VTEKE®

SINGLE PHASE VOLTAGE TRANSDUCER

VT-SERIES

FEATURES

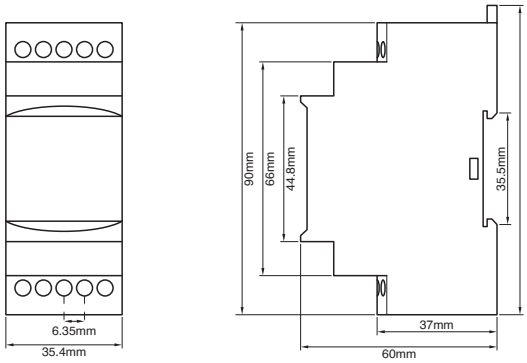
VT series True RMS Voltage Transducer is used to convert input AC voltage to DC signal used for voltage measurements. Voltage transducer samples AC signal at high frequency, calculates root mean square (RMS) voltage value for the fixed period and outputs measured signal as current loop or DC voltage signal. Available with fixed and multi-output versions.

TECHNICAL DATA

PARAMETER	VALUE
Supply Voltage	DC Model: 24 VDC (9-34V) (VT-XXX-XXX-24) AC Model: 230 VAC (85-280V) (VT-XXX-XXX-220)
Galvanic Isolation	DC Model: not isolated AC Model: 1.5 kV isolation, 3.0 kV withstand
Input Voltage Range (at full scale output)	0-24 AAC (VT-024 Series) 0-500 AAC (VT-500 Series) Customized
Continuous Overload Current	10A AC
Input Signal Frequency	40 .. 100Hz
Sampling Frequency	31kHz typical
Conversion Accuracy	Max 1.0% error at nominal current, T=25°C
Response Time	100ms typical
Operating Temperature	-10°C to 60°C
Output Load Capability	Max 700Ω (current output) @24V supply Min 10Ω (voltage output) @ max 5% error
Max Power Consumption	DC Model: 1 W (35 mA) @24 VDC AC Model: 2 W (20 mA) @115 VAC, 3 W (15 mA) @230 VAC
Mounting Type	DIN rail mount



DIMENSIONS



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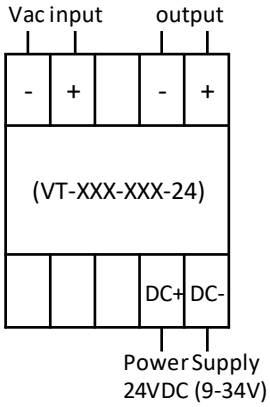
Code ex: CT1-420220

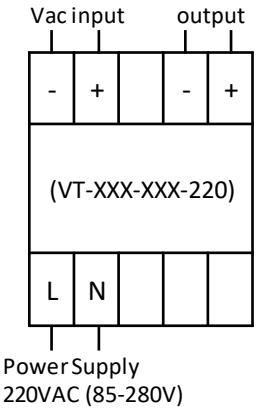
XX XXX-XXX XXX

Transducer Type	Input	Output	Powersupply
CT (Current Transducer) VT (Voltage Transducer)	• 1 (0-1AAC) • 5 (0-5AAC) • 500 (0-500VAC) • 24 (0-24VAC) • Customized	• M (Multi-range) • 420 (4-20mA) • 020 (0-20mA) • 005 (0-5V) • 010 (1-5V) • 015 (1-5V) • 210 (2-10V)	• 24 (9-34VDC) • 220 (85-280VAC)

CODES EXAMPLES

INPUT	CODE	OUTPUT	
0-500VAC	VT-500-M1-24	4-20m A 0-20m A 0-5V	24VDC (9-34V)
	VT-500-M1-220	0-10V 1-5V 2-10V	220VAC (85-280V))
	VT-500-420-24	4-20m A	24VDC (9-34V)
	VT-500-020-24	0-20m A	
	VT-500-005-24	0-5V	
	VT-500-010-24	0-10V	
	VT-500-015-24	1-5V	
	VT-500-210-24	2-10V	
	VT-500-420-220	4-20m A	220VAC (85-280V))
	VT-500-020-220	0-20m A	
	VT-500-005-220	0-5V	
	VT-500-010-220	0-10V	
	VT-500-015-220	1-5V	
	VT-500-210-220	0-20m A	





LED OPERATION

- Green LED on the top of board used for power and status indication.
- Continuously light when powered and function properly.
- Blinks 3 times during boot after power failure.
- Blinks continuously in case of hardware failure.
- Blinks continuously when DC current higher than 0.47A is applied to