VTU-DIN SERIES
AC or DC Voltage Transducers



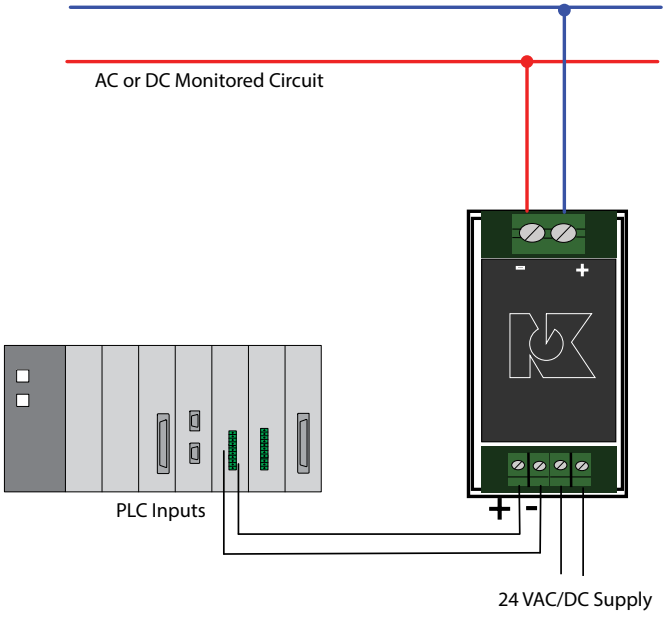
VTU-DIN Series Voltage Transducers are high-performance True RMS transducers for sensing voltage in single, three-phase or DC installations. Housed in a slim, compact, easy-to-install DIN rail mounted case, these transducers come in a variety of voltage ranges. The VTU-DIN measures AC or DC voltage from 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

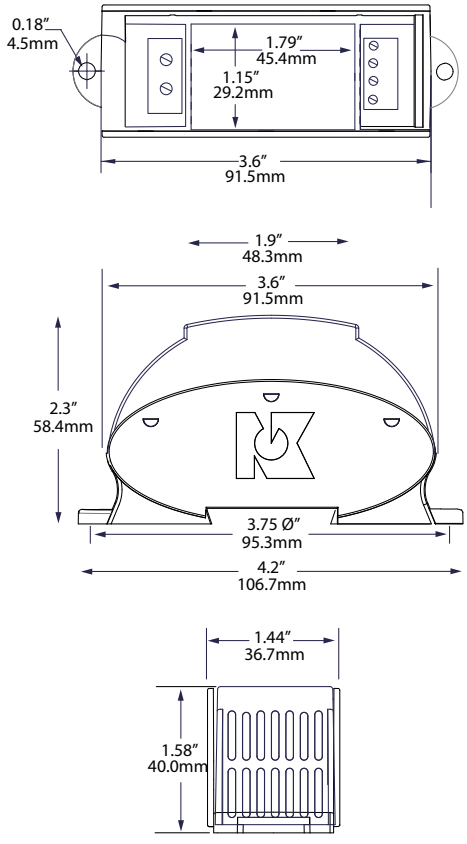
- Accepted worldwide.

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

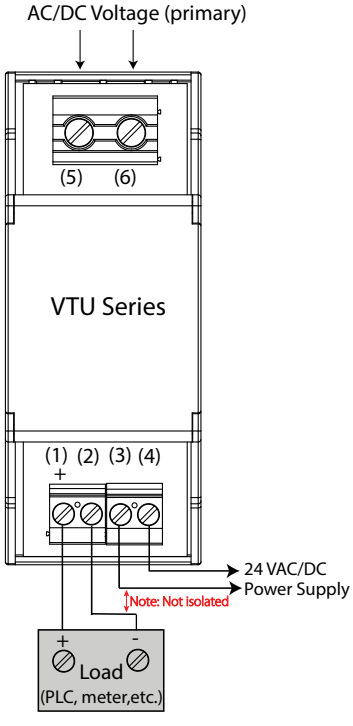
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Voltage Transducer Dimensions



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.

	(1)		(2)			(3)			(4)		
VTU		–				**2**	**4**	**U**	–	**D**	**I**	**N**

(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

(4) Mounting

DIN	DIN rail compatible

OEMs **Test & Evaluation Units for OEMs**
Free program expedites evaluation process. See page 3 for details.

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