Current Transducer

Applications

For the electronic measurement of currents: AC, DC，pulsed…，with galvanic separation between the primary circuits and the secondary circuits.

CE RoHS COMPLIANT

Advantages	Applications	Standards
Excellent accuracy	AC variable speed drives	GB/T 25119-2010 EN50178 EN50155
Very good linearity	Servo motor drives	
Low temperature drift	Battery supplied applications	
Wide frequency bandwidth	converter /inverter	
Optimized response time	UPS/SVG	

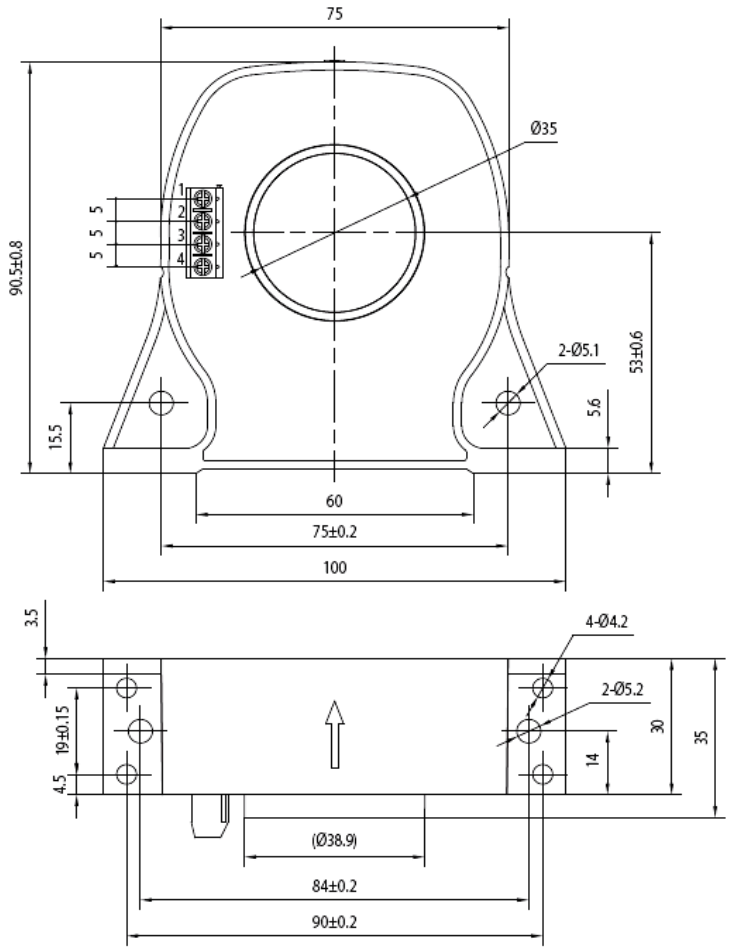
Main electrical data (@±I_{PN}, T_A = 25℃)		
I_{PN}	Primary nominal current	500A
I_{PM}	Primary current measuring range	±800A
V_C	Supply voltage	DC±(15~18)×(1±5%)V
I_C(@±24V)	Current consumption	≤±25mA+I_{SN}
I_{SN}	Output current	100mA
	Conversion ratio	1:5000
R_M	Load resistance	@±15V, ±500A: 0Ω~40Ω @±15V, ±800A: 0Ω~5Ω @±18V, ±500A: 0Ω~60Ω @±18V, ±800A: 0Ω~15Ω

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	≤±0.13mA
I_{OT}(@-40℃~+85℃)	Temperature coefficient of δ_{Zt}	≤±0.64mA
T_R(90% of I_{PN}&di/dt > 50 A/μS)	Step response time to 90 % of I_{PN}	≤1μS

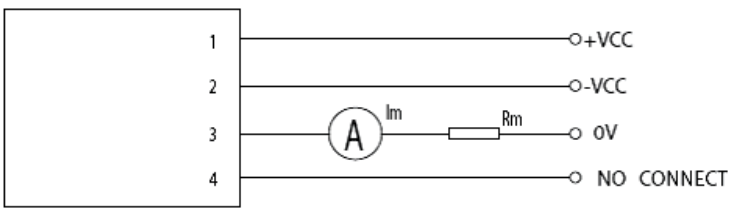
General data		
Ta	Ambient operating temperature	-40~+85℃
Ts	Ambient storage temperature	-45~+90℃
m	Mass	≤400g

Insulation coordination		
	Voltage for AC insulation test, 50Hz,1min	6kV

Dimensions Series (in mm)



Connection



Mechanical characteristics	Remark

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General tolerance	±1mm
Transducer fastening	4 hole ø4.2mm 4 M4 steel screws
Transducer fastening	2hole ø5.2mm 2M5 steel screws
Recommended fastening torque	2.5 N • m
Primary through-hole	φ 35mm
Connection of secondary	Four core pressure welding mode

1. When measuring the current direction of arrowmark on direction and sensor, the sensor output ISN is positive.

2. Product secondary side connectingline optimization shielding wire, cable shielding layer close to the product end can connect chassis, negative power or power 0 v .

3. Power sensor mounting screw hole of the vertical degree requirements: requirements in the national standard grade 8 or above (or below 0.06).

4. Sensor mounting surface flatness requirements:

a) Planeness national standard installation 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 5 mm) in plane ups and downs than 0.5 mm) in plane ups and downs;

5. 1mm；Did not note the tolerance + / - 1 mm;