

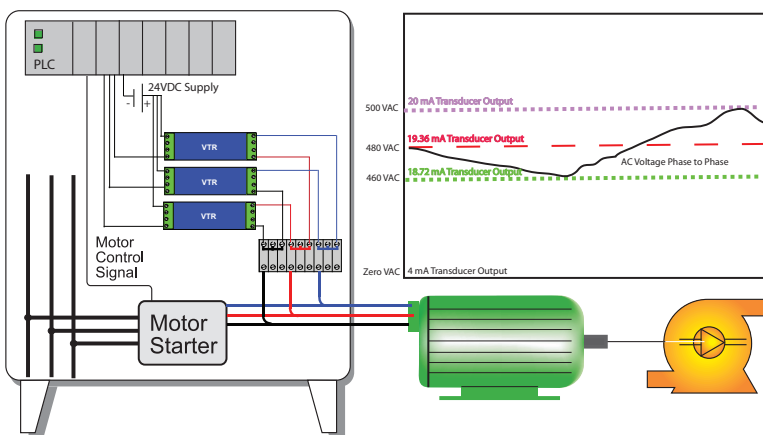
## VTR SERIES Voltage Transducers

### Applications

#### True RMS 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 which may cause stress in or damage to soft starter components (SCRs).

### Phase Loss Protection



**VTR Series** is a high-performance True RMS transducer for sensing voltage in single- and three-phase installations. Applicable on nominal circuits of 120V, 240V and 480V, VTR Series voltage transducers provide a fully isolated, 4-20mA output proportional to rated nominal voltage in both sinusoidal and non-sinusoidal (variable frequency) situations. Housed in a slim, compact, easy-to-install DIN-rail mount enclosure, the VTR Series comes in a variety of nominal voltages and with four-wire terminal block connection.

### Features

#### True RMS Output

- 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 4-20mA Loop Powered Output

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

#### Input/Output Isolation

- Input and output circuitry electrically isolated for improved safety of use.

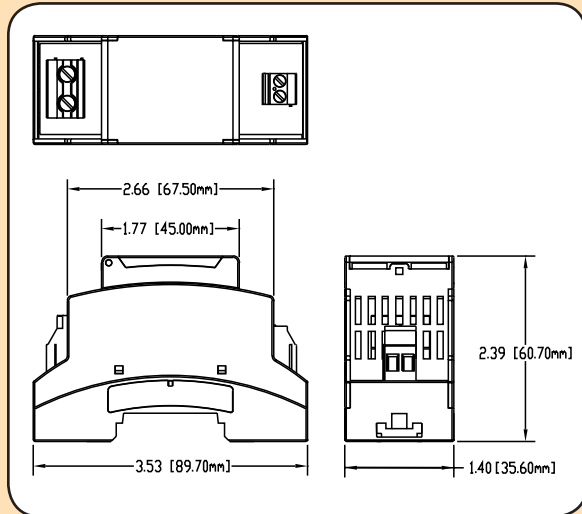
#### Compact DIN-rail Mount Enclosure\*

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

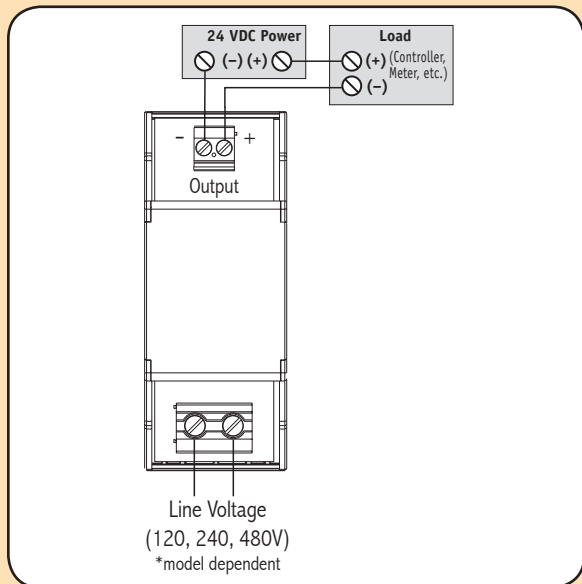
\*See DIN Rail accessories datasheet for information on the kit.



## Dimensions



## Connections



## Specifications

<b>Power Supply</b>	24VDC Loop-powered
<b>Input</b>	120V, 150V, 240V, 480V, 500V
<b>Input Over-range</b>	+15% of nominal range
<b>Output</b>	4–20mA Proportional; capped at 24mA max.
<b>Response Time</b>	250 ms (to 90% value)
<b>Accuracy</b>	<1%
<b>Linearity</b>	<0.5%
<b>Loading</b>	<500 ohms
<b>Isolation Voltage</b>	2500VAC
<b>Frequency Range</b>	40Hz–5KHZ
<b>Operating Temp.</b>	-30°C to 60°C
<b>Mounting</b>	DIN-rail compatible
<b>Case</b>	UL94 V0 Flammability Rated; noncorrosive thermoplastic
<b>Environmental</b>	14 to 122°F (-10 to 50°C), 0–95% RH non-condensing
<b>EMC/Immunity</b>	EN50081-1, EN50082-2
<b>Ripple</b>	<1% (peak to peak)
<b>Listings</b>	UL/CUL and CE Pending

## Ordering Information

Sample Model Number: VTR1-420-24L-DIN

True RMS voltage transducer with 120V nominal range, standard 4–20mA proportional output; 24V loop-powered with a DIN-compatible enclosure.

VTR (1) - (2) (3) (4)  
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### (1) Nominal Range

1	120V
2	150V
3	240V
4	480V
5	500V

### (2) Output Type

420	4–20 mA
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### (3) Supply Voltage

24L	24V Loop powered
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### (4) Mounting

DIN	DIN-rail compatible
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