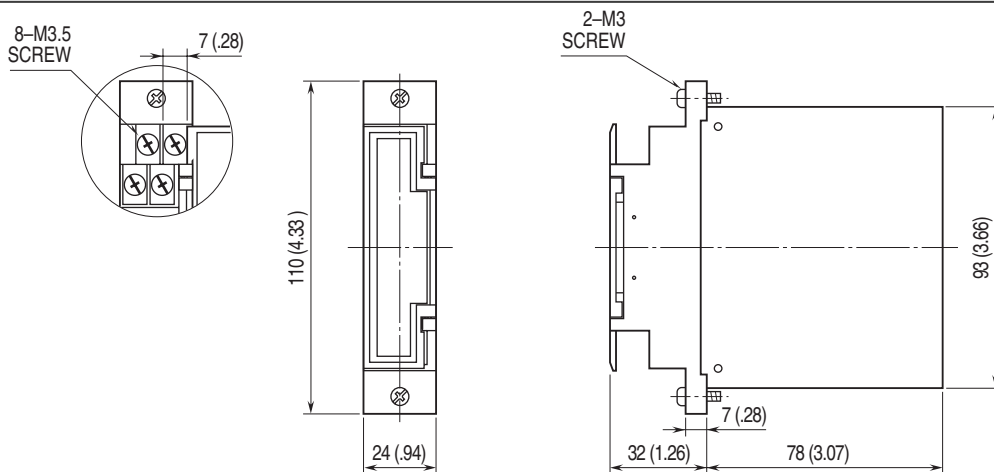
500 V AC @ 1 minute

(output 1 to output 2 to power)

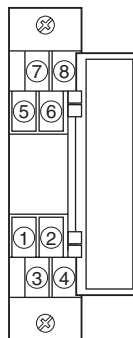
1500 V AC @ 1 minute

(input or output or power to ground)

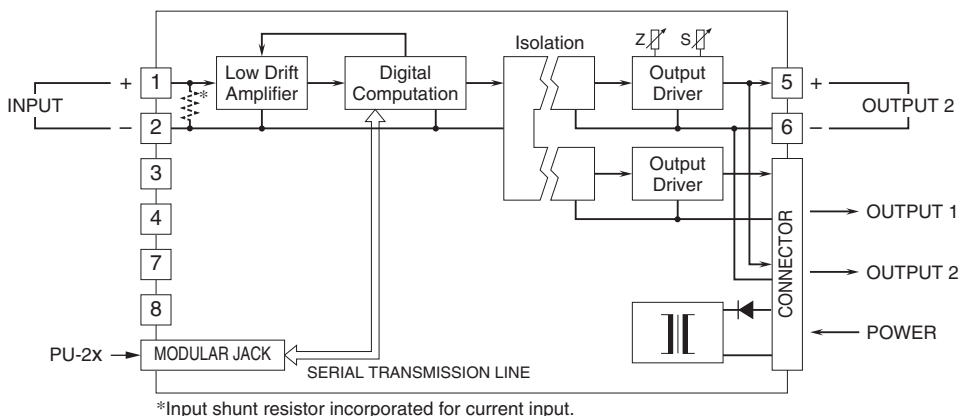
DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.

