

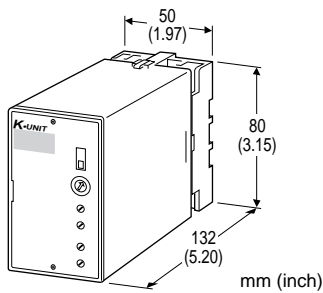
**Plug-in Signal Conditioners K-UNIT**

**CURRENT LOOP SUPPLY**

(for level transmitter use)

**Functions & Features**

- Powering a 4 – 20 mA DC current loop
- Shortcircuit protection
- Applicable to smart transmitters
- Usable as 4 – 20 mA isolator
- Wide span adjustment range
- High-density mounting



**MODEL: KWLD-A6-[1]**

**ORDERING INFORMATION**

- Code number: KWLD-A6-[1]
- Specify a code from below for [1].  
(e.g. KWLD-A6-B)

**INPUT**

**Current**

4 – 20 mA DC (Input resistance 250 Ω)

**OUTPUT 1**

**Current**

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

**OUTPUT 2**

**Voltage**

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

**[1] POWER INPUT**

**AC Power**

- B: 100 V AC
- C: 110 V AC
- D: 115 V AC
- F: 120 V AC

G: 200 V AC

H: 220 V AC

J: 240 V AC

**DC Power**

S: 12 V DC

R: 24 V DC

**GENERAL SPECIFICATIONS**

**Construction:** Plug-in

**Connection:** M3.5 screw terminals

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to output 1 to output 2 to power

**Overrange output:** Approx. -10 to +110 %

**Zero adjustment:** ±10 % of the input 4 – 20 mA (front)

**Output 2 zero adjustment:** ±2 % of the calibrated range (front)

**Span adjustment:** 10 – 100 % of the input 4 – 20 mA (front)

**Output 2 span adjustment:** ±2 % of the calibrated range (front)

**Coarse span adjustment:** Rotary switch (front)

**Loop test switch:** Supply output is removed with OFF.

**SUPPLY OUTPUT**

(Across the terminals 4 – 5)

**Output voltage:** 24 – 28 V DC with no load

18 V DC min. at 20 mA

**Current rating:** ≤ 22 mA DC

- Shortcircuit Protection

**Current limited:** 30 mA max.

**Protected time duration:** No limit

**INPUT SPECIFICATIONS**

- DC Current: Input resistor incorporated

**INSTALLATION**

**Power input**

**AC:** Operational voltage range: rating ±10 %, 50/60 ±2 Hz, approx. 3.5 VA

**DC:** Operational voltage range: rating ±10 %

ripple 10 %p-p max., approx. 3 W (125 mA at 24 V)

**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 lbs)

**PERFORMANCE in percentage of span**

**Accuracy:** ±0.1 % (Coarse span adjustment SW set to '0')

**Temp. coefficient:** ±0.02 %/°C (±0.01 %/°F) (Coarse span adjustment SW set to '0')

**Response time:** ≤ 0.2 sec. (0 – 90 %)



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

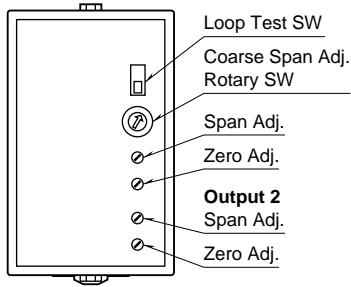
**Insulation resistance:**  $\geq 100\text{ M}\Omega$  with 500 V DC

**Dielectric strength:**

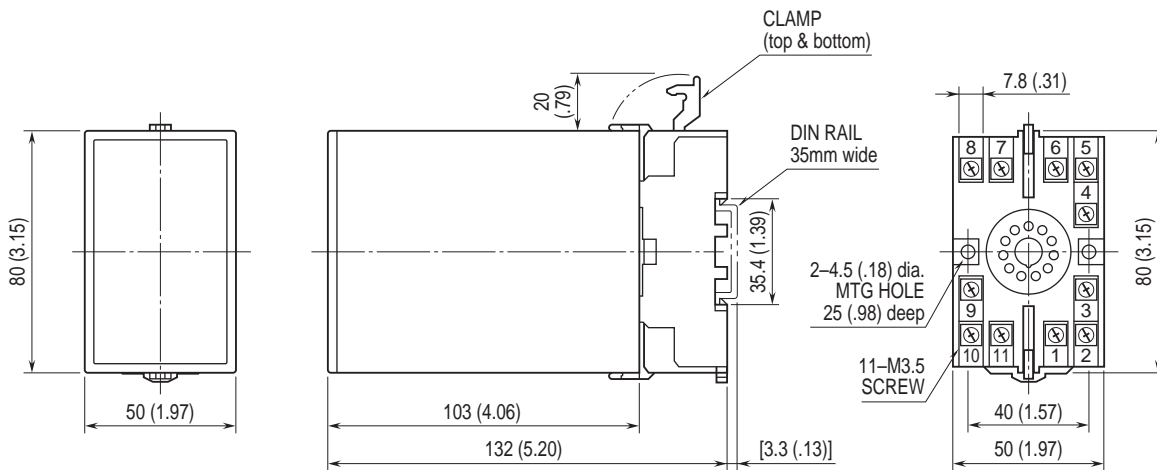
2000 V AC @1 minute (input to output 1 or output 2 to power to ground)

1000 V AC @1 minute (output 1 to output 2)

## EXTERNAL VIEW



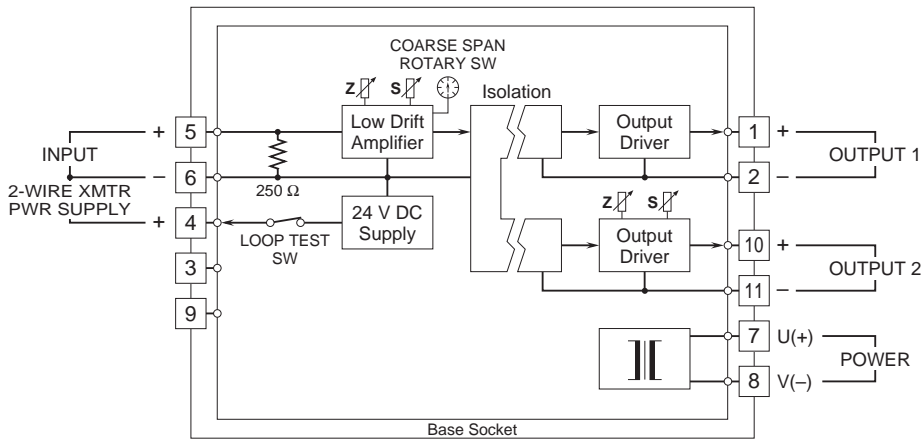
## DIMENSIONS unit: mm (inch)



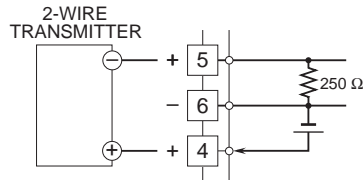
• When mounting, no extra space is needed between units.



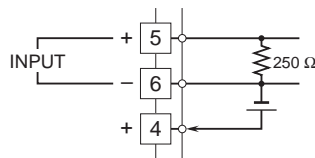
**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



■ When Used as DC Supply



■ When Used as Isolator



Specifications are subject to change without notice.