

Hall Current Sensor- TI101-CCS

$I_{PN}=100A$

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



• Operating performances (AT =25°C)

Primary nominal r.m.s. current	I_{PN}	100		A			
Primary current measuring range	I_P	0~±150		A			
Secondary nominal r.m.s. current	I_{SN}	50		mA			
Measuring resistance	R_M	$T_A=70^\circ C$		$T_A=85^\circ C$			
			$R_{M \min}$	$R_{M \max}$	$R_{M \min}$	$R_{M \max}$	
		with ±12V	@ ±100A _{max}	0	50	0	42 Ω
			@ ±120A _{max}	0	22	0	14 Ω
		with ±15V	@ ±100A _{max}	0	110	20	102 Ω
	@ ±150A _{max}	0	33	20	25 Ω		
Conversion ratio	K_N	1:2000					
Supply voltage	V_{CC}	±12~15 (±5%)		V			
Current consumption	I_C	10(@±15V)+ I_S		mA			
Linearity	ϵ_L	≤±0.1 @0~± I_{PN}		%			
Accuracy	X	±0.45@ $I_{PN}, V_C=±15V, T_A=25^\circ C,$		%			
Offset current	I_O	<±0.1 @ $I_P=0, T_A=25^\circ C$		mA			
Thermal drift of I_O	I_{OT}	≤±0.5 (type ±0.1)		mA/°C			
Response time	t_r	<1		µs			
di/dt accurately followed	di/dt	200		A/µs			
Hysteresis offset current	I_{OH}	≤±0.15 @±3 $I_{PN} \rightarrow 0$		mA			
Isolation voltage	V_d	2.5 @50(60)Hz/1min		KV			
Frequency bandwidth	f	0~200		KHz			

• General data

Operating temperature	T_O	-25~85°C	°C
Storage temperature	T_S	-40~85°C	°C
Mass	m	18	g

• 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

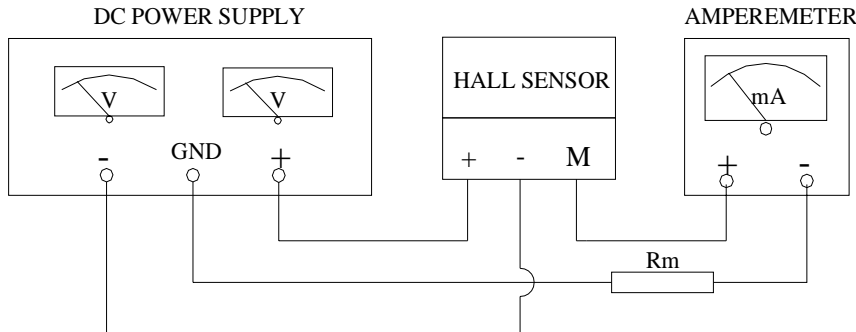
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|----------------------------|---|
| ◆Excellent accuracy | ◆Very good linearity |
| ◆Low temperature drift | ◆Optimized response time |
| ◆Wide frequency bandwidth | ◆High immunity to external interference |
| ◆Very low insertion losses | ◆Current overload capability |

Note: 1)Measuring range limited to ±60A_{MAX} 2)Measuring range limited to ±55A_{MAX}

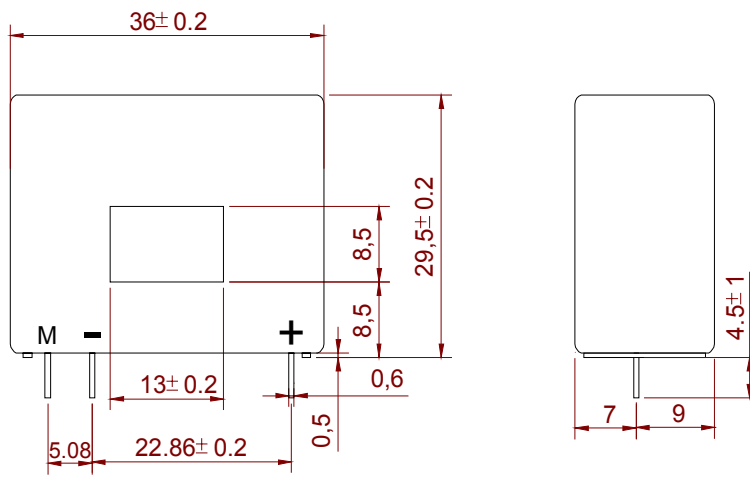
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● Connection

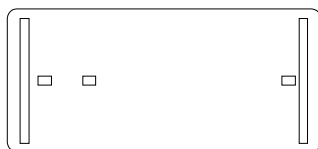


● Dimensions (Unit:mm/inch)



Front view

Left view



Bttom view

secondary terminals	
terminal +	+12..15V
terminal -	-12..15V
terminal M	measure

● Remarks

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