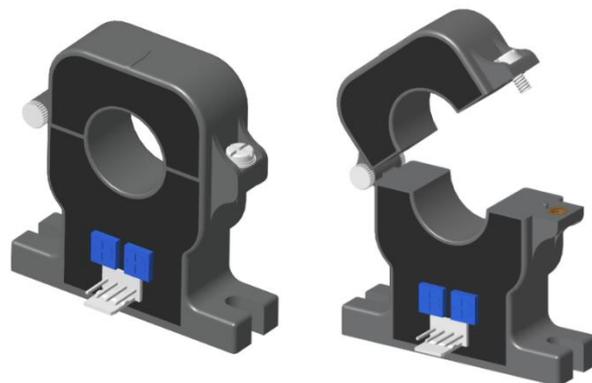


$I_{pn} = 50A...500A$ 

Features

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

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

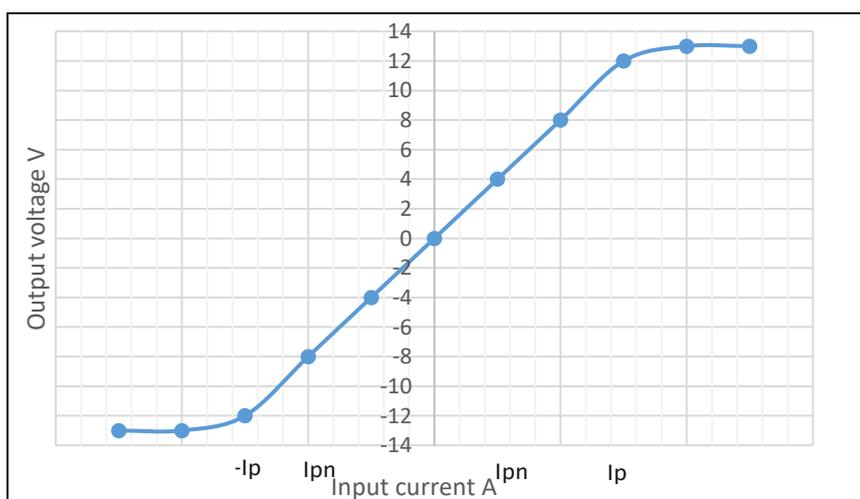
Parameters	Symbol	Value	Units
Dielectric strength between primary and secondary terminals,50Hz, 60 seconds	V_d	3.0	kV
Comparative tracking index	CTI	250	V
Insulation resistance at 500 VDC	R_{IS}	>100	M Ω
Creepage distance		22.50	mm
Clearance distance		22.50	mm

Product Range

Product Code	Primary Nominal Current (I_{pn})	Primary Measuring Range (I_p)
HK050T03	50A	$\pm 100A$
HK100T03	100A	$\pm 200A$
HK200T03	200A	$\pm 400A$
HK300T03	300A	$\pm 600A$
HK400T03	400A	$\pm 800A$
HK500T03	500A	$\pm 800A$

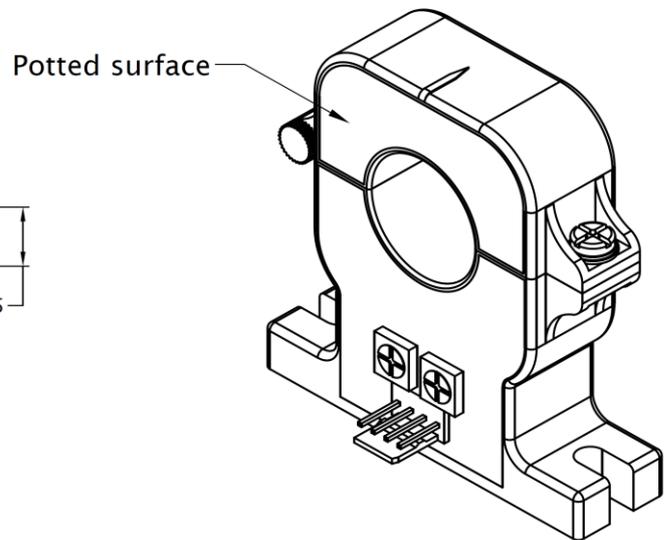
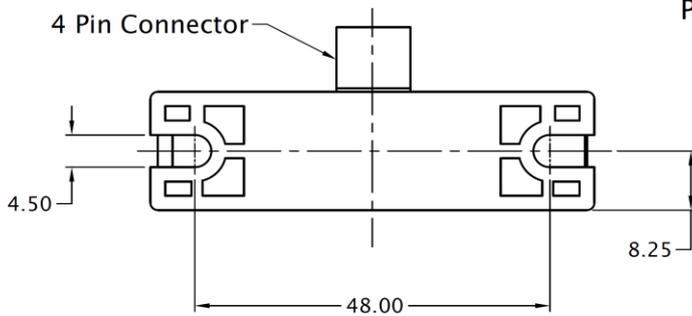
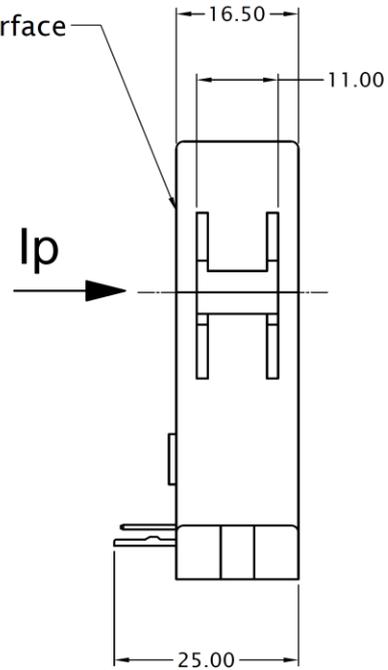
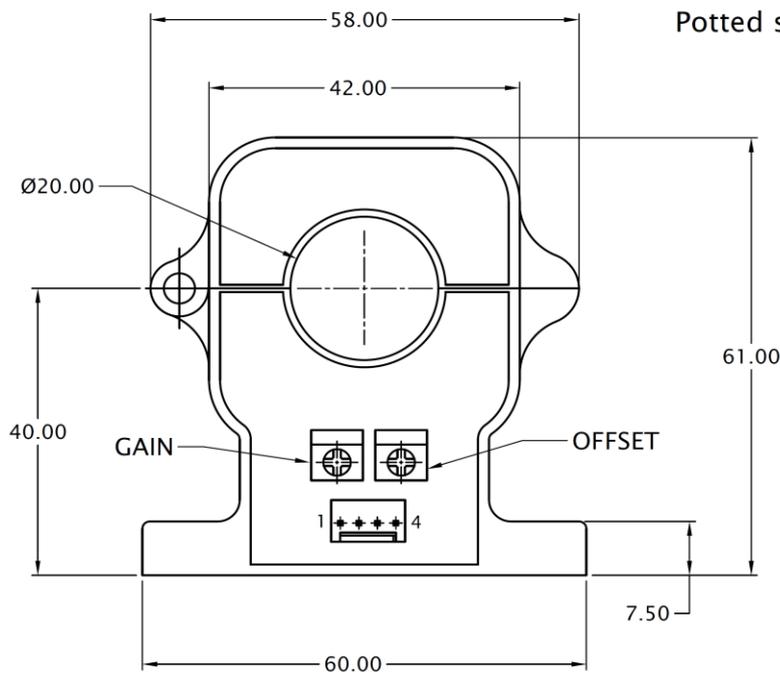
Specifications (Unless otherwise specified temperature is 25°C)

Parameters	Symbol	Condition	Min	Typ	Max	Units
Burden resistance	R_b		10			$k\Omega$
Output offset voltage	V_{off}	at $I_p=0$		± 25.0		mV
Output voltage	V_{out}	at $\pm I_{pn}$, $R_b=10k\Omega$,		± 4.0		V
Supply voltage ($\pm 5\%$)	V_s			± 15		V
Current consumption	I_c	at $\pm 15V$		25.0		mA
Overall accuracy at I_{pn} (Excluding offset)	X_G			± 2.0		%
Linearity error	Σ_L	-25 to 85 °C		<1.0		%
Temperature coefficient of V_{out}	TV_{out}	-25 to +85 °C		± 0.1		%/K
Reaction time at 90% Of I_{pn}	t_{ra}			3.0		μs
Frequency bandwidth at -3db	BW	-3dB, small signal bw	DC		20	kHz
di/dt accurately followed	di/dt			50		A/ μs
Ambient operating temperature	T_A			-25 to +85		°C
Ambient storage temperature	T_S			-25 to +85		°C
Mass	m			78		g

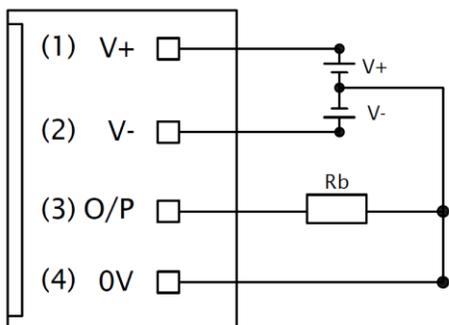
Input & Output Characteristics

Mechanical dimensions

GENERAL TOL. ±0.5 mm	
ALL DIMENSIONS ARE IN 'mm'	SCALE - NTS



Connection Diagram



- Connector on the product: Connector header, Part no-22-04-1041, Molex
- Suggested mating connector: Connector housing, Part no-22-01-1042, Molex, & corresponding pin part no: 08-50-0114, Molex
- Sensor mounting: 2 Slots X Ø 4.5mm, M4 steel screws, recommended fastening torque 3 N-m
- It is recommended to centrally locate the current carrying conductor or completely fill the central opening for optimum performance
- Output is positive when current (I_p) flows in the direction of arrow
- Ensure proper connection of Power supply to avoid damage to the Sensor

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.
- 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 must be used in electrical or electronic systems as per the applicable standards.
- 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 the reserves right to make modifications on products for improvements without prior notice.