

## **CSM150LA Hall-effect Current Sensor**

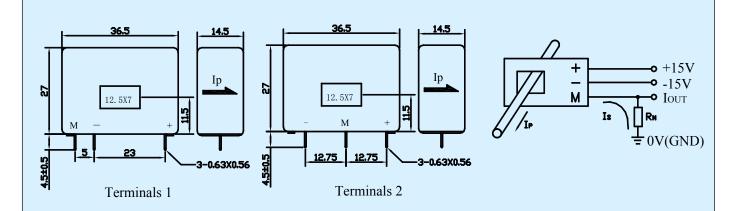


Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Electrical characteristics			
	Туре	CSM150LA	
$I_{PN}$	Primary nominal input current	150	A
$I_P$	Measuring range of primary current	0~±150	A
$I_{SN}$	Secondary nominal output current	75	mA
$\mathbf{K}_{\mathbf{N}}$	Conversion ratio	1:2000	
$\mathbf{R}_{\mathbf{M}}$	Measuring resistance	$V_C = \pm 15V  I_P = \pm 150A  0-33$	Ω
$V_{C}$	Supply voltage	±15(±5%)	V
$I_{C}$	Current consumption	$V_C=\pm 15V$ 10+Is	mA
$\mathbf{V}_{\mathbf{D}}$	Insulation voltage	AC/50Hz/1min 2.5	kV
$\epsilon_{ m L}$	Linearity	<0.2	%FS
X	Accuracy	$T_A=25^{\circ}C V_C=\pm 15V$ <=0.7	%
Io	Zero offset current	T <sub>A</sub> =25℃ <±0.2	mA
I <sub>OM</sub>	Residual current	I <sub>P</sub> →0 <±0.15	mA
Iot	Thermal drift of I <sub>0</sub>	$I_P=0 T_A=-25\sim+85^{\circ}C$ <±0.5	mA
$T_{R}$	Response time	<1	μs
f	Frequency bandwidth(-1dB)	DC~100	kHz
$T_A$	Ambient operating temperature	-25~+85	r
Ts	Ambient storage temperature	-40~+100	C
Rs	Secondary coil resistance(T <sub>A</sub> =25°C)	112	Ω
m	Mass	19	g
	Standard	Q/320115QHKJ01-2013	

## Dimensions of drawing (mm)

## Connection



## Remarks

- ·Incorrect connection may lead to the damage of the sensor. I<sub>SN</sub> is positive when the I<sub>P</sub> flows in the direction of the arrow.
- $\cdot Dynamic\ performance\ (di/dt\ and\ response\ time)\ are\ best\ with\ a\ primary\ bar\ in\ the\ center\ of\ the\ through-hole.$