

Rack-mounted Power Transducers 17-RACK

SIGNAL CONVERTER

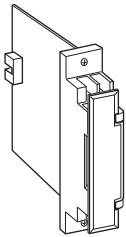
(fast response)

Functions & Features

- Converting a DC input into a standard process signal
- Isolation between input and output

Typical Applications

- Isolation between control room and field instrumentation



MODEL: 17VK-[1]6-R

ORDERING INFORMATION

- Code number: 17VK-[1]6-R
- Specify a code from below for [1].
(e.g. 17VK-26-R)
- Special input range (For codes Z & 0)

[1] INPUT

Current

- A:** 4 - 20 mA DC (Input resistance 250 Ω)
- D:** 0 - 20 mA DC (Input resistance 50 Ω)
- G:** 0 - 1 mA DC (Input resistance 1000 Ω)
- H:** 10 - 50 mA DC (Input resistance 100 Ω)
- Z:** Specify current (See INPUT SPECIFICATIONS)

Voltage

- 1:** 0 - 10 mV DC (Input resistance 10 kΩ min.)
- 2:** 0 - 100 mV DC (Input resistance 100 kΩ min.)
- 3:** 0 - 1 V DC (Input resistance 1 MΩ min.)
- 4:** 0 - 10 V DC (Input resistance 1 MΩ min.)
- 5:** 0 - 5 V DC (Input resistance 1 MΩ min.)
- 6:** 1 - 5 V DC (Input resistance 1 MΩ min.)
- 0:** Specify voltage (See INPUT SPECIFICATIONS)

OUTPUT

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.)

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: Connector

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Input to output to power

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

■ **DC Current:** Input resistor incorporated
Specify input resistance value for code Z.
($R \leq 2 W \div [F.S. Current]^2$)

■ **DC Voltage:** 0 - 300 V DC

Minimum span: 3 mV

Offset: Max. 1.5 times span

Input Resistance

Span 3 - 10 mV : $\geq 10 k\Omega$

Span 10 - 100 mV : $\geq 10 k\Omega$

Span 0.1 - 1 V : $\geq 100 k\Omega$

Span $\geq 1 V$: $\geq 1 M\Omega$

OUTPUT SPECIFICATIONS

With the input voltage code 3, 4, 5, 6 and current, the output goes below 0 % when the input is open.

INSTALLATION

Current consumption: Approx. 35 mA

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

Operating humidity: 40 to 85 % RH (non-condensing)

Mounting: Standard Rack 17BXE

Weight: 150 g (0.33 lb)

PERFORMANCE in percentage of span

Accuracy: ±0.3 %

Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)

Response time: Approx. 25 msec. (0 - 90 %)

Line voltage effect: ±0.1 % over voltage range

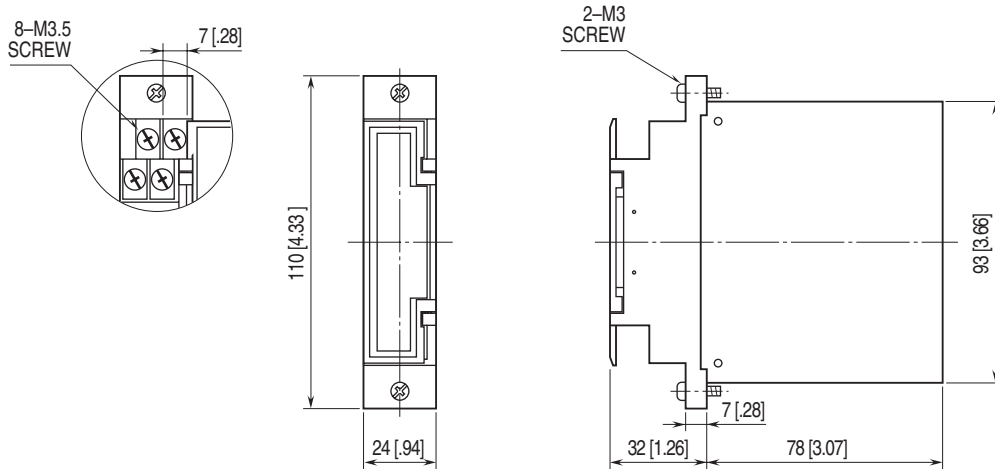
Insulation resistance: $\geq 100 M\Omega$ with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute

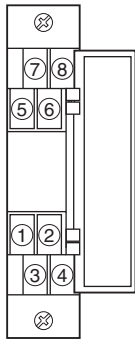
(input to output or power)

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

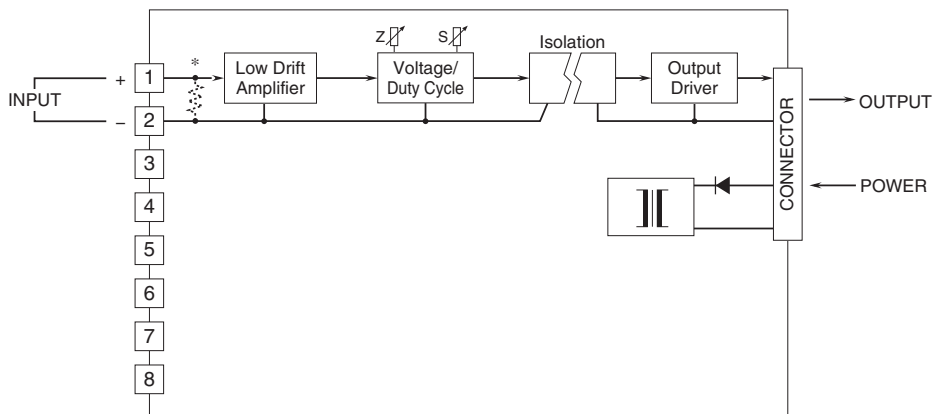
DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor incorporated for current input.



Specifications are subject to change without notice.