NT1000C-S/SP3 Current Transducer

A

Applications

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

CE RoHS COMPLIANT

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	

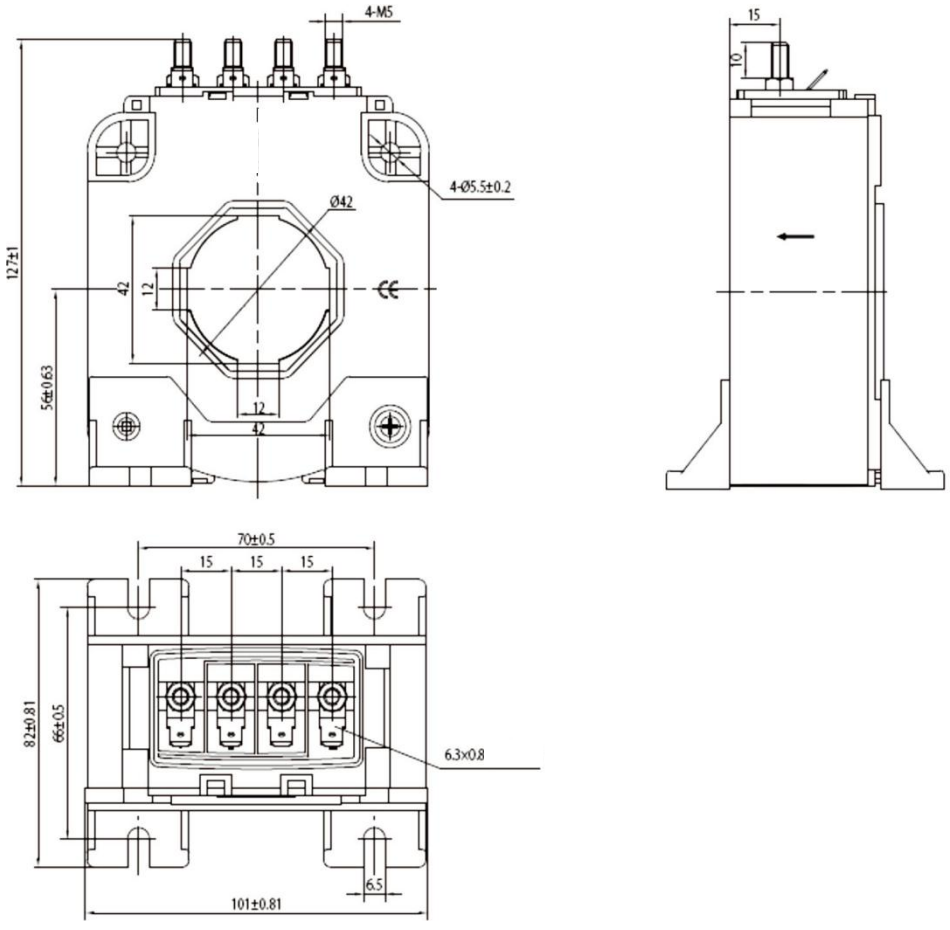
Main electrical data		
I_{PN}（A）	Primary nomina lcurrent rms	1000A
I_P（A）	Primary current measuring range	0～±2400
	Turns ratio	1:5000
V_C（V）	Supply voltage	DC±(15~24)×(1±5%)V
I_{SN}(mA)	Secondary nominal current rms	200mA
R_M（Ω）	Measuring resistance	
	$R_M$min $R_M$max with ±15V @±1000A max: 0Ω 15Ω @±1200A max: 0Ω 7Ω with ±24V @±1000A max: 0Ω 50Ω @±2000A max: 0Ω 7Ω	
I_C(@±24V)	Current consumption	≤30mA+ Secondary output current I_{SN}
	Isolation test: Between the primary circuit to the secondary circuit	13.4kVrms/50Hz/1min
	Case material	UL94V-0

Accuracy - Dynamic performance data		
δ i (@I_{PN}，T_A=25℃)	Overall Accuracy	≤±0.4%
δ L (@I_{PN}，T_A=25℃)	Linearity error	＜0.1%

I_O ($@I_P$=0，T_A=25℃)	Offset current	≤±0.5mA
I_{OT}	Thermal drift	≤±1mA（-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

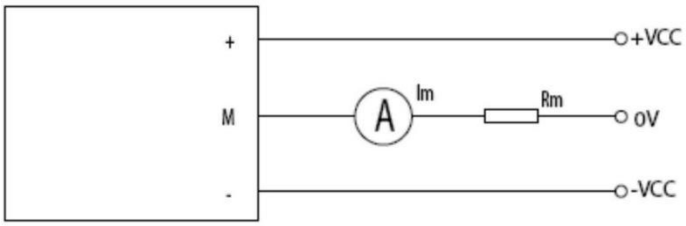
General data		
Ta	Ambient operating temperature	-40℃~+85℃
Ts	Ambient storage temperature	-45℃~+90℃
D_{Cl}	Clearance distance mm	45
D_{CP}	Creepage distance mm	64
	CTI	＞175
	Mass	≤900g

Dimensions (in mm)



Connection

Connection of secondary：4 M5 threaded studs



Mechanical characteristics		Remark
General tolerance	±1 mm	1、The sensor output I_{PN} is positive when IP flows in the direction of the arrow. 2、Shielded wire recommended for secondary connection, cable shielding layer close to the terminals can be connected to housing， negative power terminal or GND.
Transducer fastening （Recommended）	4 hole ø6.5mm 4 screws M6	
Recommended fastening torque	4.5 N • m	
Bus bar(Recommended)	ø 42mm	
Connection of secondary	4 M5 threaded studs Faston 6.3×0.8	
Recommended fastening torque	2.2 N • m	