

## CSM200LAP Hall-effect Current Sensor



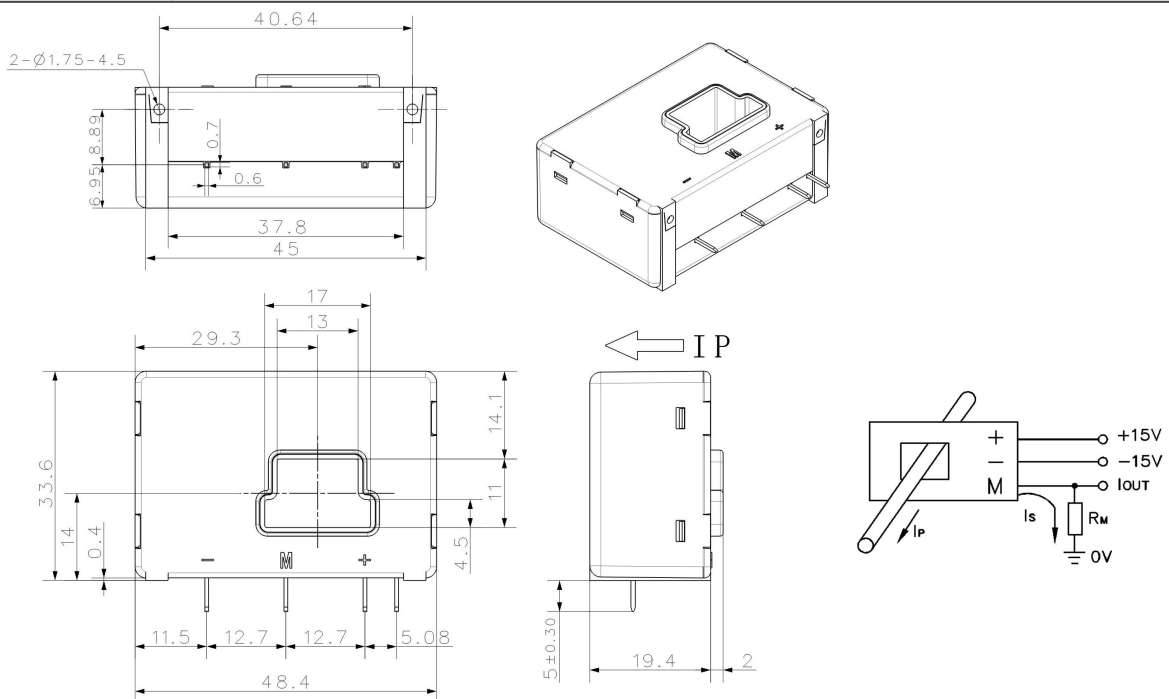
Closed loop current sensor is based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

### Electrical characteristics

	Type	CSM200LAP	
$I_{PN}$	Primary nominal input current	200	A
$I_P$	Measuring range of primary current	0~±300	A
$I_{OUT}$	Secondary nominal output current	100	mA
$K_N$	Conversion ratio	1:2000	
$R_M$	Measuring resistance	$V_C = \pm 12V / I_{PN}$	0-28 $\Omega$
		$V_C = \pm 12V / I_P$	0-5 $\Omega$
		$V_C = \pm 15V / I_{PN}$	0-58 $\Omega$
		$V_C = \pm 15V / I_P$	0-9 $\Omega$
$V_C$	Supply voltage	$\pm 12 \sim \pm 15 (\pm 5\%)$	
$I_C$	Current consumption	$V_C = \pm 15V$	15+ $I_S$ mA
$V_D$	Insulation voltage	AC/50Hz/1min	3 kV
$\epsilon_L$	Linearity		<0.15 %FS
$X$	Accuracy	$T_A = 25^\circ C$	<±0.5 %
$I_0$	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 $I_0$	$I_P = 0$ $T_A = -40 \sim +85^\circ C$	≤±0.005 mA/°C
di/dt	di/dt accurately followed		>200 A/μs
$T_R$	Response time	$I_P = I_{PN}$ 10%-90%	<1 μs
$f$	Frequency bandwidth(-1dB)		DC~100 kHz
$T_A$	Ambient operating temperature		-40~+85 °C
$T_S$	Ambient storage temperature		-40~+100 °C
$R_S$	Secondary coil resistance( $T_A = 85^\circ C$ )		81 $\Omega$
$m$	Mass		40 g
	Standard	Q/320115QHKJ01-2016	

### 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.