PRO U33 3IN1 AC Voltage Transducer

Product Description

Pro Series Transducers for Electrical Quantities, fundamental devices for process automation. All our instruments fulfill all important requirements and regulations concerning electromagnetic compatibility and safe isolation (IEC688-1992 standard and GB/T 13850-1998 standard). The devices have been developed, manufactured and tested in accordance with Quality Assurance System ISO 9001.

Technical Specification

Accuracy: Class 0.2, 0.5

Auxiliary Power Supply: 85V~265VDC/AC 24V~80VDC/AC

Stability: Annual Change Rate 0.2%

Input Overload Capacity:

Continuous Overload Capacity ≤1.5X

Transient Overload Capacity Voltage Limit≤3X Current Limit≤50X

Output

 $Rext = \infty$

Constant Voltage Output, Load Resistor Rext \geq 250 Ω Constant Current Output, Load Resistor Rext \leq 500 Ω Voltage \leq 20V

Alternating Wave: \$18mV(Peak-Peak)

Response Time: ≤300ms
Power Consumption: <3VA

Striking Voltage: \$\leq 2.5kV\$

Material of Housing: Lexan 940, Flammability acc. to UL 94V0

Operating Temperature: $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$ Storage Temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ Relative Humidity of Annual Mean $\leq 90\%\text{RH}$

Installation: DIN 35mm Rail

Size: 105mm×69mm×110mm

Guaranty Period: 2 years

PRO U33 Theory

The 3in1 AC voltage transducer is a combination transducer that integrates three U31 transducers into 1 housing. It takes three phase voltage inputs and provides three separate isolated outputs.

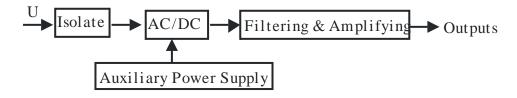


Fig.1. Block Diagram for U31 AC Voltage Transducer

Technical Data

Input: 0V~100V/120V/220V/380V/500V/600V

Output: 4mA~20mA,0mA~1mA, 0mA~20mA,0V~1V,0V~5V,0V~10V

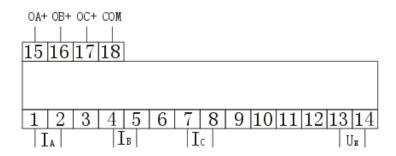


Fig.2.Wiring Diagram

UA, UB, UC : Input Voltage Variables
UH: Auxiliary Power Supply

OA,OB,OC: Output In Correspondence toUA,UB, UC

COM: Common Terminal

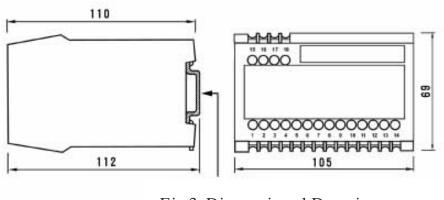


Fig 3. Dimensional Drawings