SINGLE PHASE CURRENT TRANSDUCER

CT SERIES

FEATURES

CT Series True RMS current transducer is used to convert current transformer AC output to DC signal used for current measurement. Current transducer samples AC signal at high frequency, calculates root mean square (RMS) current value for the fixed period and outputs measured signal as current loop or DC voltage signal. Available with fixed and multi-output versions.

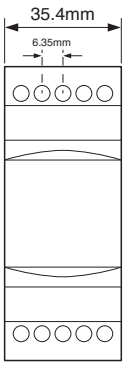


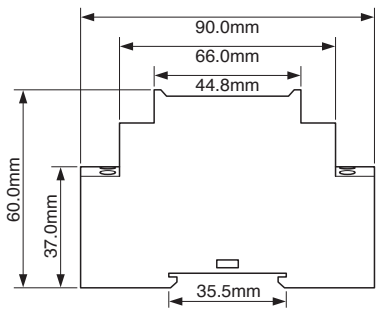


TECHNICAL DATA

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

DIMENSIONS





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VTEKE®

CODING TABLE

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

LED INDICATOR 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 CT inputs.

CONNECTION DIAGRAM

