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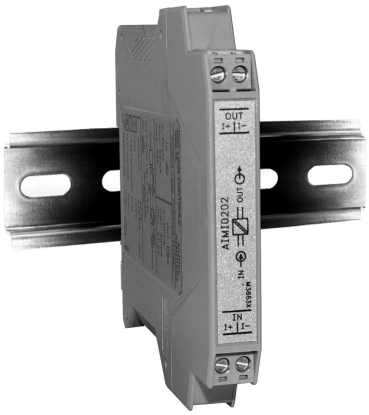
Bulletin No. AIMI-A
Drawing No. LP0664
Released 1/08

MODEL AIMI - 0 (4) TO 20 MA PASSIVE LOOP POWERED ISOLATOR



DESCRIPTION

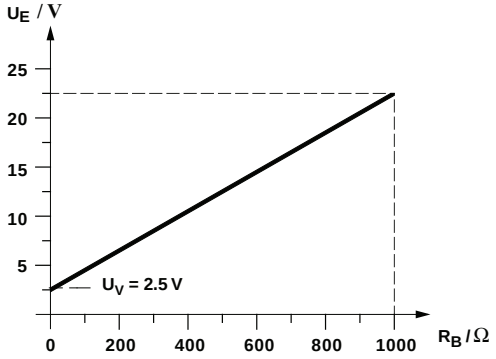
The AIMI0202 passive isolator is used for the electrical isolation and processing of analog 0(4) to 20 mA standard current signals. The AIMI0202 provides electrical isolation between the control electronics and process I/O. In addition, interference signals above 75 Hz are effectively suppressed.

Input and output circuit do not require separate auxiliary power. The AIMI0202 obtains power from the input signal. The modules are snapped onto symmetrical DIN rails in accordance with EN 50 022.

VOLTAGE DROP AT INPUT

When using the AIMI0202, ensure that the current-driving voltage of the measuring transducer is sufficient for driving the maximum current of 20 mA, with a power loss of 2.5 V (2.5 V + (20 mA * RLOAD).

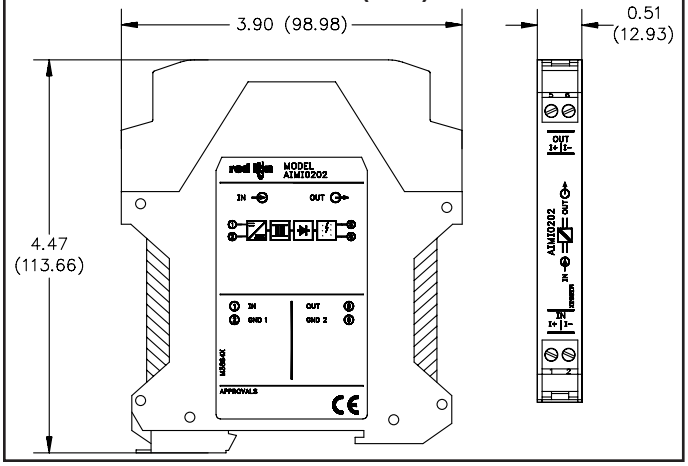
Voltage drop across the input is calculated by determining the load resistance of the output loop, drawing a vertical line to the curve, then horizontally to the voltage drop.



SPECIFICATIONS

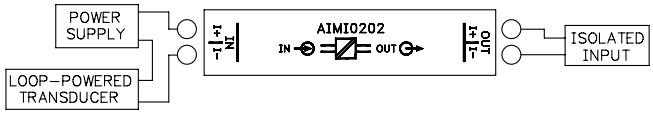
1. **INPUT RANGE:** 0(4) to 20 mA
2. **MAXIMUM INPUT CURRENT/VOLTAGE:** 50 mA/30 VDC
3. **INPUT RESISTANCE@ 20mA:** 125-1125 Ω (dependent on load)
4. **VOLTAGE DROP AT INPUT:** (See Chart at Right)
5. **MAXIMUM INPUT FREQUENCY:** <75 Hz
6. **RESPONSE TIME:** 5 msec. max.
7. **OUTPUT SIGNAL:** 0(4) to 20 mA
   Max. Load Resistance: ≤ 1375 Ω @ 20 mA
8. **ISOLATION VOLTAGE:** 510 V, 50 Hz, for 1 minute
9. **ACCURACY:** ≤0.1% of full scale
10. **OPERATING TEMPERATURE RANGE:** -10 to +70°C
11. **TEMPERATURE COEFFICIENT:** ≤0.002%/K of the measured value
12. **CONSTRUCTION:** Case body is green, Polyamide PA
13. **MOUNTING:** Standard DIN style rail, including top hat (T) profile rail according to EN50022 - 35 × 7.5 and 35 × 15, and G profile rail according to EN50035 - G32.
14. **WEIGHT:** 2.976 oz (84.37 g)

DIMENSIONS In inches (mm)



WIRING CONNECTIONS

Connect transducer to input (Terminals 1 & 2), observing polarity. A power supply may be required for loop powered transducers.



The energy for the supply on the input side is taken from the analog input signal. Due to the dynamic input resistance, a power loss of approximately 2.5 V drops at the module input.

ORDERING INFORMATION

MODEL NO.	INPUT	OUTPUT	PART NUMBER
AIMI	0 (4)-20 mA	0 (4)-20 mA	AIMI0202

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