

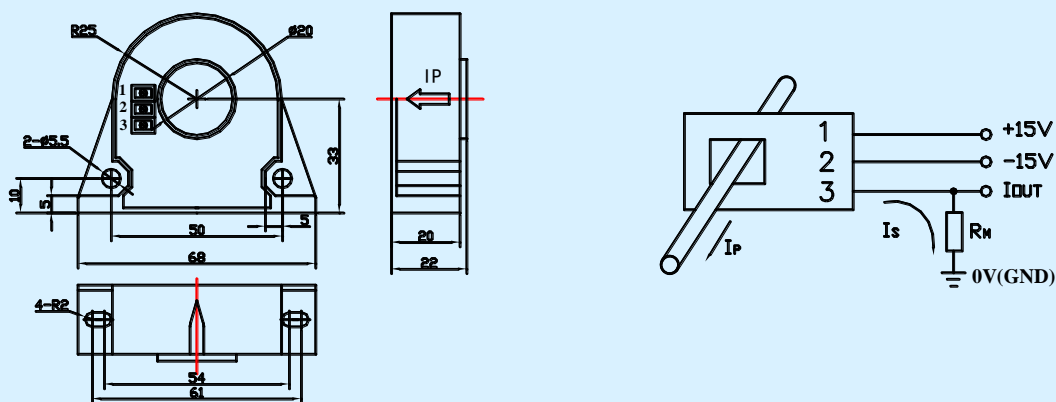
CSM300LT Hall-effect Current Sensor Series



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	CSM050LT	CSM100LT	CSM200LT	CSM300LT	
I_{PN}	Primary nominal input current	50	100	200	300	A
I_P	Measuring range of primary current	0~±75	0~±150	0~±300	0~±500	A
I_{SN}	Secondary nominal output current	25	50	100	150	mA
K_N	Conversion ratio	1:2000				
R_M	Measuring resistance ($V_C=±15V/I_{PN}$)	504(max)	237(max)	100(max)	56(max)	Ω
	($V_C=±15V/I_P$)	327(max)	147(max)	56(max)	21(max)	Ω
	($V_C=±18V/I_{PN}$)	619(max)	293(max)	130(max)	75(max)	Ω
	($V_C=±18V/I_P$)	397(max)	148(max)	75(max)	31(max)	Ω
V_C	Supply voltage	±12~±18(±5%)				V
I_C	Current consumption	$V_C=±15V$	20+ I_S			mA
V_D	Insulation voltage	AC/50Hz/1min	6			kV
ϵ_L	Linearity	<0.1				%FS
X	Accuracy	$T_A=25^\circ C$	<±0.7			%
I_0	Zero offset current	$T_A=25^\circ C$	<±0.25			mA
I_{OM}	Residual current	$I_P \rightarrow 0$	<±0.2			mA
I_{OT}	Thermal drift of I_0	$I_P=0 \quad T_A=-25\sim+85^\circ C$	<±0.65			mA
T_R	Response time	<1				μs
di/dt	di/dt accurately followed	>100				A/μs
f	Frequency bandwidth(-3dB)	DC~100				kHz
T_A	Ambient operating temperature	-25~+85				°C
T_S	Ambient storage temperature	-40~+100				°C
R_S	Secondary coil resistance	$T_A=25^\circ C$	22			Ω
	Standard	Q/3201CHGL02-2007				

Dimensions of drawing (mm) Connection



Elucidation: 1:+15V 2:-15V 3: I_{OUT}

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.