

Hall Current Sensor TR101..102-OCS

$I_{PN}=100..1000A$

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



LEAD FREE



RoHS COMPLIANT

● Operating performance ($T_A=25^\circ C$)

Performance \ Model		TR101 OCS	TR201 OCS	TR301 OCS	TR401 OCS	TR501 OCS	TR601 OCS	TR102 OCS
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}	±4			V			
Supply voltage	V_{CC}	±15(±5%)			V			
Current consumption	I_C	<25			mA			
Linearity	ϵ_L	$\leq \pm 0.5 @ 0... \pm I_{PN}$			%			
Accuracy @ $I_{PN}, V_C = \pm 15V, T_A = 25^\circ C, X$		±1			%			
Offset voltage @ $I_P = 0, T_A = 25^\circ C$	V_O	<±10			mV			
Thermal drift of V_O	V_{OT}	$\leq \pm 1$			mV/°C			
Thermal drift of V_{OUT}	$TC\epsilon_G$	$\leq \pm 0.05$			%/°C			
Response time	t_r	<3 @90% of I_P			µs			
di/dt accurately followed	di/dt	50			A/µs			
Hysteresis offset current	V_{OH}	$\leq \pm 10 @ \pm 3I_{PN} \rightarrow 0$			mV			
Isolation voltage	V_d	3 @50(60)Hz/1min			KV			
Isolation resistance	R_{IS}	500			MΩ			
Frequency bandwidth	f	0~50			KHz			

● General data

Operating temperature	T_O	-25~+85	°C
Storage temperature	T_S	-40~+100	°C
Mass	m	230	g
Note	Insulated plastic case recognized according to UL 94-V0		

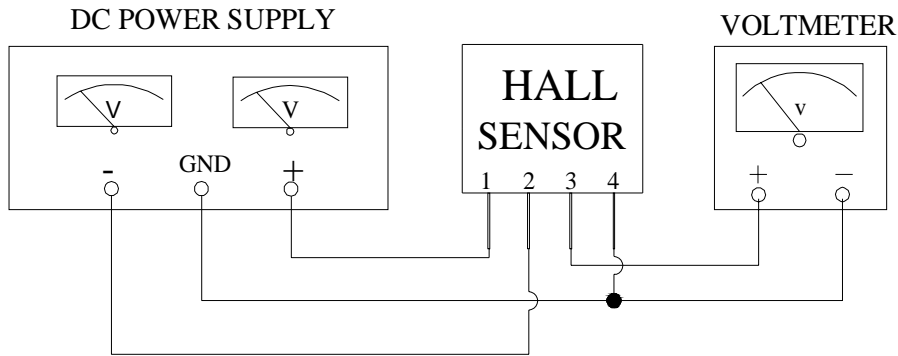
● Applications

◆ AC variable speed drives and servo motor drives	◆ Static converters for DC motor drives
◆ Battery supplied applications	◆ Switched Mode Power Supplies(SMPS)
◆ Uninterruptible Power Supplies(UPS)	◆ Power supplies for welding applications

● Advantages

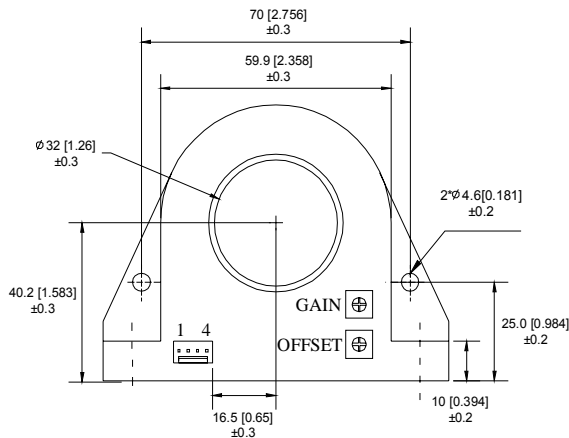
◆ Low temperature drift	◆ Only one design for wide current ratings range
◆ Low power consumption	◆ High immunity to external interference
◆ Very low insertion losses	◆ Current overload capability

● **Connection**

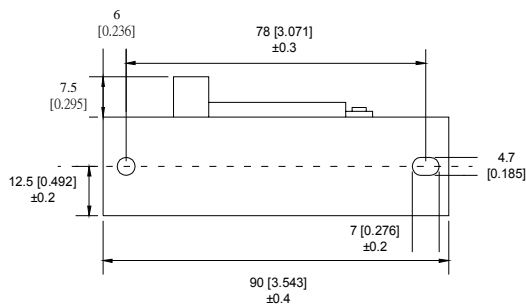
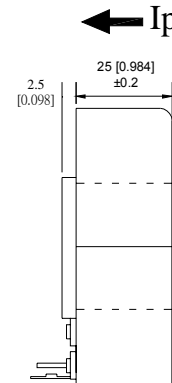


● **Dimensions (unit: mm/inch)**

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**

- ◆ V_{OUT} is positive when I_p flows in the direction of the arrow.
- ◆ Temperature of the primary conductor should not exceed 100°C.
- ◆ These are standard models. For different versions (supply voltages, secondary connections, unidirectional measurements, operating temperatures, etc.) please contact us.

Drawn by: ZhongYunchun08/29/07 Checked by: ZhongYunchun08/29/07 Approved by: KennyCheng08/29/07