Dual Channel Input/Output Isolators 15-RACK

SIGNAL CONVERTER

(fast response)

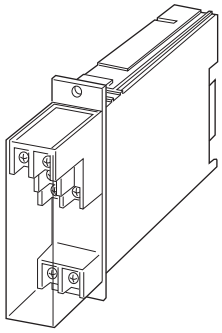
Functions & Features

• 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 of [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 our 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

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OUTPUT SPECIFICATIONS

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

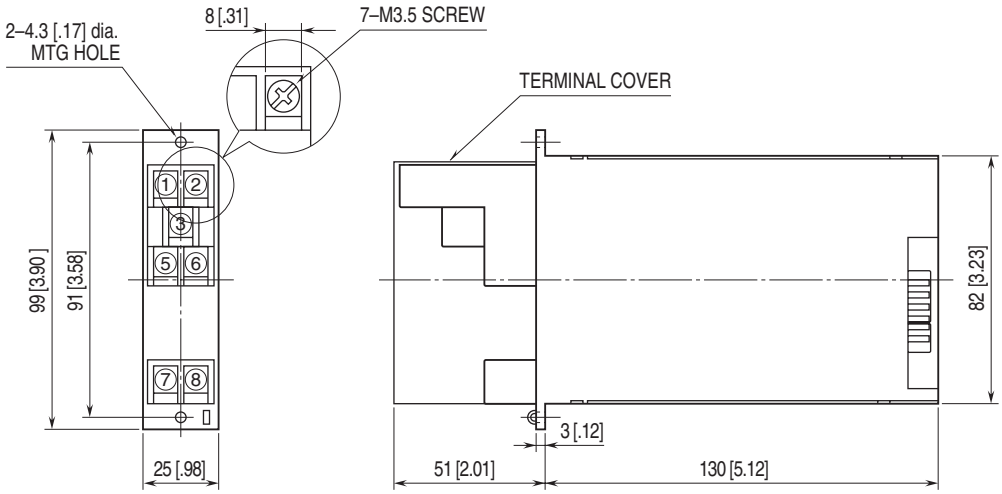
INSTALLATION

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]



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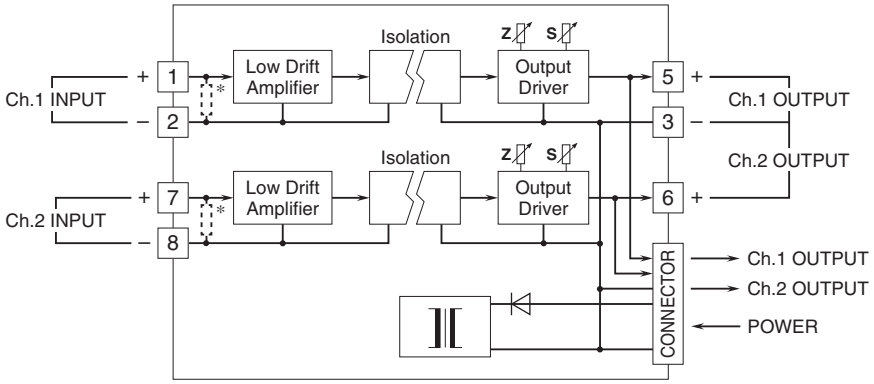
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor incorporated for current input.

⚠ Specifications are subject to change without notice.

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