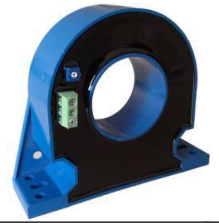


MCSM1000LTC Hall-effect Current Sensor Series

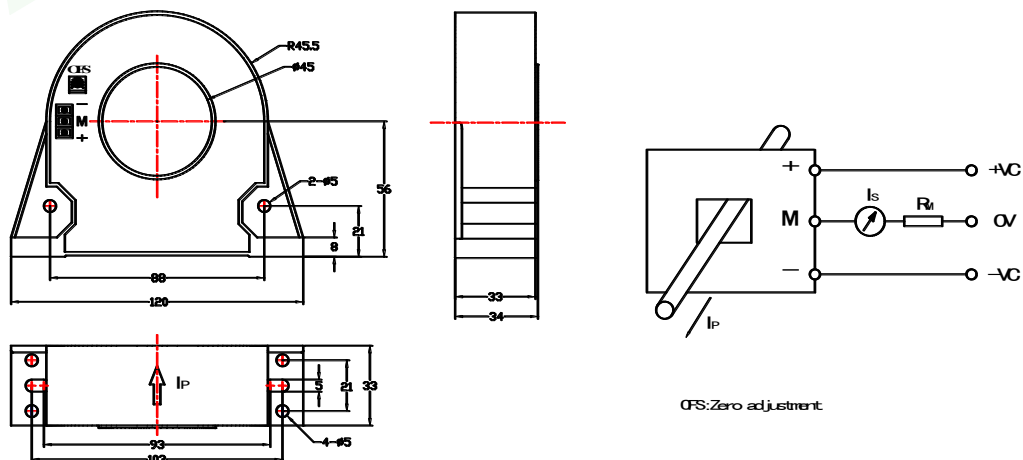
Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.



Electrical characteristics				
Type	MCSM1000LTC			
I_{PN}	Primary nominal input current	1000		A
I_P	Measuring range of primary current(DC)	0~±2000		A
I_{SN}	Secondary nominal output current	200		mA
K_N	Conversion ratio	1:5000		
R_M	Measuring resistance ($V_C=±15V$)	$V_C=±15V$ $I_P=±1000$	0~30	$Ω$
	($V_C=±15V$)	$V_C=±15V$ $I_P=±1200$	0~20	$Ω$
	($V_C=±18V$)	$V_C=±24V$ $I_P=±1000$	0~75	$Ω$
	($V_C=±18V$)	$V_C=±24V$ $I_P=±2000$	0~15	$Ω$
V_C	Supply voltage	±15~±24(±5%)		V
I_C	Current consumption	$V_C=±24V$	18+ I_S	mA
V_D	Insulation voltage	AC/50Hz/1min	6	kV
$ε_L$	Linearity			%FS
X	Accuracy	$T_A=25℃$	<±0.7	%
I_0	Zero offset current	$T_A=25℃$	<±0.25	mA
I_{OT}	Thermal drift of I_0	$I_P = 0$ $T_A = -25~+85℃$	<±0.005	mA/℃
T_r	Response time	90% I_{PN}	<1	us
di/dt	di/dt accurately followed			A/μs
f	Frequency bandwidth(-1dB)	DC~100		kHz
T_A	Ambient operating temperature	-25~+85		℃
T_S	Ambient storage temperature	-40~+100		℃
R_S	Secondary coil resistance($T_A=25℃$)	37		$Ω$
	Standard	Q/320115QHKJ01-2010		

Dimensions of drawing (mm)

Connection



Remarks

- Incorrect connection may lead to the damage of the sensor. I_{SN} is positive when the I_P flows in the direction of the arrow.
- Dynamic performance (di/dt and response time) are best with a primary bar in the center of the through-hole.