



# Mechanical Specification

Case	Black Sleeve
Encapsulate	Epoxy
Terminals	UL1007 AWG24
Weight	<50g
Tolerance	±0.3mm
Storage temp	-50°C ~ +80°C

Voltage error and phase displacement for transducer			
Percentage of Rated Primary Current	$5\%I_N \leq I < 20\%I_N$	$20\%I_N \leq I < 120\%I_N$	$120\%I_N \leq I < 600\%I_N$
Current Error	<±0.2	<±0.15	<±0.1
Phase displacement	≤18	≤16	≤10
Inspected by	Verified by	Approved by	

## 4.0 Electrical Performance Requirements

- Winding Requirements
- Primary : Lead out by copper Conductor
- Secondary: Lead out by UL1007 #24 Black and Red Wires.
- Insulation Strength Between turns.
- Keep the secondary coil open, then input 10A(rms) current to primary coil for one minute, the insulation between turns of CT should be without any damage
- Insulation Resistance
- Insulation Resistance between primary and secondary winding should be greater than 1000 MΩ
- Insulation strength
- The primary to secondary winding can undertake power frequency AC 4000V and will not be penetrated for one minute by 1ma creepage
- Impulse Test
- The CT should with stand an Impulse voltage of 8KV, conducted under IEC Standards
- Magnetic Influence Test
- The Accuracy of the CT should be within 1% in the presence of 0.7T magnet at a distance of 30mm with base current flowing through the primary winding at unity

power factor.

- Short time over Current Test
- The accuracy of the CT should not be changed by an over current of 3000A RMS applied for half cycle at 50Hz.