

CSM3000LTF

High-precision Hall closed-loop current se

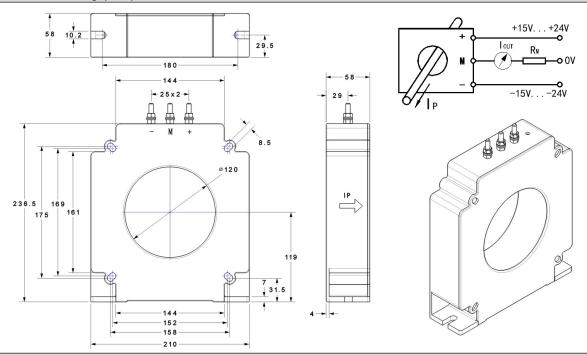


Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Elect	rical characteristics							
	Туре	CSM1000LTF		CSM2000LTF		CSM3000LTF		
I _{PN}	Primary nominal input current	1000		2000		3000		Α
I _P	Measuring range of primary current(DC)	0∼±1500		0∼±3000		0∼±4500		Α
I _{out}	Secondary nominal output current	200		400		600		mA
K _N	Conversion ratio	1:5000						
R _M	Measuring resistance (V _C =±15V)	I _P =±1000	0-52	I _P =±2000	0-16	I _P =±3000	0-5	Ω
	(V _C =±15V)	I _P =±1500	0-28	I _P =±3000	0-5	I _P =±4500		Ω
	(V _C =±24V)	I _P =±1000	0-97	I _P =±2000	0-39	I _P =±3000	0-20	Ω
	(V _C =±24V)	I _P =±1500	0-58	I _P =±3000	0-20	I _P =±4500	0-7	Ω
V _c	Supply voltage	±15~±24(±5%)						V
I _c	Current consumption	V _C =±24V 28+I _{OUT}					mA	
V _d	Insulation voltage	AC/50Hz/1min 6					kV	
Х	Accuracy	T _A =25℃ ±0.3					%	
٤ ل	Linearity	<0.1						%F
I _o	Zero offset current	T _A =25℃ <±0.2						mA
I _{ot}	Thermal drift of I ₀	I _P =0 T _A =-40∼+85℃ <±0.01						mA/
Tr	Response time	90%I _{PN} <1						μs
di/	dit accurately followed	>100						A/µ
f	Frequency bandwidth(-1dB)	DC~100						kHz
T _A	Ambient operating temperature	-40~+85						$^{\circ}\mathbb{C}$
Ts	Ambient storage temperature	-40~+125						$^{\circ}$
R_s	Secondary coil resistance(T _A =25°C)	18						Ω
m	Mass	3400						g
	Standard	Q/320115QHKJ01-2016						

Dimensions of drawing (mm)

Connection



Remarks

- 1.Incorrect connection may lead to the damage of the sensor. I_{OUT} is positive when the I_{P} flows in the direction of the arrow.
- 2.Dynamic performance (di/dt and response time) are best with a primary bar in the center of the through-hole.