Current Transducer

Applications

For the electronic measurement of currents: AC, DC IMPL.,etc.,with galvanic isolation between the primary (high power) and the secondary (electronic) circuits.

Advantages	Applications	Standards
Excellent accuracy	AC variable speed drives	EN50178
Very good linearity	Servo motor drives	EN50155
Low temperature drift	Battery supplied applications	
Wide frequency bandwidth	converter /inverter	
Optimized response time	UPS/SVG	

Main electrical data		
I_{PN}（A）	Primary nominal current rms	1000
I_P（A）	Primary current measuring range	0～±2100
	Conversion ratio	1:5000
V_C（V）	Supply voltage	DC±(15~24)×(1±5%)V
I_{SN} (mA)	Secondary nominal current rms	200mA
R_M（Ω）	Measuring resistance	
	70℃ 85℃ @±15V, ±1000A: 0Ω ~23Ω 0Ω ~19Ω @±15V, ±1300A: 0Ω ~7Ω @±24V, ±1000A: 0Ω ~63Ω 10Ω ~61Ω @±24V, ±2100A: 0Ω ~6Ω	
I_C(@±24V)	Current consumption	≤35mA+ Secondary output current I_{SN}
	Isolation test: Between the primary circuit to the secondary circuit	3.8kVrms/50Hz/1min

Accuracy - Dynamic performance data	
δ i	≤±0.4%

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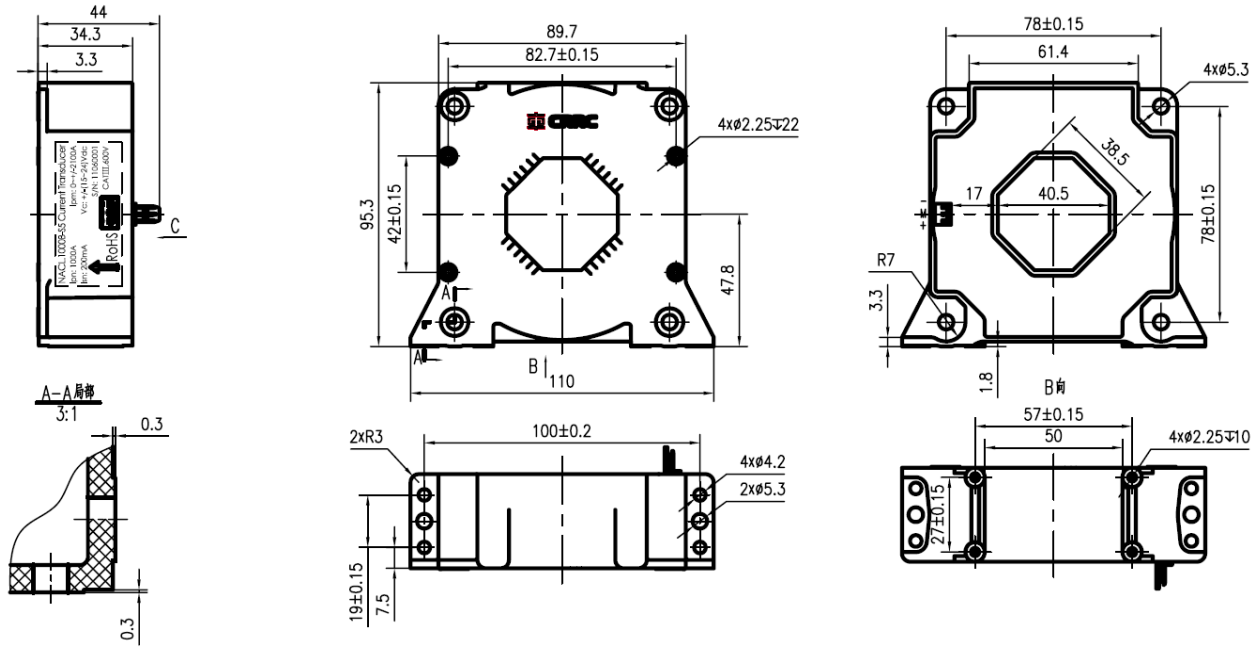
(@I_{PN}， T_A=25℃)	Overall Accuracy	
δ L (@I_{PN}， T_A=25℃)	Linearity error	＜0.1%
I_O (@I_P=0， T_A=25℃)	Offset current	≤±0.4mA
I_{OT}	Thermal drift	≤ ±0.8mA（-40℃~+85℃）
t_r	Response time to 90% of I_{PN} step	≤1us
di/dt	di/dt Accurately followed	＞100A/us
BW	Frequency bandwidth(-1dB)	DC..100kHz

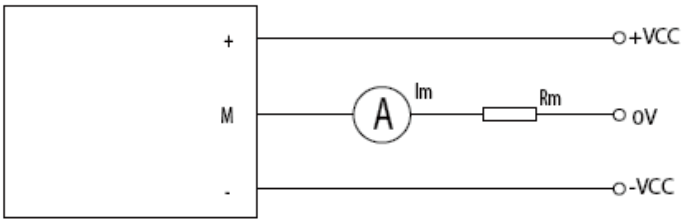
General data		
Ta	Ambient operating temperature	-40℃~+85℃
Ts	Ambient storage temperature	-45℃~+90℃
	Clearance distance dCl mm	16.8
	Creepage distance dCp mm	18.3
	CTI	＞175
	Mass	≤850g

Dimensions (in mm)



Connection

Connection of secondary：MOLEX 6410



Mechanical characteristics		Remark
General tolerance	±1 mm	1. When measuring the current direction of arrow mark on direction and sensor, the sensor output I_{SN} is positive.
Transducer fastening （Recommended）	4 hole and 4 notch ø5.3mm 4 M5 steel screws	2. Product secondary side connecting line optimization shielding wire, cable shielding layer close to the product end can connect chassis, negative power or power 0 v. 0V
Transducer fastening （Recommended）	2 hole and 2 notches ø 5.3mm 2 M5 steel screws	3. Power sensor mounting screw hole of the vertical degree requirements: requirements in the national standard grade 8 or above (or below 0.06).
Recommended fastening torque	3.5 N • m	4. Sensor mounting surface flatness requirements (a). Planeness national standard instalation grade 11 or above (or surface fluctuation is less than 0.25 mm); (b). When mounting surface with a small round convex platform design flatness requirement of national standard grade 12 or more (or less than 0.5 mm) in plane ups and downs;
Bus bar（Recommended）	40.5×13mm	
Connection of secondary	Molex 6410	5. Did not note the tolerance + / - 1 mm;