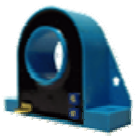
HCOL09 Series

For the electronic measurement of currents : DC, AC, pulsed, mixed, with a galvanic isolation between the primary (high power) circuit and the secondary (electronic) circuit.



LEAD FREE

Operating performance (AT =25 ℃)

Performance \ Part No.		HCOL09-101-11	HCOL09-201-11	HCOL09-301-11	HCOL09-401-11	HCOL09-501-11	HCOL09-601-11	HCOL09-701-11
Primary nominal r.m.s. current	I_{PN} (A)	100	200	300	400	500	600	1000
Primary current measuring range	I_P (A)	0~±300	0~±600	0~±900	0~±1000	0~±1000	0~±1000	0~±1000
Output voltage	V_{OUT}	±4V						
Supply voltage	V_{CC}	±15V (±5%)						
Current consumption	I_C	＜25mA						
Linearity	ε_L	≦±0.5% @0...±IPN						
Accuracy @I_{PN},V_C=±15V,T_A=25℃,	X	±1%						
Offset voltage @I_P=0,TA=25℃	V_O	＜±10 mV						
Thermal drift of V_O	V_{OT}	≦±1mV/℃						
Thermal drift of V_{OUT}	$TC\varepsilon_G$	≦±0.05%/℃						
Response time	t_r	＜3μs @90% of Ip						
di/dt accurately followed	di/dt	50A/μs						
Hysteresis offset current	V_{OH}	≦±10mV @±3IPN→0						
Isolation voltage	V_d	3KV @50(60)Hz/1min						
Isolation resistance	R_{IS}	500MΩ						
Frequency bandwidth	f	0~50KHz						

General data

Operating temperature	TA	–25 ~ 85 ℃
Storage temperature	T_S	–40 ~ 100 ℃
Mass	m	230g
Note		Insulated plastic case recognized according to UL 94-V 0

Applications

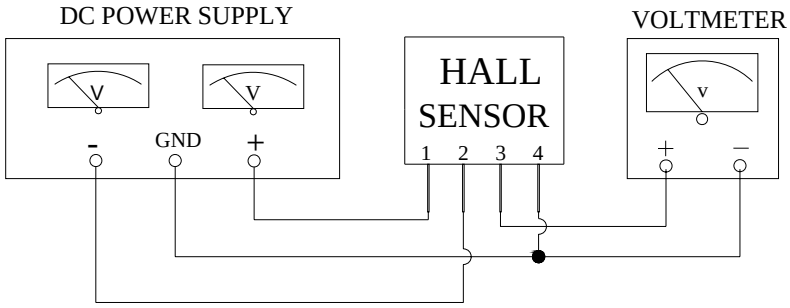
1.AC variable speed drives and servo motor drives	4.Static converters for DC motor drives
2.Battery supplied applications	5.Switched Mode Power Supplies(SMPS)
3.Uninterruptible Power Supplies(UPS)	6.Power supplies for welding applications

Advantages

1.Low temperature drift	4.Only one design for wide current ratings range
2.Low power consumption	5.High immunity to external interference
3.Very low insertion losses	6.Current overload capability

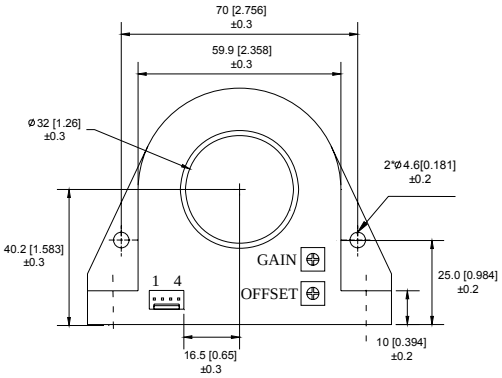
HCOL09 Series

Connection

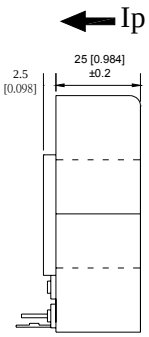


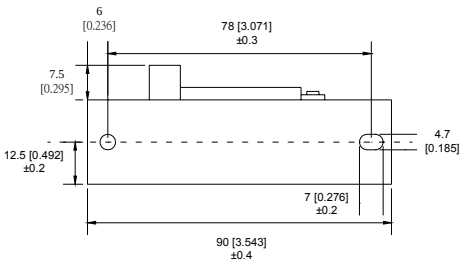
Dimensions (unit: mm/inch)

Front View



Right View





Bottom View

Secondary terminals

Terminal 1	+15V
Terminal 2	-15V
Terminal 3	OUTPUT
Terminal 4	GND

Connection of secondary
Molex 22-01-1042

Remarks

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

2.Temperature of the primary conductor should not exceed 100℃.

3.These are standard models. For different versions(supply voltages, secondary connections, unidirectional measurements, operating temperatures, etc.)please contact us.