NA100-P(NACL.100P-S6) Current Transducer

产 品 说 明 | Applications

NA100-P series high-precision current sensor is a closed loop device based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It has strong anti-jamming ability and it provides accurate electronic measurement of DC, AC or pulsed currents.

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Advantages	Applications	Standards
Excellent accuracy	Variable speed drives	UL 94-V0
Low temperature of offset	Battery supplied applications	EN 60947-1:2004
Small size	UPS Uninterruptible Power Supplies	EN50178:1998

主要电气参数 Main electrical data (Ta=+25℃)		
I_{PN}	Primary nominal current rms	100A
I_P (@±24V)	Primary current measuring range	0～±150A
V_C	Supply voltage	±12V～±15V×(1±5%)
K	Turns ratio	1:2000
I_{SN} ($@I_p=±I_{pn}$)	Secondary nominal current rms	50mA
R_L	Load resister	25℃
(@±12V, ±100A)		0Ω ～42Ω
(@±12V, ±120A)		0Ω ～14Ω
(@±15V, ±100A)		20Ω ～100Ω
(@±15V, ±150A)		20Ω ～25Ω
I_C	Static Current consumption	≤15mA + I_{SN}

Accuracy - Dynamic performance data		
δ_i ($@Ta=+25℃, I_p=I_{PN}$)	Overall Accuracy	≤±0.7%
δ_L ($@Ta=+25℃, I_p=I_{PN}$)	Linearity error	≤0.2%

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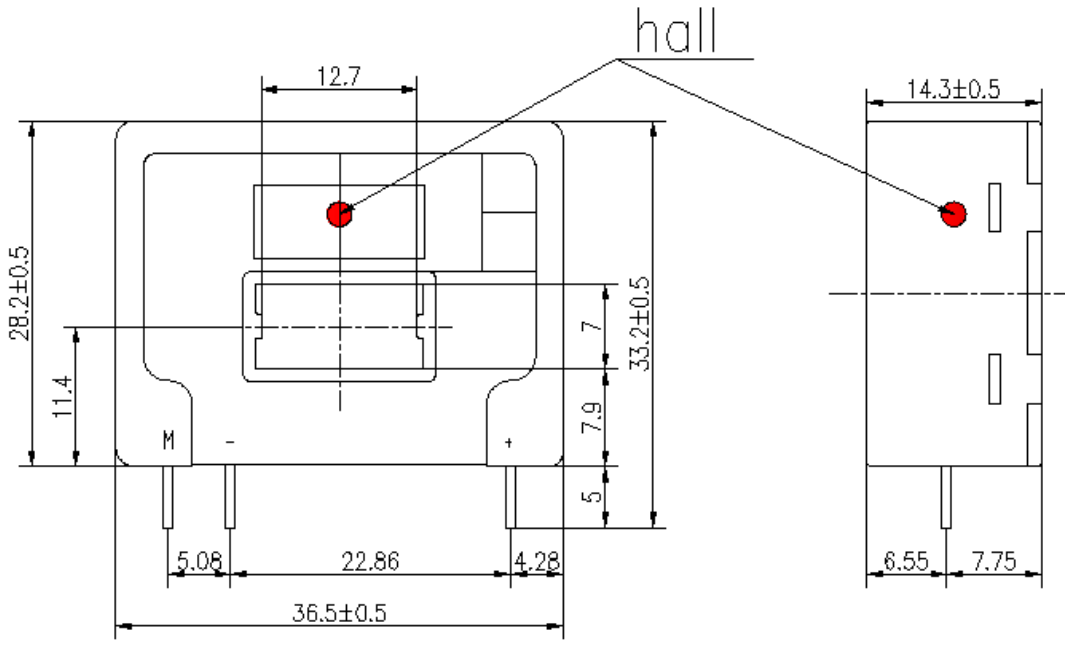
δ_z(Ta=+25℃)	Electrical offset current	≤±0.1mA
δ_{zt} (Ta=-40℃～+85℃)	Temperature coefficient of δ_{zt}	≤±0.25mA (@-25℃~+85℃)
		≤±0.5mA(@-40℃~-25℃)
t_r (@di/dt=100A/us ,90% I_{PN})	Step response time	≤1 us
BW（-3dB）	Frequency bandwidth（-1dB）	DC～100 kHz

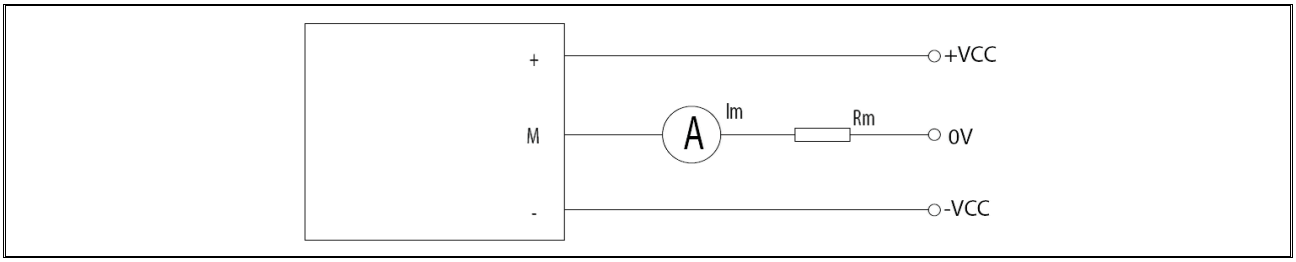
General data		
Ta	Ambient operating temperature	-40℃~+85℃
Ts	Ambient storage temperature	-45℃~+90℃
	Mass	≤25g

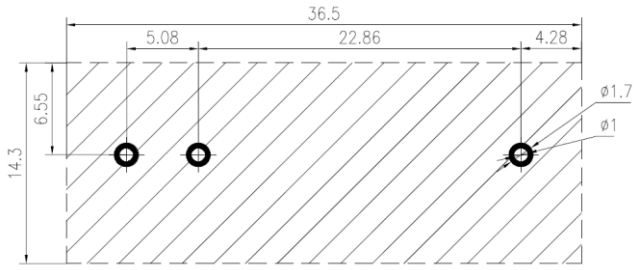
Insulation data		
U_d (@50Hz,1min)	Rms voltage for AC insulation test	2.5KV
R_{IS} (@2500V)	Isolation resistance	≥500 MΩ

NA100-P Dimensions NA100-P Series (in mm)



Connection



Mechanical characteristics	Remark
1. : Installation method: circuit board welding installation 2. 0.63×0.56mm connector size: 0.63 mm×0.56mm 3. 7×12.7mm The original installation square hole: 7×12.7mm 4. mm)：  	I_P . It will be in a forward direction when the I_P flows according to the direction of the arrowhead.