

®

CS20000EKL Hall-effect Current Sensor Series

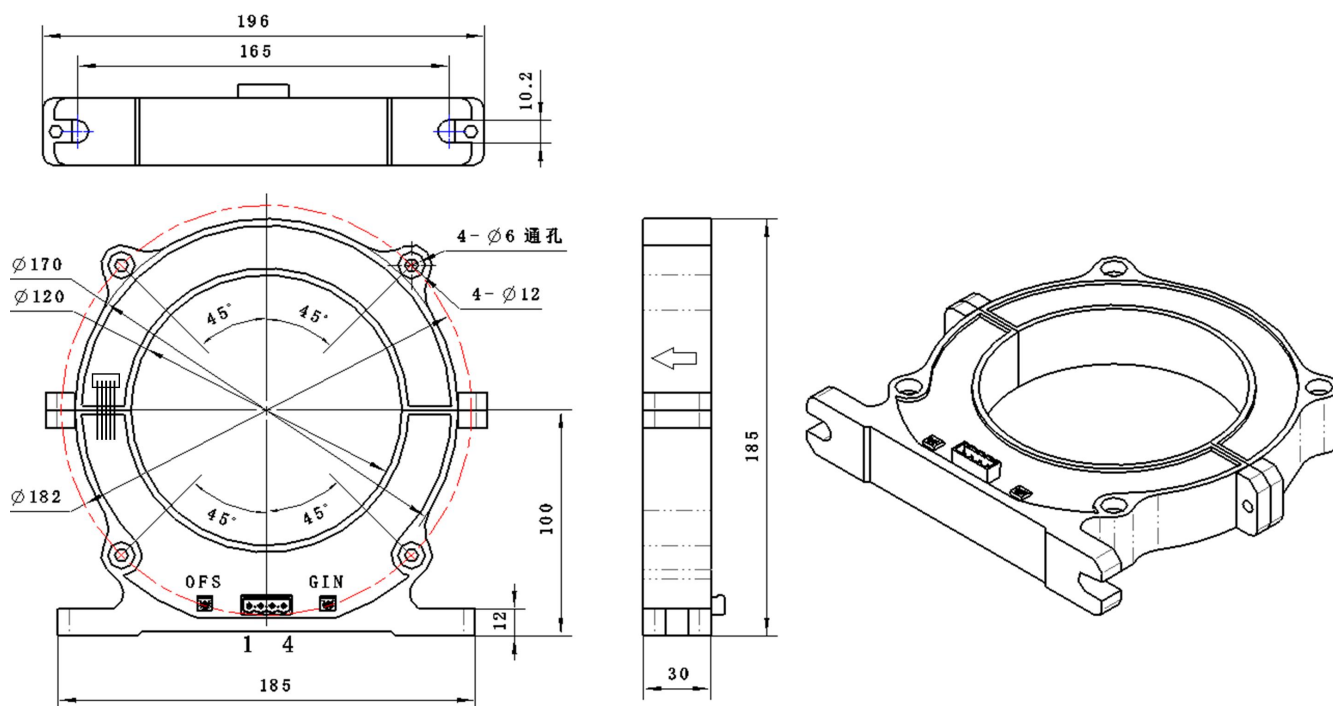
Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.



Electrical characteristics

	Type	CS500EKL	CS1000EKL	CS5000EKL	CS10000EKL	CS20000EKL	
I_{PN}	Primary nominal input current	500	1000	5000	10000	20000	A
I_P	Measuring range of primary current	0~±1000	0~±2000	0~±6000	0~±12000	0~±24000	A
V_{OUT}	Nominal output voltage	4±1%					V
V_C	Supply voltage	±12~±15(±5%)					V
I_C	Current consumption	$V_C=±15V$ <50					mA
V_D	Insulation voltage	AC/50Hz/1min 6					kV
ϵ_L	Linearity	<1					%FS
V_O	Offset voltage	$T_A=25^\circ C$ <±25					mV
V_{OM}	Residual voltage	$I_{PN} \rightarrow 0$ <±20					mV
V_{OT}	Thermal drift of V_O	$I_P=0$ $T_A=-25 \sim +85^\circ C$ <±1					mV/°C
T_R	Response time	≤10					μs
f	Frequency bandwidth(-3dB)	DC~6					kHz
T_A	Ambient operating temperature	-25~+85					°C
T_S	Ambient storage temperature	-25~+100					°C
R_L	Load resistance	≥10					KΩ
m	Mass	1160					g
	Standard	Q/320115QHKJ-2016					

Dimensions of drawing (mm)



Elucidation: 1: +15V 2: -15V 3: V_{OUT} 4: 0V(GND) OFS: Zero adjustment GIN: Gain adjustment

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.