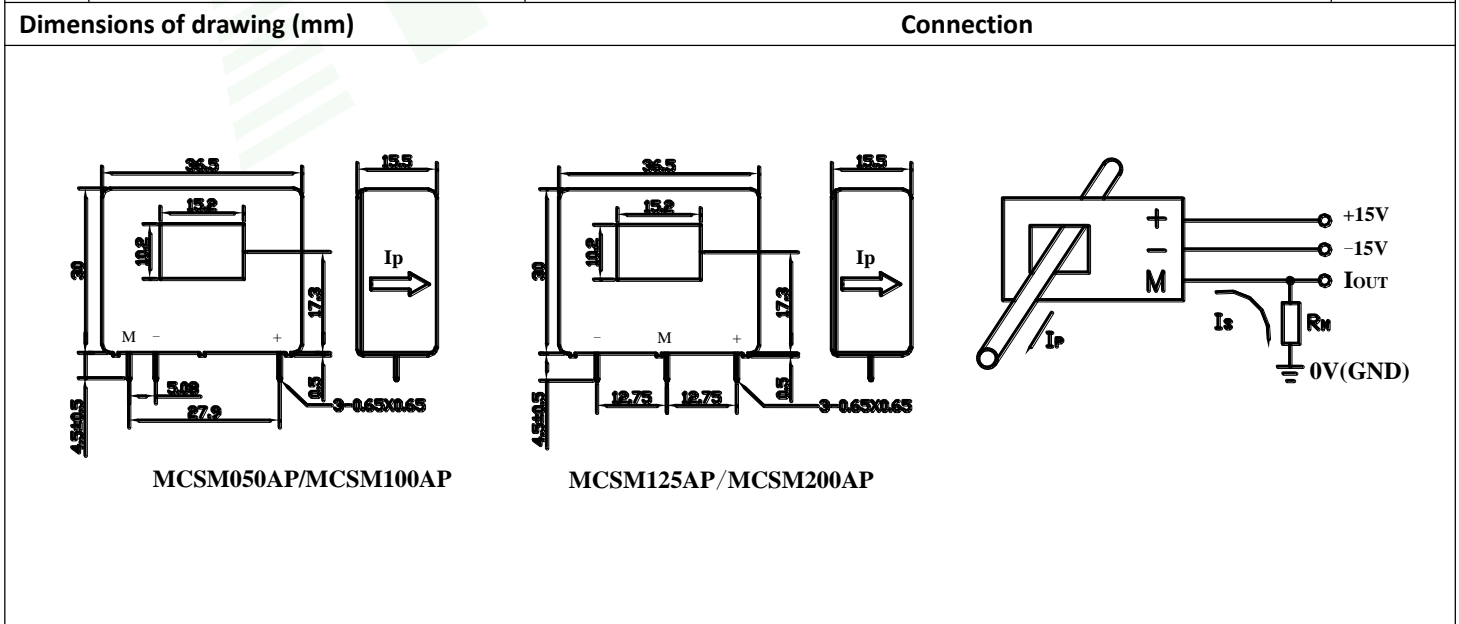


# MCSM200AP Hall-effect Current Sensor Series

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	MCSM050AP	MCSM100AP	MCSM1250AP	MCSM200AP							
$I_{PN}$	Primary nominal input current					50	100	125	200	A	
$I_P$	Measuring range of primary current					0 ~ ± 1 5 0	0 ~ ± 3 0 0 0	0 ~ ± 3 7 5	0 ~ ± 6 0 0	A	
$I_{SN}$	Secondary nominal output current					50±0.5%	50±0.5%	125±0.5%	100±0.5%	mA	
$K_N$	Conversion ratio					1:1000	1:2000	1:1000	1:2000		
$R_M$	Measuring resistance ( $V_C=±18V$ )					0-100	0-68	0-15	0-12	Ω	
$V_C$	Supply voltage					±12~±18(±5%)				V	
$I_C$	Current consumption					$V_C=±15V$	10+ $I_S$			mA	
$V_D$	Insulation voltage					AC/50Hz/1min			3	KV	
$\epsilon_L$	Linearity									<0.2	%FS
X	Accuracy					$T_A=25^\circ C$				<±0.7	%
$I_O$	Zero offset current					$T_A=25^\circ C$				<±0.2	mA
$I_{OM}$	Residual current					$I_P \rightarrow 0$				<±0.15	mA
$I_{OT}$	Thermal drift of $I_O$					$I_P = 0 \quad T_A = -2.5 \sim +85^\circ C$				≤±0.005	mA/°C
$T_R$	Response time									<1	μs
f	Frequency bandwidth(-3dB)									DC~200	kHz
$T_A$	Ambient operating temperature									-25~+85	°C
$T_S$	Ambient storage temperature									-40~+100	°C
$R_S$	Secondary coil resistance( $T_A=25^\circ C$ )					30	45	30	45	Ω	
Standard						Q/3201CHGL02-2007					



**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.