

VTU-DIN SERIES

AC or DC Voltage Transducers

VTU-DIN Series Voltage Transducers are high-performance True RMS transducers for sensing voltage in single, three-phase or DC installations. Housed in a slim, compact, easy-to-install DIN rail mounted case, 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.

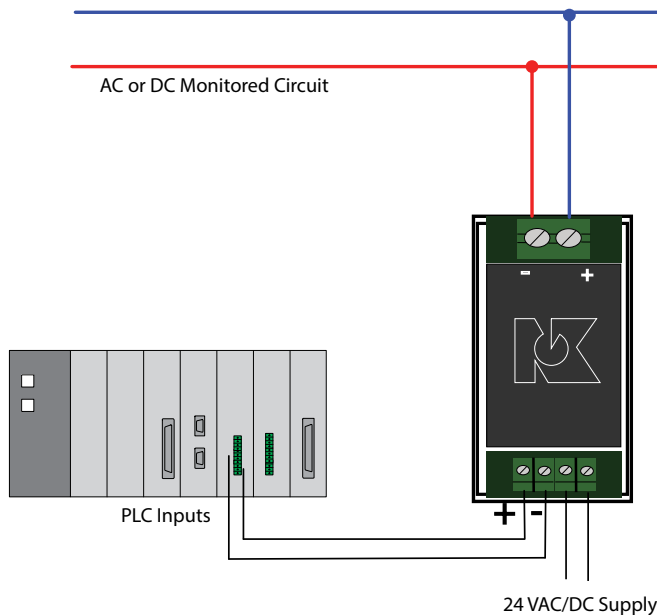


Voltage Transducer Applications

True RMS or DC Voltage Monitoring

- Detect below normal or “brownout” 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).

Phase Loss Detection



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*

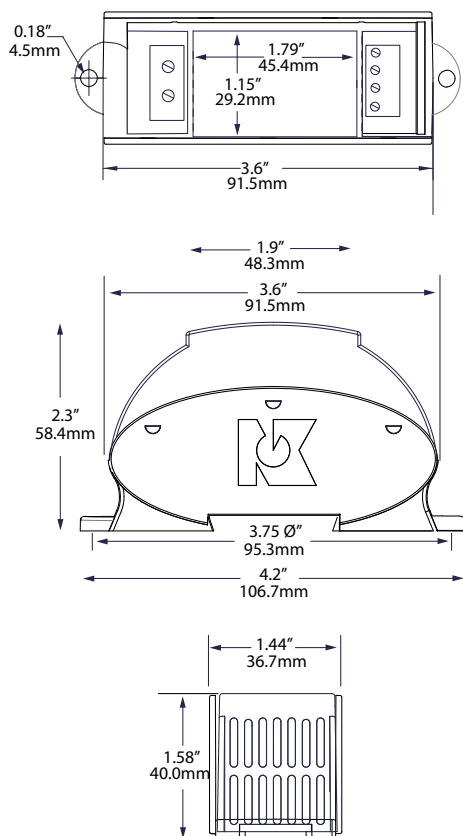
- Space saving 35 mm wide enclosure mounts quickly for an attractive installation.

UL/cUL and CE Approved

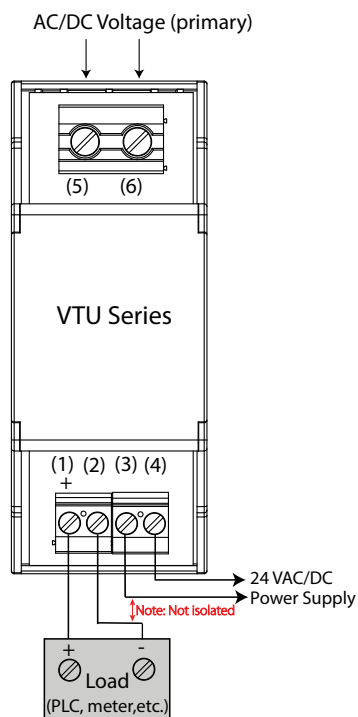
- Accepted worldwide.

*For information on the DIN rail accessories kit, see page 140.

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	• 4–20 mA proportional (capped at 31 mA max.) • 0–5 VDC • 0–10 VDC
Response Time	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
Case	UL94 V-0 Flammability Rated; noncorrosive thermoplastic
Environmental	–4 to 122°F (–20 to 50°C) 0–95% RH, non-condensing
Listings	UL/cUL, CE

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 DIN rail compatible case.

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(1) Range

A	0–15 V
B	0–25 V
C	0–50 V
D	0–60 V
E	0–120 V
F	0–150 V
G	0–240 V
H	0–300 V
I	0–400 V
J	0–500 V
K	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
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(4) Mounting

DIN	DIN rail compatible
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Test & Evaluation Units for OEMs

Free program expedites evaluation process. See page 3 for details.

