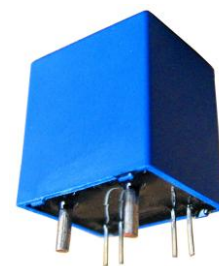




CSM050P Hall-effect Current Sensor Series

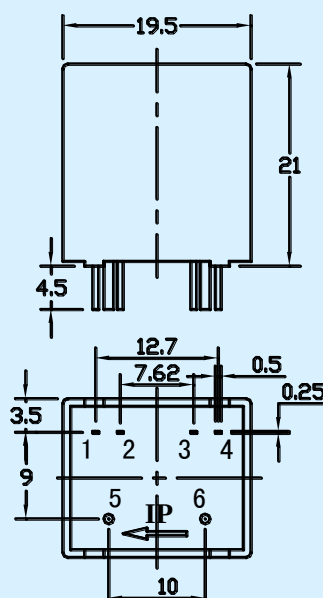


Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Electrical characteristics

	Type	CSM005P	CSM010P	CSM015P	CSM020P	CSM025P	CSM030P	CSM050P	
I_{PN}	Primary nominal input current	5	10	15	20	25	30	50	A
I_P	Measuring range of primary current	$0 \sim \pm 10$	$0 \sim \pm 20$	$0 \sim \pm 30$	$0 \sim \pm 40$	$0 \sim \pm 50$	$0 \sim \pm 60$	$0 \sim \pm 100$	A
	Dimension of input terminal	$\Phi 0.8$	$\Phi 1.0$	$\Phi 1.0$	$\Phi 1.4$	$\Phi 1.4$	$\Phi 1.6$	$\Phi 1.6$	mm
K_N	Conversion ratio	3:1500	2:2000	1:1500	1:2000	1:2500	1:3000	1:3125	
R_{IM}	Internal measuring resistance	400	400	400	400	400	400	250	Ω
V_{OUT}	Secondary nominal output voltage	$4 \pm 0.5\%$							V
V_C	Supply voltage	$\pm 15(\pm 5\%)$							V
I_C	Current consumption	< 25							mA
V_D	Insulation voltage	AC/50Hz/1min 2.5							kV
ε_L	Linearity	< 0.1							%FS
V_O	Zero offset voltage	$T_A = 25^\circ\text{C}$ $< \pm 25$							mV
V_{OT}	Thermal drift of V_O	$I_P = 0$ $T_A = -25 \sim +85^\circ\text{C}$ $< \pm 0.5$							mV/ $^\circ\text{C}$
T_R	Response time	< 1							μs
f	Frequency bandwidth(-3dB)	DC~200							kHz
T_A	Ambient operating temperature	$-25 \sim +85$							$^\circ\text{C}$
T_S	Ambient storage temperature	$-40 \sim +100$							$^\circ\text{C}$
	Standard	Q/3201CHGL02-2007							

Dimensions of drawing (mm)



Elucidation: 1:V_{OUT} 2:+15V 3:-15V 4:GND 5:-Input 6:+Input

Remarks

Incorrect connection may lead to the damage of the sensor.

V_{OUT} is positive when the I_P flows in the direction of the arrow.