

Dual Channel Input/Output Isolators 15-RACK

SIGNAL CONVERTER

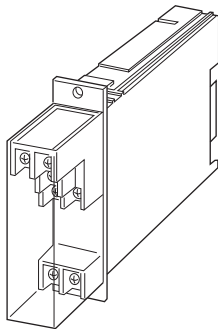
(fast response)

Functions & Features

- Converting a DC input into a standard process signal
- 2 channels available; accomplishing economical and space-saving multi-input processing

Typical Applications

- Isolation between control room and field instrumentation



MODEL: 15VK-[1]6-R[2]

ORDERING INFORMATION

- Code number: 15VK-[1]6-R[2]
- Specify a code from below for each [1] and [2].
(e.g. 15VK-46-R/Q)
- Special input range (For code 0)
- Specify the specification for option code /Q
(e.g. /C01)

[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)

Voltage

- 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 5000 Ω min.)

POWER INPUT

DC Power

R: 24 V DC
(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[2] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to M-System's web site.)

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

RELATED PRODUCTS

- EXTENDER CARD (model:10EC)
Necessary to adjust span.

GENERAL SPECIFICATIONS

Construction: Rack-mounted; terminal access via screw terminals at the front and via card-edge connector at the rear; terminal cover provided

Connection

Input: M3.5 screw terminals (torque 0.8 N·m)

Output: Card-edge connector and M3.5 screw terminals (torque 0.8 N·m)

Power input: Supplied from card-edge connector

Screw terminal: Nickel-plated steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output or power; ch.1 input to ch.2 input

Overrange output: Approx. -10 to +120 %

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

Span adjustment: 95 to 105 % (top)

INPUT SPECIFICATIONS

■ **DC Current:** Input resistor incorporated

■ **DC Voltage:** 0 - 30 V DC

Minimum span: 0.1 V

Offset: Max. 1.5 times span

Input resistance

Span 0.1 - 1 V : ≥ 100 kΩ

Span ≥ 1 V : ≥ 1 MΩ

OUTPUT SPECIFICATIONS

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

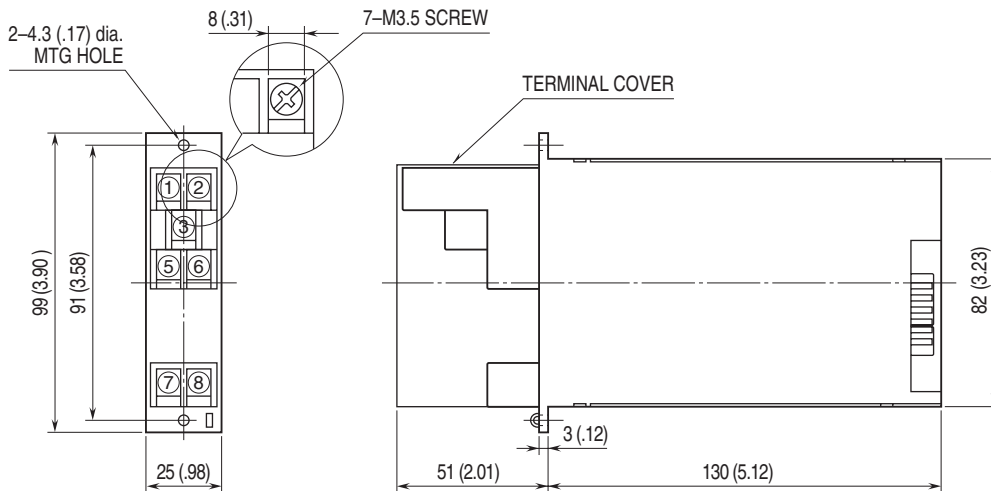
INSTALLATION

- Power consumption:** Approx. 20 mA
- Operating temperature:** -5 to +55°C (23 to 131°F)
- Operating humidity:** 30 to 90 %RH (non-condensing)
- Mounting:** Standard Rack 15BX
- Weight:** 180 g (0.40 lb)

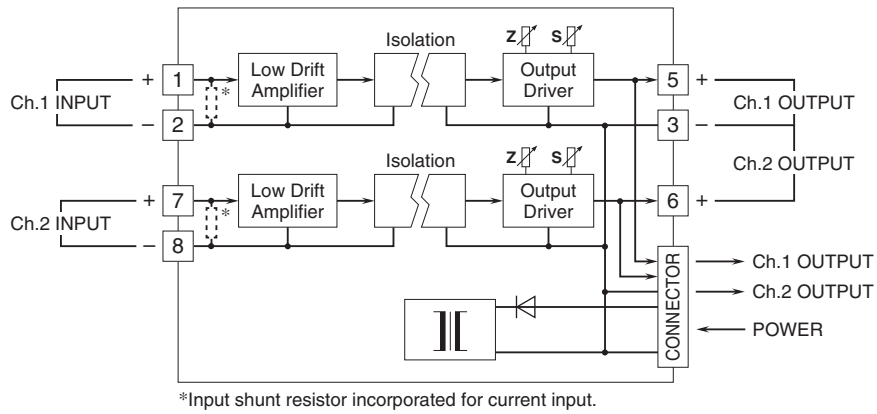
PERFORMANCE in percentage of span

- Accuracy:** ±0.1 %
- Temp. coefficient:** ±0.015 %/°C (±0.008 %/°F)
- Response time:** ≤ 25 msec. (0 - 90 %)
- Line voltage effect:** ±0.1 % over voltage range
- Insulation resistance:** ≥ 100 MΩ with 500 V DC
- Dielectric strength:** 500 V AC @ 1 minute
(input to output or power)
- 500 V AC @ 1 minute (ch.1 to ch.2 input)
- 500 V AC @ 1 minute (output to ground)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.