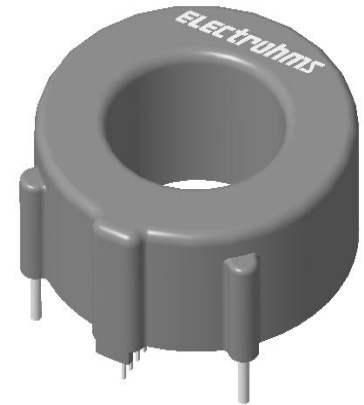


$I_{pn} = 200A$ 

Representative image only

### Features

- Used for measurement of electric AC/DC current
- Open loop current sensor
- Pulsed in electric & electronic equipment
- Voltage output
- PCB mounting type
- Plastic outer case complaint to UL94-V0

### Advantage

- Good linearity
- Low power consumption

### Applications

- Used for measurement of electric DC current
- Pulsed in electric & electronic equipment

### Application domain

- Commercial
- Industrial

### Standards

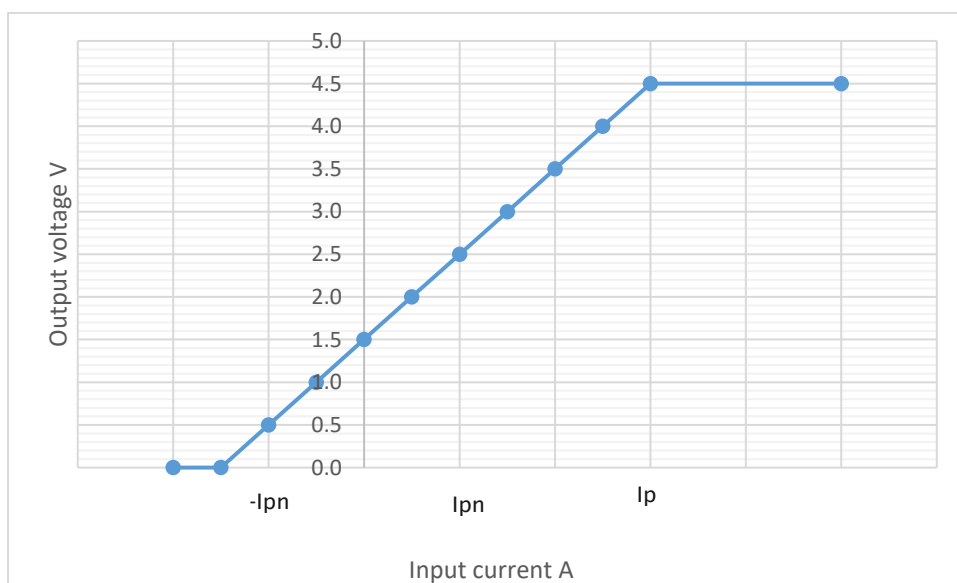
- EN 50178
- UL508\*

## Insulation Characteristics

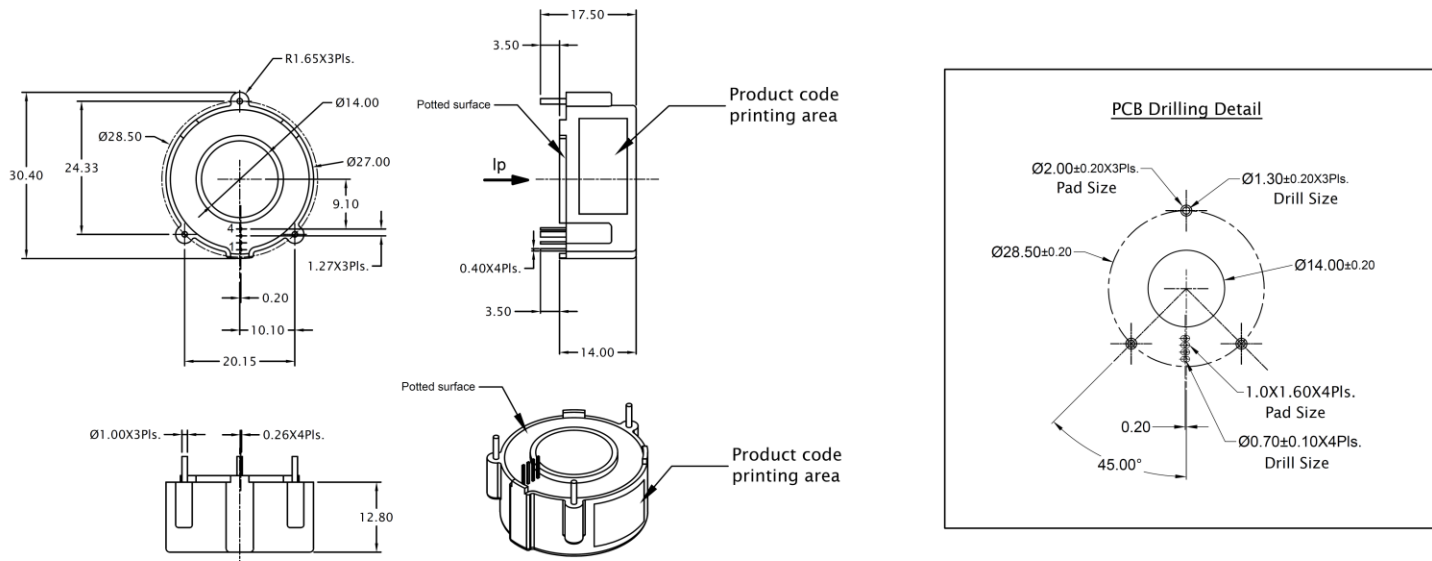
Parameters	Symbol	Value	Units
Dielectric strength between primary and secondary terminals, 50 Hz, 60 seconds	$V_d$	3.0	kVrms
Comparative tracking index	CTI	600	V
Insulation resistance at 500 VDC	$R_{is}$	>100	MΩ
Creepage distance		3.00	mm
Clearance distance		1.80	mm

**Specifications (Unless otherwise specified temperature is 25°C)**

Parameters	Symbol	Condition	Min	Typ	Max	Units
Primary Nominal Current	$I_{pn}$			200		Arms
Primary Measuring Range	$I_p$		-200		+600	A
Burden resistance	$R_b$		10			k $\Omega$
Output offset voltage	$V_{off}$	at $I_p = 0$		1.50±0.015		V
Output voltage	$V_{out}$	at $\pm I_{pn}$ , $R_b = 10k\Omega$		$V_{off} + 1.0$		V
Supply voltage	$V_s$		4.75	5.00	5.25	V
Current consumption at +5V	$I_c$			18.0		mA
Accuracy at $I_{pn}$ (Excluding offset)	$X_G$			±1		%
Linearity error	$\Sigma_L$			±1		%
Temperature coefficient of $V_{off}$	$TV_{off}$	-40 to +85 °C		±0.5		mV/K
Temperature coefficient of $V_{out}$	$TV_{out}$	-40 to +85 °C		±0.1		%/K
Response time at 90% of $I_{pn}$	$t_r$			<10		$\mu$ s
Frequency bandwidth	BW	-3dB, small signal bw	DC		50	kHz
di/dt accurately followed	di/dt			>50		A/ $\mu$ s
Ambient operating temperature	$T_A$		-40		+125	°C
Ambient storage temperature	$T_S$		-40		+125	°C
Mass	m			100		g

**Input & Output Characteristics**

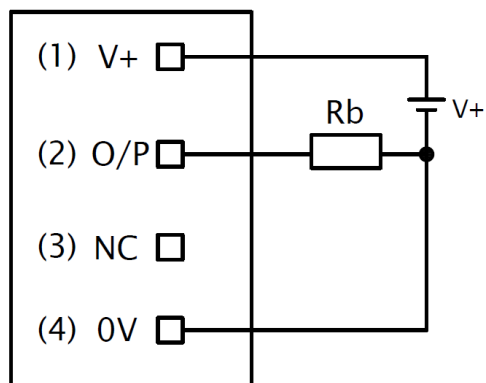
**Mechanical dimensions**



Tolerance unless otherwise specified

0.5 up to 3 in mm	3 up to 6 in mm	6 up to 30 in mm	30 up to 120 in mm	120 up to 400 in mm	400 up to 1000 in mm	ALL DIMENSIONS ARE IN 'mm'	
± 0.20	± 0.30	± 0.50	± 0.80	± 1.20	± 2.0	SCALE -NTS	

**Connection Diagram**



- Sensor mounting: PCB mountable.
- It is recommended to centrally locate the current carrying conductor or completely fill the central opening for optimum performance.
- Output increases when current ( $I_p$ ) flows in the direction of arrow.
- Ensure proper connection of power supply to avoid damage to the sensor.
- \* Designed to meet UL508

## Safety



- This Sensor must be used in electric/electronic equipment with respect to applicable standards and safety requirements in accordance with the manufacturer's operating instructions.



- Caution, risk of electrical shock
- When operating the Sensor, certain parts of the module can carry hazardous voltage (eg. primary busbar, power supply).
- Ignoring this warning can lead to injury and/or cause serious damage.
- A protective housing or additional shield could be used
- Disconnecting the main power must be possible
- Over currents ( $\gg I_{PN}$ ) can cause an additional voltage offset due to magnetic remanence.
- The temperature of the primary conductor shall not exceed 100 °C.
- This Sensors may only be used in electrical or electronic systems which fulfil the relevant regulations (Standards, EMC Requirements)
- Protect non-isolated high-voltage current carrying parts against direct contact (e.g. with a protective housing)
- When installing the sensor, ensure that the safe separation (between primary circuit and secondary circuit) is maintained over the whole circuits and their connections.

## General information:

Electrohms reserves the right to make modifications on products for improvements without prior notice.