# **VTU-DIN SERIES** AC or DC Voltage Transducers

VTU-DIN Series Voltage Transducers are high-performance True RMS transducers for sensing voltage in single, threephase or DC installations. Housed in a slim, compact, easy-toinstall DIN rail mounting enclosure, these transducers come in a variety of voltage ranges. The VTU-DIN measures AC or DC voltage from 0–15 to 0–600 V and provides an industry standard output proportional to connected voltage in alternating current circuits with sinusoidal or non-sinusoidal (variable frequency) applications or direct current circuits.

### **Voltage Transducer Applications**

#### True RMS or DC Voltage Monitoring

- Detect below normal or "brown out" voltage conditions; protect against possible motor overheating.
- Identify phase loss conditions by detecting voltage reduction in one or more phase of three-phase motor.
- Monitor over voltage conditions associated with regenerative voltage to help in diagnosing/avoiding motor drive issues.
- Detect voltage conditions that may cause stress or damage to soft starter components (SCRs).

### Voltage Transducer Features

#### Zero to 5 KHz Measurement

 Allows for use in situations where power supplied is non-sinusoidal such as VFD applications, poor power quality installations or other electrically harsh/challenging environments.

#### Standard Outputs

• Industry standard outputs makes use with existing controllers, data loggers and SCADA equipment easy and reliable.

#### **Compact DIN Rail Mount Case**

• Space saving 35 mm wide enclosure mounts quickly for an attractive installation.

### Designed for UL/cUL and CE Approval

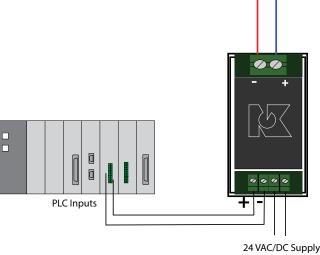
• Accepted worldwide.

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Phase Loss Detection

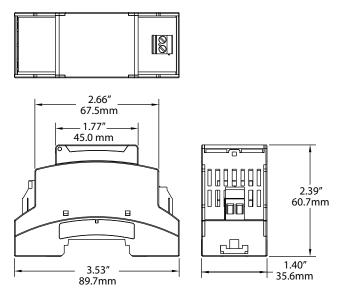




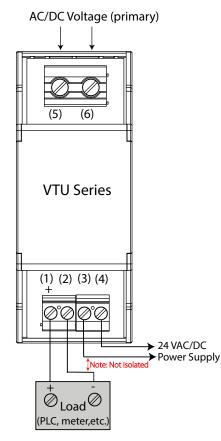
Test & Evaluation Units for OEMs Free program expedites evaluation process. See page 1 for details.



#### **Voltage Transducer Dimensions**



### Voltage Transducer Connections



#### **Voltage Transducer Specifications**

Power Supply	24 VAC or DC external power (Not isolated from the output)
Power Consumption	<2 VA
Input	0–15, 25, 50, 60, 120, 150, 240, 300, 400, 500, 600 V, AC or DC
Output	<ul> <li>4–20 mA proportional (capped at 31 mA max.)</li> <li>0–5 VDC</li> <li>0–10 VDC</li> </ul>
<b>Response Time</b>	500 ms (to 90% value)
Accuracy	<1% error
Loading	• 4–20 mA output: <400 Ω 0–5/10 VDC output: >50 KΩ
Isolation Voltage	2500 VAC
Frequency Range	0 Hz–5 KHz
Mounting	DIN rail compatible
Case	UL94 V-0 Flammability Rated; noncorrosive thermoplastic
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	Designed for UL/cUL and CE approval

#### Voltage Transducer Ordering Information

Sample Model Number: VTUE-420-24U-DIN AC/DC voltage transducer with 120 V range, standard 4–20 mA proportional output; 24 VAC/DC externally powered with a DINcompatible case.



(1) Range

A	0–15 V
В	0–25 V
С	0–50 V
D	0–60 V
E	0–120 V
F	0–150 V
G	0-240 V
Н	0-300 V
1	0-400 V
J	0–500 V
К	0-600 V

(2) Output Type		
420	4–20 mA	
005	0-5 VDC	
010	0-10 VDC	

## (3) Power Supply

24U	24 VAC/DC external
	power supply

#### (4) Mounting

DIN	DIN rail compatible
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