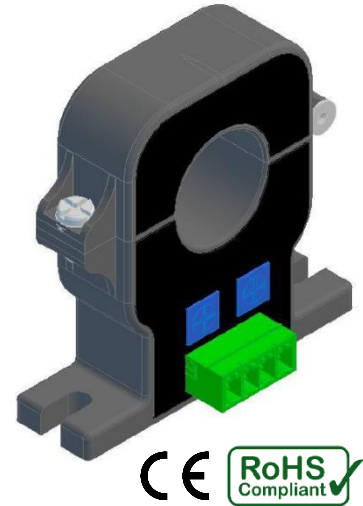


The **MLG-HE9** Series of split core Hall Effect current sensors are suited for non-contact measurement of AC & DC currents

## Features

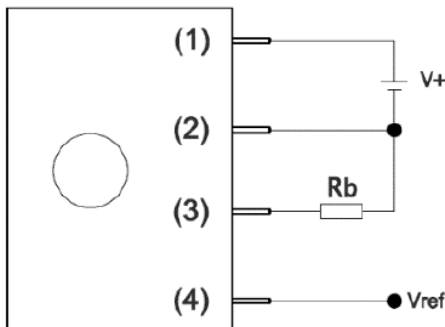
- **Split core** for easy measurement of existing systems
- **50A to 500A** models available
- **0.78" (20mm) aperture** allows for large diameter current conductors
- Ability to measure **bi-directional current**
- **Pluggable** screw terminals
- Panel mountable
- Single 5Vdc supply
- **Voltage output**
- Open loop current sensor
- **5 Year Warranty**



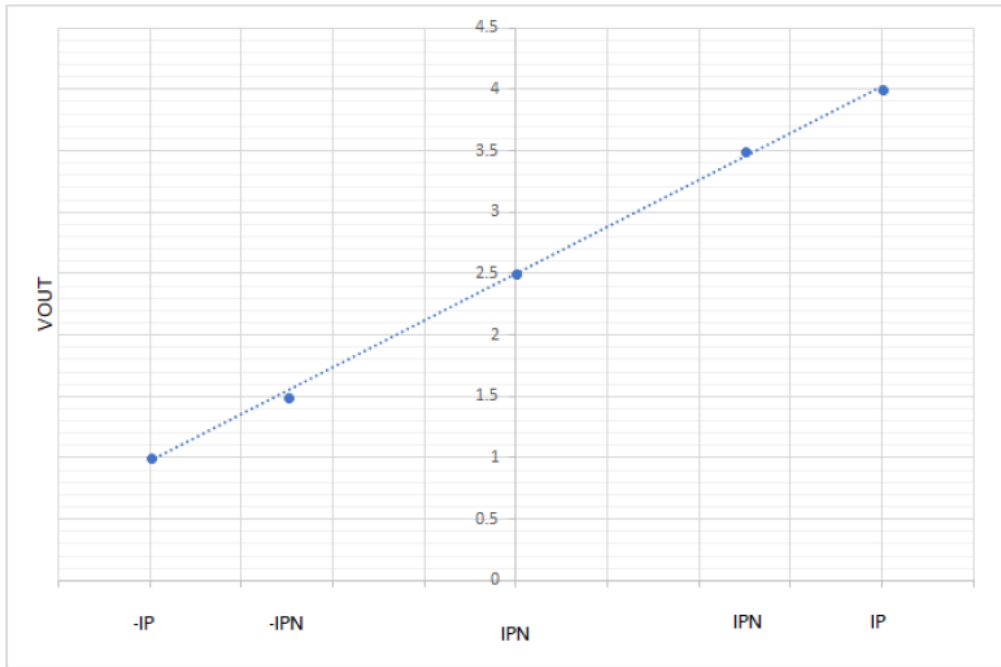
## Model Numbers

Measurlogic Part Number	Description	Primary Nominal Current $I_{PN}$ (A)	Primary Measuring Current $I_P$ (A)
<b>CTRF-0909</b>	MLG-HE9-0-004-5-B-SP	50A	± 100A
<b>CTRF-0911</b>	MLG-HE9-1-004-5-B-SP	100A	± 200A
<b>CTRF-0913</b>	MLG-HE9-2-004-5-B-SP	200A	± 400A
<b>CTRF-0915</b>	MLG-HE9-3-004-5-B-SP	300A	± 600A
<b>CTRF-0917</b>	MLG-HE9-4-004-5-B-SP	400A	± 800A
<b>CTRF-0919</b>	MLG-HE9-5-004-5-B-SP	500A	± 800A

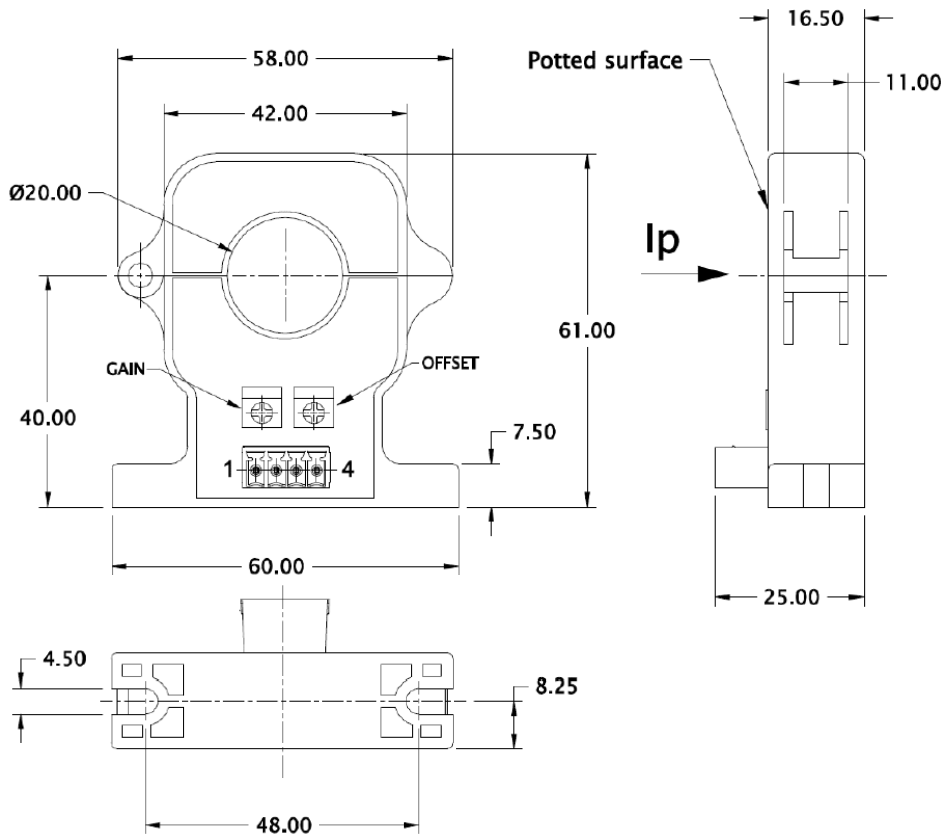
## Connection Diagram



## Input / Output Characteristics



## Mechanical Dimensions (mm) – tolerance $\pm 0.5\text{mm}$



## Technical Specifications

Parameter	Symbol	Condition	Min.	Typical	Max	Unit
Burden Resistance	$R_b$			2000 (min)		$\Omega$
Voltage Output @ $I_{PN}$	$V_{out}$	@ $\pm I_{PN}$ , $R_b = 10k\Omega$ @ $25^\circ C$		$2.5 \pm 1.0$		V
Supply Voltage ( $\pm 5\%$ )	$\pm U_c$	Operating @ 12Vdc reduces the measuring range		+ 5.0		V
Current Consumption @ +5Vdc	$I_{out}$			1.8 (typical)		mA
Overall Accuracy @ $I_{PN}$	$X_G$	@ $25^\circ C$		<2.0		%
Linearity Error	$\Sigma_L$	-40 to $85^\circ C$		<1.0		%
Output offset Voltage @ $I_p = 0$	$V_{off}$			$V_{ref} \pm 0.025$		V
Hysteresis offset Voltage	$V_{OH}$	@ $I_p = 0$ after the primary current of $I_{PN}$	<-1		<+1	mV
Temperature coefficient of $V_{out}$	$TV_{OE}$	-40 to $85^\circ C$		$\pm 0.1$		% of rdg/K
Response time @ 90% $I_{PN}$	$t_{ra}$			<5		$\mu S$
Frequency bandwidth @-3db	BW	-3dB, small signal	0	DC to 20	25	kHz
di/dt accurately followed	di/dt			>50		A / $\mu S$
Operating Temperature	$T_A$		-40	-25 to +85	+105	$^\circ C$
Storage Temperature	$T_S$		-50	-40 to +100	+105	$^\circ C$
Mass	M			77		g

## Maximum ratings

Parameter	Symbol	Value	Unit
Maximum Supply voltage (working) -40 to $85^\circ C$	$\pm U_c$	+5.0	V
Primary conductor temperature	$T_S$	85	$^\circ C$
Maximum steady state primary current -40 to $85^\circ C$	$I_{PN}$	50 to 500	A
Impulse withstand voltage 1.2/50 $\mu S$	$V_w$	7.5	kV
RMS Voltage for AC Insulation test, 50hz for 1 minute	$U_d$	3.0	kV
Comparative Tracking Index (CTI)		275	
Insulation resistance	$R_{IS}$	>1000	M $\Omega$

\*\* Specifications subject to change.