

VT3-OL SERIES

Three-Phase Voltage Transducers

The VT3-OL Series Voltage Transducers are high-performance, True RMS transducers designed for accurate voltage sensing in three-phase applications. Housed in a DIN rail or panel mount case, the VT3 monitors common three-phase voltage ranges (120, 240, and 480 VAC) up to 600 VAC and includes Phase Loss Detection with an SPST Form A relay. Available in 3-wire (Line-Line) or 4-wire (Line-Neutral) voltage configurations, it provides industry-standard analog outputs proportional to the connected voltage.

Authorized Distributor:

WESCHLER INSTRUMENTS

phone: 800-903-9870 440-378-6580

fax: 800-903-9590 440-238-0660

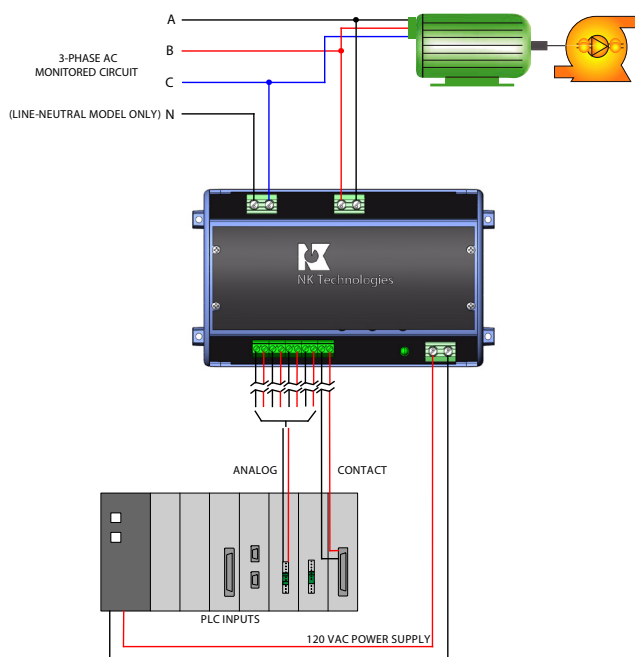
www.weschler.com info@weschler.com



Power Monitoring Applications

True RMS Voltage Monitoring

- Detect below normal or "brownout" voltage conditions to prevent motor overheating.
- Monitor sinusoidal or non-sinusoidal (variable frequency) waveforms in relevant applications.
- Identify over-voltage conditions associated with regenerative voltage to diagnose and avoid motor drive issues.
- Detect voltage conditions that could stress or damage soft start components.
- Identify phase loss conditions by detecting voltage reduction.



3-Phase Voltage Transducer Features

Monitor 3-Phase Voltage Inputs

- Measures True RMS voltage individually for all three phases.
- Provides an additional output with the average RMS voltage across all three phases.
- Ideal for challenging environments and non-sinusoidal power applications like VFDs.

Industry Standard Output Options

- Offers industry-standard output options (4–20 mA, 0–5 or 0–10 VDC).
- Compatible with existing PLC controllers, data loggers and SCADA equipment.

Phase Loss Detection

- SPST Form A relay activates when voltage drops below threshold.

Externally Powered

- Externally powered (120 VAC) with low consumption.

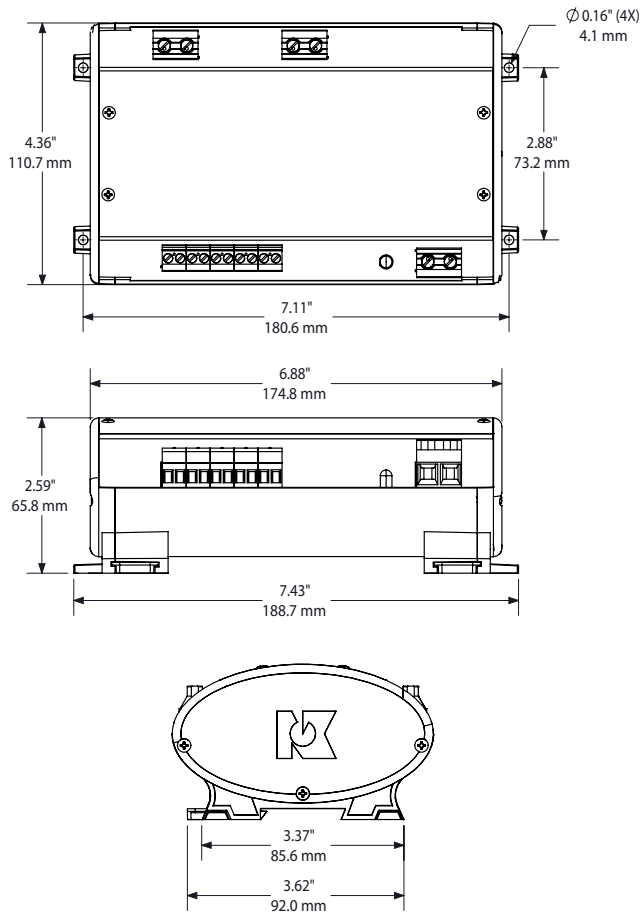
UL/cUL Listed

- Accepted worldwide.

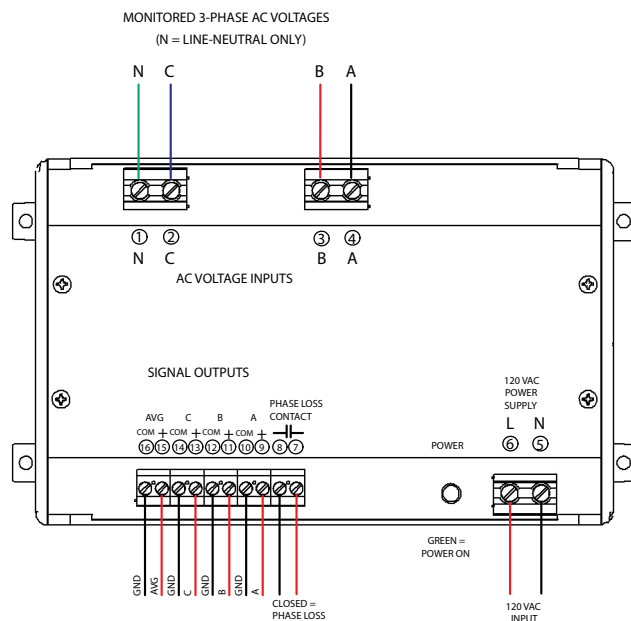
Mount Options

- Snap case onto a DIN rail, or mount directly to panel using screws.
- Need a DIN Rail? The optional DIN Rail Kit (DINKIT) includes a 175 mm wide DIN rail and two end stops.

Voltage Transducer Dimensions



Voltage Transducer Connections



Voltage Transducer Specifications



Power Supply	120 VAC (+/-10%) @ 50/60 Hz
Power Consumption	<6 VA 0-5, 0-10 V output <9 VA 4-20 mA output
Input Range Line-Line Line-Neutral	0-150, 0-300, 0-600 VAC @ 50/60 Hz 0-150, 0-300 VAC @ 50/60 Hz
Input Impedance	400 K Ω
Output Signal	• 4-20 mA (capped at 20 mA) • 0-5 VDC (capped at 5 VDC) • 0-10 VDC (capped at 10 VDC)
Response Time	200 ms (to 90% step change)
Accuracy	<1% FS
Output Loading	• 4-20 mA output: <500 Ω • 0-5/0-10 VDC output: >10 K Ω
Phase Loss Detection Relay	SPST Form A Relay Contact 1 A @ 30 VDC; 0.5 A @ 125 VAC
Isolation Voltage	UL listed to 1240 VAC
Case	UL94 V-0 Flammability Rated noncorrosive thermoplastic
Environmental	-4 to +140°F (-20 to +60°C) 0-95% RH, non-condensing
Listings	UL/cUL (E129625)

Voltage Transducer Ordering Information

Sample Model Number: VT3-LL2-420-120-OL
Three-phase voltage transducer, 0-300 VAC Line-Line input with proportional 4-20 mA output, powered by 120 VAC in a DIN rail compatible case.

VT3 - (1) L L 2 - (2) 4 2 0 - (3) 1 2 0 - (4) O L

(1) Range

LL1	0-150 VAC, Line-Line, Phase Loss @ 90 VAC
LL2	0-300 VAC, Line-Line, Phase Loss @ 180 VAC
LL3	0-600 VAC, Line-Line, Phase Loss @ 360 VAC
LN1	0-150 VAC, Line-Neutral, Phase Loss @ 90 VAC
LN2	0-300 VAC, Line-Neutral, Phase Loss @ 180 VAC

(2) Output

420	4-20 mA
005	0-5 VDC
010	0-10 VDC

(3) Power Supply

120	120 VAC
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(4) Case Style

OL	DIN Rail or Panel Mount
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