



$I_{pn} = 1500A$



Representative image only

Features

- Split core type
- Open loop current sensor
- Voltage output

Advantage

- Good linearity
- No insertion losses
- Low power consumption

Applications

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

Application domain

- Industrial

Standards

- UL508*
- EN50178 (IEC 62477)

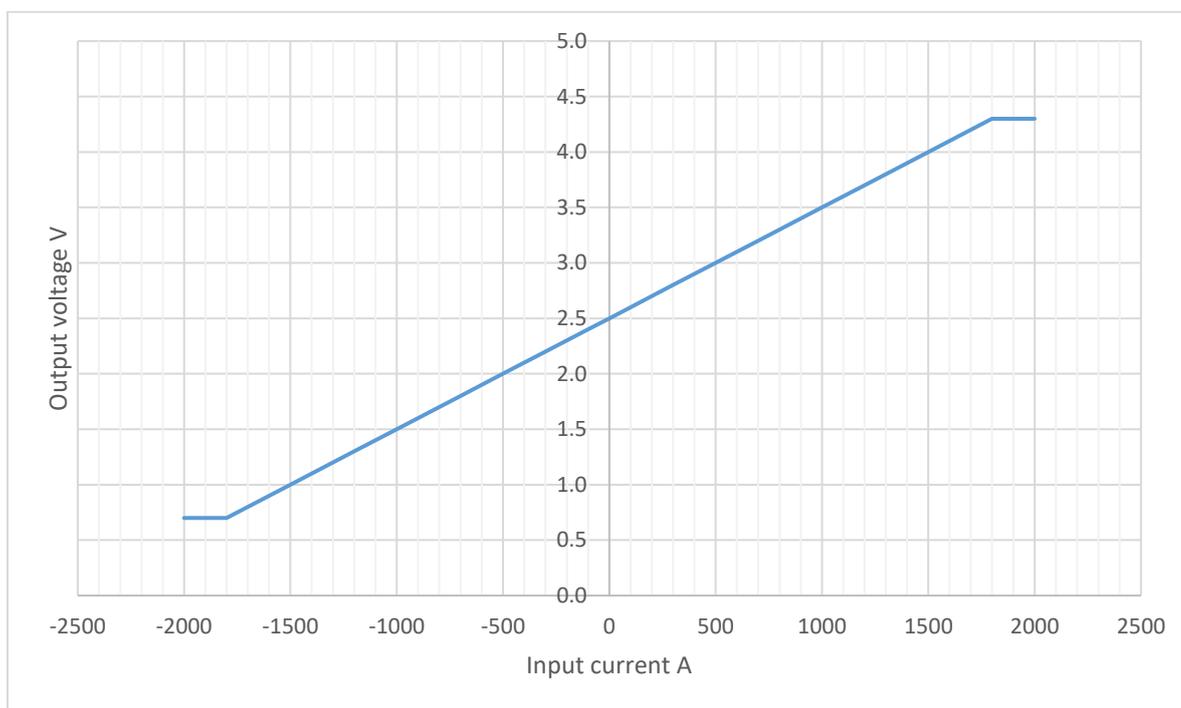
Insulation Characteristics

Parameters	Symbol	Value	Units
Dielectric strength between primary and secondary terminals,50Hz, 60 seconds	V_d	5.5	kVrms
Comparative tracking index	CTI	>250	V
Insulation resistance at 500 VDC	R_{IS}	>100	MΩ
Creepage distance		61.50	mm
Clearance distance		40.00	mm

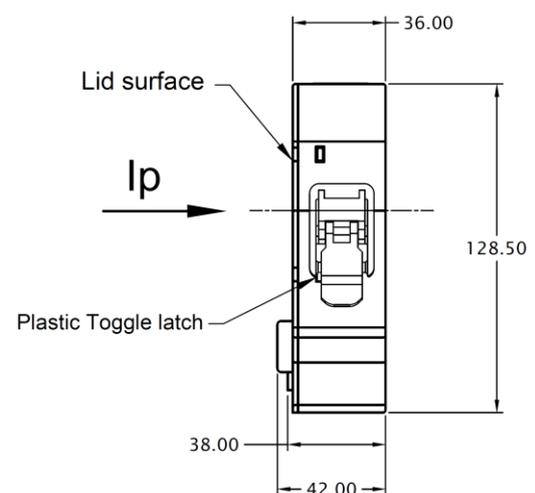
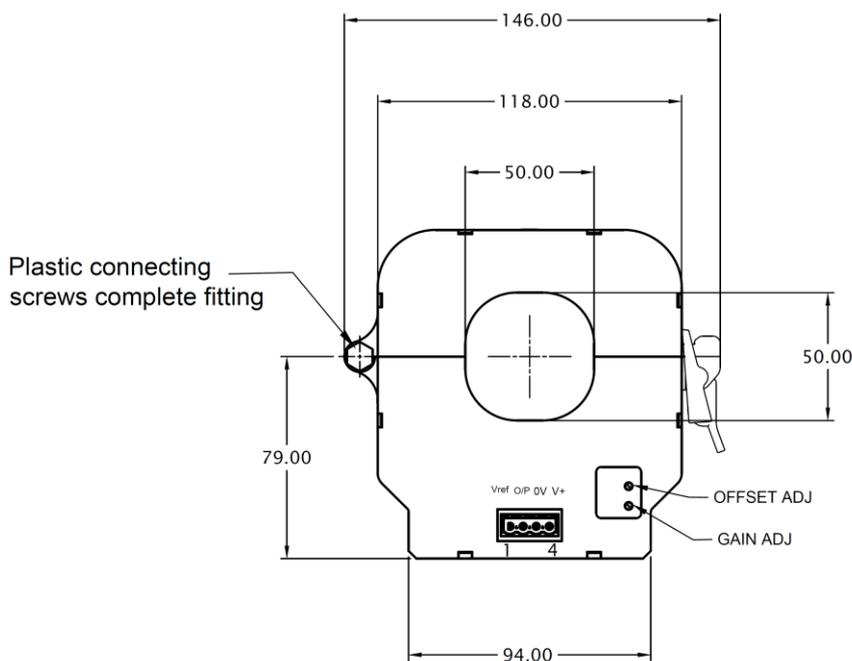
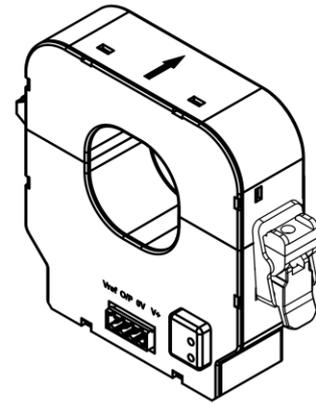
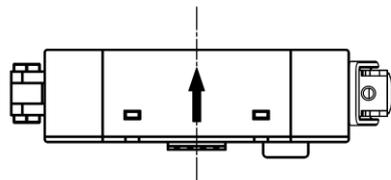
Specifications (Unless otherwise specified temperature is 25°C)

Parameters	Symbol	Condition	Min	Typ	Max	Units
Input current nominal	I_{pn}			1500		A
Input current measuring range	I_p		-1800		+1800	A
Burden resistance	R_b		10			k Ω
Output offset voltage	V_{off}	at $I_p = 0$		2.5 ± 0.025		V
Reference voltage	V_{ref}			2.5 ± 0.025		V
Output voltage	V_{out}	at $\pm I_{pn}$, $R_b = 10k\Omega$,		2.5 ± 1.5		V
Output sensitivity	V_{sens}			1.0		mV/A
Supply voltage	V_s	$\pm 5\%$	+9.0		+18.0	V
Current consumption	I_c	$V_s = +9.0 \dots 18.0V$		18		mA
Accuracy at I_{pn} (Excluding offset)	X_G		-1		+1	%
Linearity error	Σ_L	-25 to +85 °C	-0.5		+0.5	%
Temperature coefficient of V_{out}	TV_{out}	-25 to +85 °C		500		ppm/k
Reaction time at 90% Of I_{pn}	t_{ra}			---		
Frequency bandwidth	BW	-3dB		DC		
Output lowpass filter cut-off frequency	f_c			1.4		Hz
AC attenuation at 1500A di/dt accurately followed	di/dt	at 50Hz		-24		dB
Ambient operating temperature	T_A		-25		+85	°C
Ambient storage temperature	T_S		-40		+100	°C
Mass	m			1.0		kg

Input & Output Characteristics



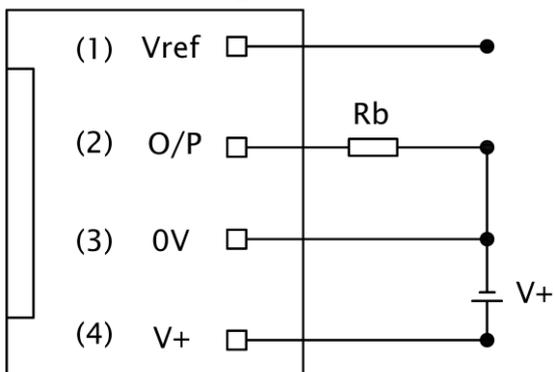
Mechanical dimensions



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



General information

- Connector on the product: Connector header, part no- 1755752, Phoenix Contact
- Suggested mating connector: Connector housing, part no-1757035, Phoenix Contact
- 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
- Electrohms reserves the right to make modifications on products for improvements without prior notice.
- *Designed to meet UL 508

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)
- Pay attention to 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.