

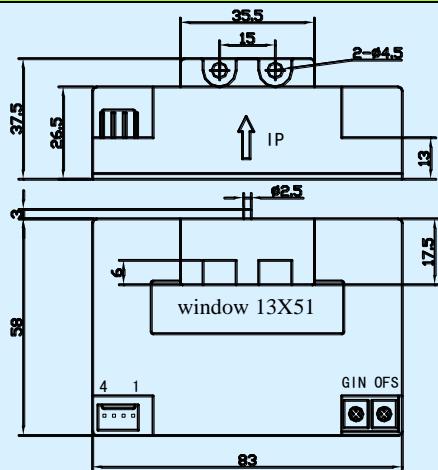
CSM600FA Hall-effect Current Sensor Series



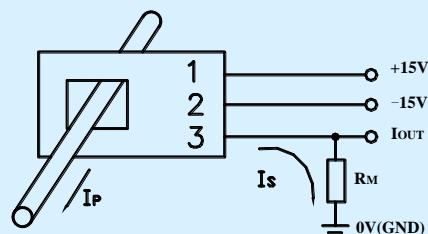
Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Electrical characteristics						
	Type	CSM200FA	CSM300FA	CSM400FA	CSM500FA	CSM600FA
I _{PN}	Primary nominal input current	200	300	400	500	600
I _P	Measuring range of primary current	0~±300	0~±450	0~±600	0~±750	0~±800
I _{SN}	Secondary nominal output current	100±0.5%				mA
K _N	Conversion ratio	1:2000	1:3000	1:4000	1:5000	1:6000
R _M	Measuring resistance (V _C =±15V/ I _{PN})	0~88	0~76	0~63	0~46	0~32
	(V _C =±15V/ I _P)	0~50	0~38	0~25	0~8	0~4
	(V _C =±18V/ I _{PN})	0~117	0~105	0~92	0~75	0~61
	(V _C =±18V/ I _P)	0~69	0~57	0~44	0~27	0~24
V _C	Supply voltage	±15~±18(±5%)				V
I _C	Current consumption	V _C =±15V 20+Is				mA
V _D	Insulation voltage	AC/50Hz/1min 5				kV
ε _L	Linearity	<0.1				%FS
X	Accuracy	T _A =25°C V _C =±15V <±0.7				%
I ₀	Zero offset current	T _A =25°C <±0.3				mA
I _{OM}	Residual current	I _P →0 <±0.2				mA
I _{OT}	Thermal drift of I ₀	I _P =0 T _A =-25~+85°C <±0.5				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°C)	19	31	44	61	75
	Standard	Q/3201CHGL02-2007				

Dimensions of drawing (mm)



Connection



Elucidation:1:+15V 2:-15V 3:I_{OUT} 4:No connection OFS:Zero adjustment

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.