

## Plug-in Signal Conditioners K-UNIT

### ISOLATOR

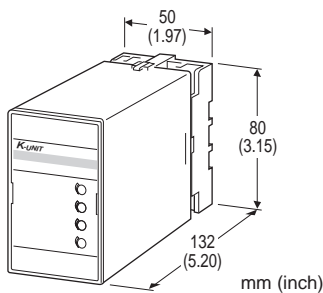
(two isolated outputs)

#### Functions & Features

- Standard instrumentation signal isolator with two outputs
- Isolation up to 2000 V AC
- High-density mounting

#### Typical Applications

- Isolation between control room and field instrumentation



### MODEL: KWYV-[1][2][3]-B[4]

#### ORDERING INFORMATION

- Code number: KWYV-[1][2][3]-B[4]
- Specify a code from below for each [1] through [4]. (e.g. KWYV-6AA-B/Q)
- Specify the specification for option code /Q (e.g. /C01/S01)

When the user requires a current and a voltage output, specify the current to be the Output 1 which allows a greater load.

#### [1] INPUT

##### Current

A: 4 - 20 mA DC (Input resistance 250 Ω)

##### Voltage

6: 1 - 5 V DC (Input resistance 1 MΩ min.)

#### [2] OUTPUT 1

##### Current

A: 4 - 20 mA DC (Load resistance 600 Ω max.)

##### Voltage

6: 1 - 5 V DC (Load resistance 5000 Ω min.)

#### [3] OUTPUT 2

##### Current

A: 4 - 20 mA DC (Load resistance 350 Ω max.)

#### Voltage

6: 1 - 5 V DC (Load resistance 5000 Ω min.)

#### POWER INPUT

##### AC Power

B: 100 V AC

#### [4] OPTIONS

blank: none

/Q: With options (specify the specification)

#### SPECIFICATIONS OF OPTION: Q (multiple selections)

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

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

##### TERMINAL SCREW MATERIAL

/S01: Stainless steel

#### GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3.5 screw terminals

Screw terminal: Chromated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output 1 to output 2 to power

Overrange output: Approx. -10 to +120 % at 1 - 5 V

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

Span adjustment: 95 to 105 % (front)

#### INPUT SPECIFICATIONS

##### ■ DC Current:

Shunt resistor attached to the input terminals (0.5 W)

#### INSTALLATION

##### Power input

•AC: Operational voltage range: rating  $\pm 10\%$ , 50/60  $\pm 2$  Hz, approx. 3 VA

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

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface or DIN rail

Weight: 400 g (0.88 lb)

#### PERFORMANCE in percentage of span

Accuracy:  $\pm 0.1\%$

Temp. coefficient:  $\pm 0.02\%$ /°C ( $\pm 0.01\%$ /°F)

Response time:  $\leq 0.5$  sec. (0 - 90 %)

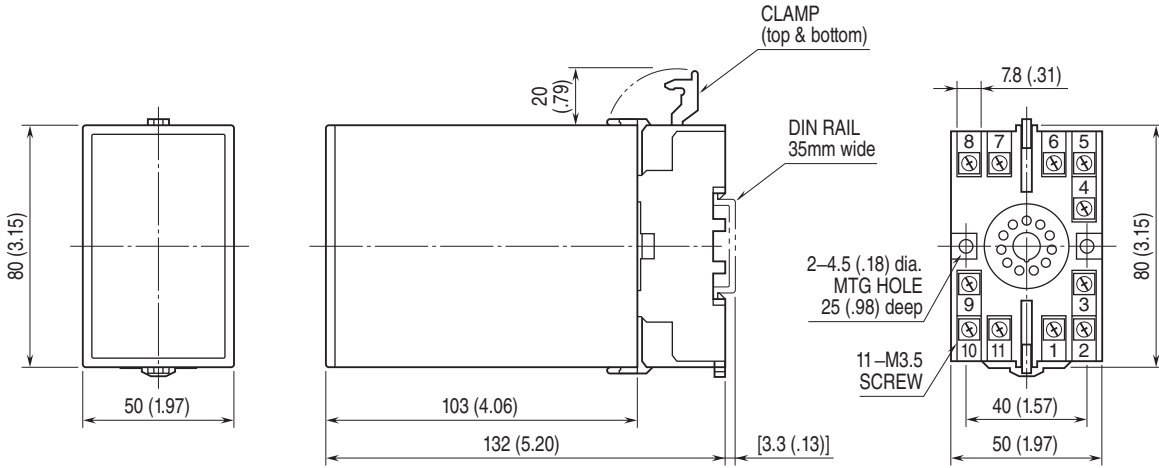
Line voltage effect:  $\pm 0.1\%$  over voltage range

Insulation resistance:  $\geq 100$  MΩ with 500 V DC



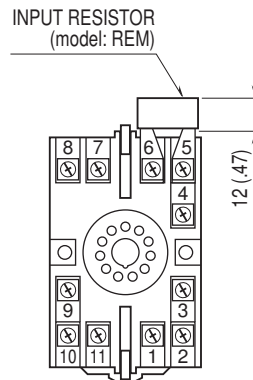
**Dielectric strength:** 2000 V AC @1 minute  
 (input to output to power to ground)  
 1000 V AC @ 1 minute (output 1 to output 2)

## DIMENSIONS unit: mm (inch)



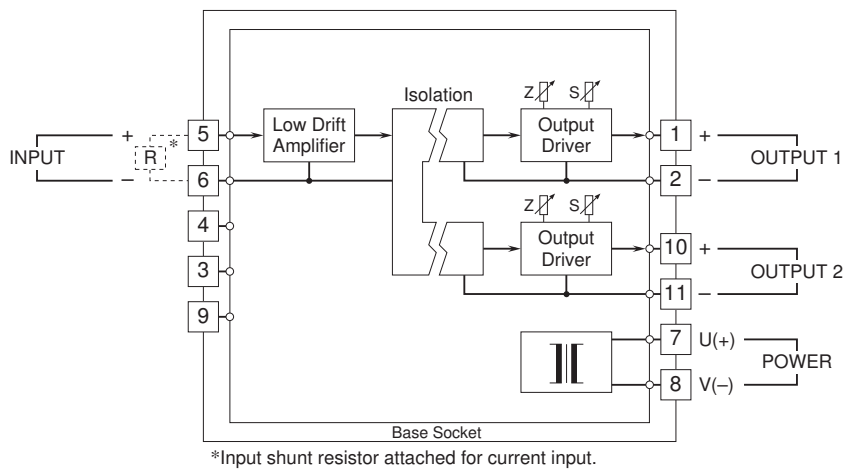
• When mounting, no extra space is needed between units.

## TERMINAL ASSIGNMENTS unit: mm (inch)



Input shunt resistor attached for current input.

**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Specifications are subject to change without notice.