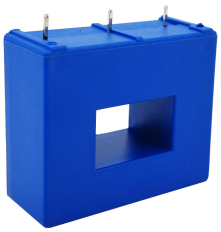
CSM200AP Hall-effect Current Sensor Series

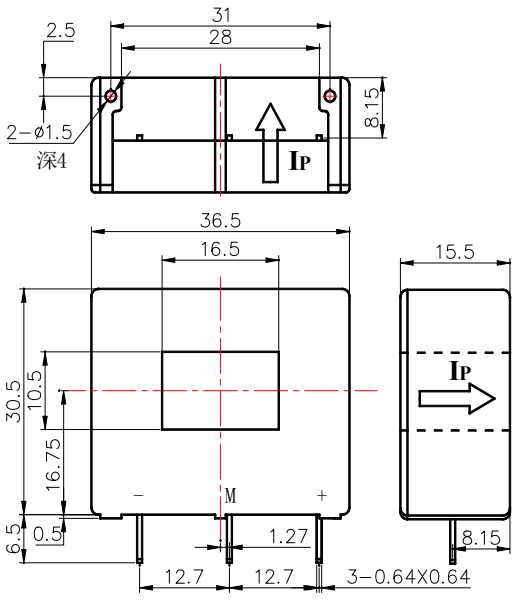


Closed loop current sensor is based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

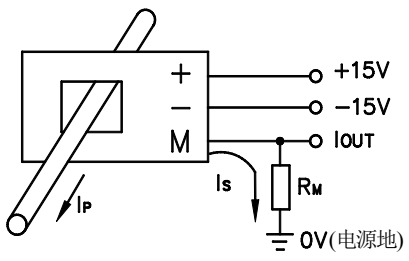
Electrical characteristics

	Type			
	Type		CSM200AP	
I_{PN}	Primary nominal input current		200	A
I_P	Measuring range of primary current		0~±300	A
I_{SN}	Secondary nominal output current		100±0.5%	mA
K_N	Conversion ratio		1:2000	
R_M	Measuring resistance	V_C=±12V/I_{PN}	0-57	Ω
		V_C=±12V/I_P	0-22	Ω
		V_C=±15V/I_{PN}	0-87	Ω
		V_C=±15V/I_P	0-42	Ω
V_C	Supply voltage		±12~±15(±5%)	V
I_C	Current consumption	V_C=±15V	10+Is	mA
V_D	Insulation voltage	AC/50Hz/1min	3	kV
ε_L	Linearity		<0.1	%FS
X	Accuracy	T_A=25℃	<±0.7	%
I_O	Zero offset current	T_A=25℃	<±0.2	mA
I_{OM}	Residual current	I_P→0	<±0.15	mA
I_{OT}	Thermal drift of I_0	I_P=0 T_A=-25~+85℃	≤±0.005	mA/℃
T_R	Response time		<1	μs
f	Frequency bandwidth(-3dB)		DC~200	kHz
T_A	Ambient operating temperature		-25~+85	℃
T_S	Ambient storage temperature		-40~+100	℃
R_S	Secondary coil resistance(T_A=25℃)		48	Ω
m	Mass		17	g
	Standard		Q/3201CHGL02-2016	

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.