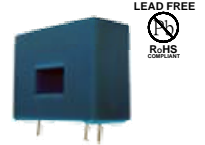


# HCCL11 Series

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.



## Operating performance ( AT =25 °C )

Part No.		HCCL11-500-11				HCCL11-101-11						
Performance												
Primary nominal r.m.s. current	$I_{PN}(A)$	50				100						
Primary current measuring range	$I_P(A)$	0~±70				0~±150						
Secondary nominal r.m.s. current	$I_{SN}$	50mA				50mA						
Measuring resistance	$R_M$		$T_A=70^{\circ}C$		$T_A=85^{\circ}C$			$T_A=70^{\circ}C$		$T_A=85^{\circ}C$		
			$R_{M \min}$	$R_{M \max}$	$R_{M \min}$	$R_{M \max}$		$R_{M \min}$	$R_{M \max}$	$R_{M \min}$	$R_{M \max}$	
		with ±12V	@±50A <sub>max</sub>	10Ω	100Ω	60Ω	95Ω	±100A <sub>max</sub>	0Ω	50Ω	0Ω	42Ω
			@±70A <sub>max</sub>	10Ω	50Ω	60 <sup>1)</sup> Ω	60 <sup>1)</sup> Ω	±120A <sub>max</sub>	0Ω	22Ω	0Ω	14Ω
		with ±15V	@±50A <sub>max</sub>	50Ω	160Ω	135Ω	155Ω	±100A <sub>max</sub>	0Ω	110Ω	20Ω	102Ω
	@±70A <sub>max</sub>	50Ω	90Ω	135 <sup>2)</sup> Ω	135 <sup>2)</sup> Ω	±150A <sub>max</sub>	0Ω	33Ω	20Ω	25Ω		
Conversion ratio	$K_N$	1:1000				1:2000						
Supply voltage	$V_{CC}$	±12~15V ( ±5% )										
Current consumption	$I_C$	10mA (@±15V)+ $I_S$										
Linearity	$\epsilon_L$	≤±0.1% @0~± $I_{PN}$										
Accuracy	X	±0.65% @ $I_{PN}, V_C=±15V, T_A=25^{\circ}C$ ,				±0.45% @ $I_{PN}, V_C=±15V, T_A=25^{\circ}C$ ,						
Offset current	$I_O$	<±0.2mA @ $I_P=0, T_A=25^{\circ}C$				<±0.1mA @ $I_P=0, T_A=25^{\circ}C$						
Thermal drift of $I_O$	$I_{OT}$	≤±0.6mA/°C (type ±0.1)				≤±0.5mA/°C (type ±0.1)						
Response time	$t_r$	< 1μs										
di/dt accurately followed	di/dt	200A/μs										
Hysteresis offset current	$I_{OH}$	≤±0.3mA @±3 $I_{PN} \rightarrow 0$				≤±0.15mA @±3 $I_{PN} \rightarrow 0$						
Isolation voltage	$V_d$	2.5KV @50(60)HZ/1min										
Frequency bandwidth	f	0~200KHz										

Note : 1) Measuring range limited to ±60A<sub>MAX</sub>      2) Measuring range limited to ±55A<sub>MAX</sub>

## General data

Operating temperature	$T_A$	-25 ~ 85 °C
Storage temperature	$T_S$	-40 ~ 100 °C
Mass	m	18g

## Applications

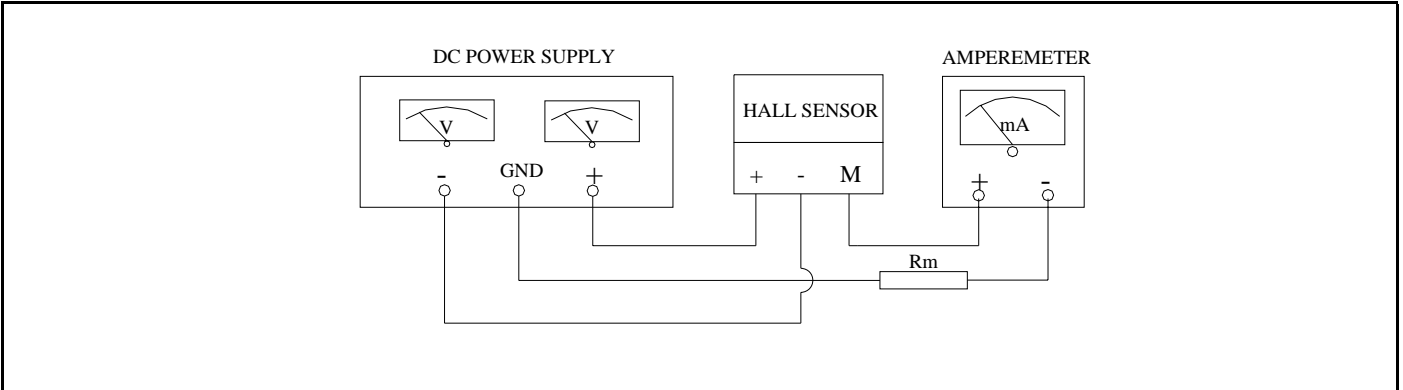
1.AC variable speed drives and servo motor drives	4.Static converters for DC motor drives
2.Battery supplied applications	5.Switched Mode Power Supplies(SMPS)
3.Uninterruptible Power Supplies(UPS)	6.Power supplies for welding applications

## Advantages

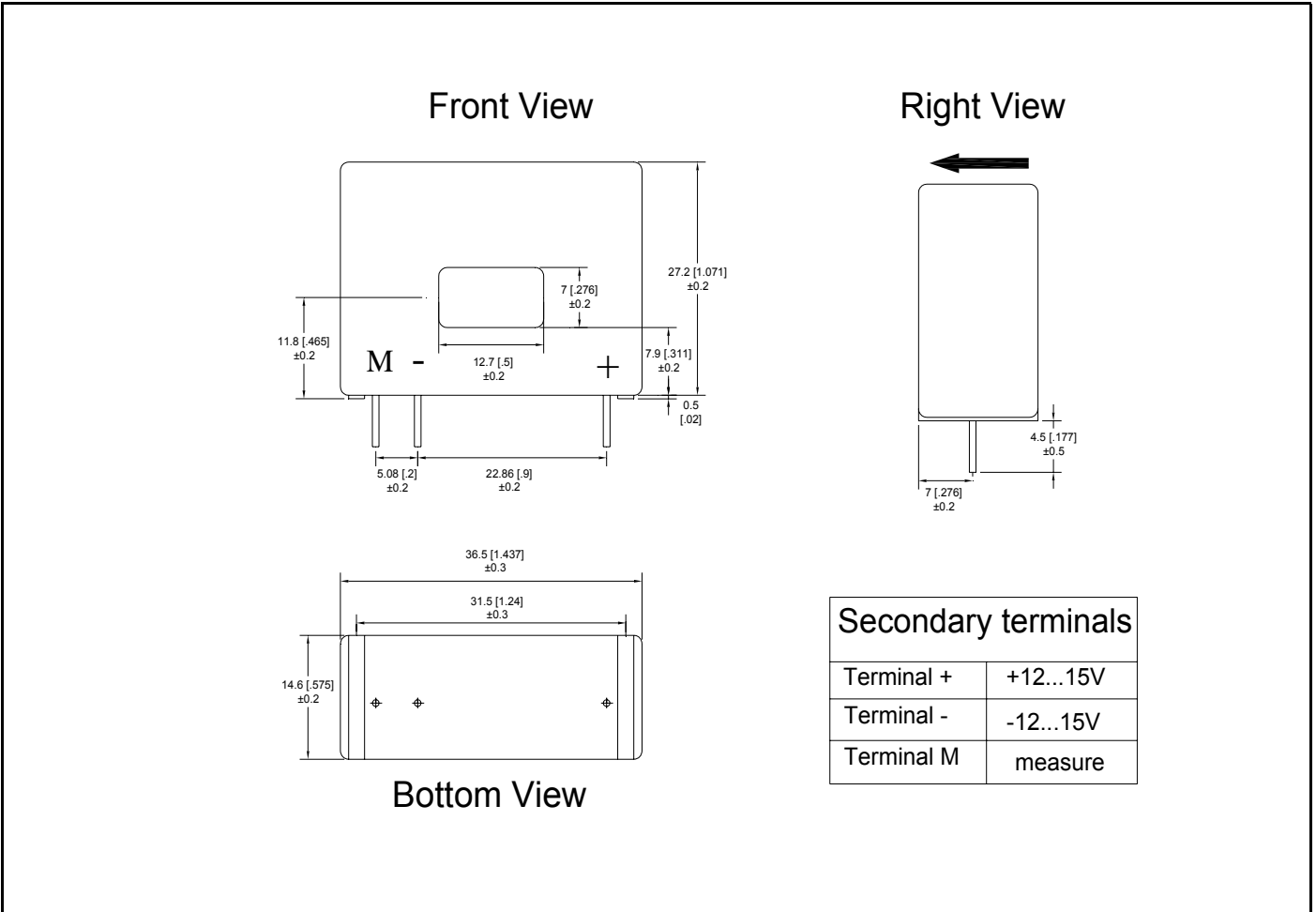
1.Excellent accuracy	5.Very good linearity
2.Low temperature drift	6.Optimized response time
3.Wide frequency bandwidth	7.High immunity to external interference
4.Very low insertion losses	8.Current overload capability

# HCCL11 Series

## Connection



## Dimensions (unit: mm/inch)



## Remarks

- $I_{OUT}$  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.