**Features**

- Ratiometric output
- Open loop current sensor
- Voltage output
- Panel mounting type
- Plastic outer case complaint to UL94-V0

Advantage

- Good linearity
- Low power consumption

Applications

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

Application domain

- Commercial
- Industrial

Standards

- EN 50178
- UL508

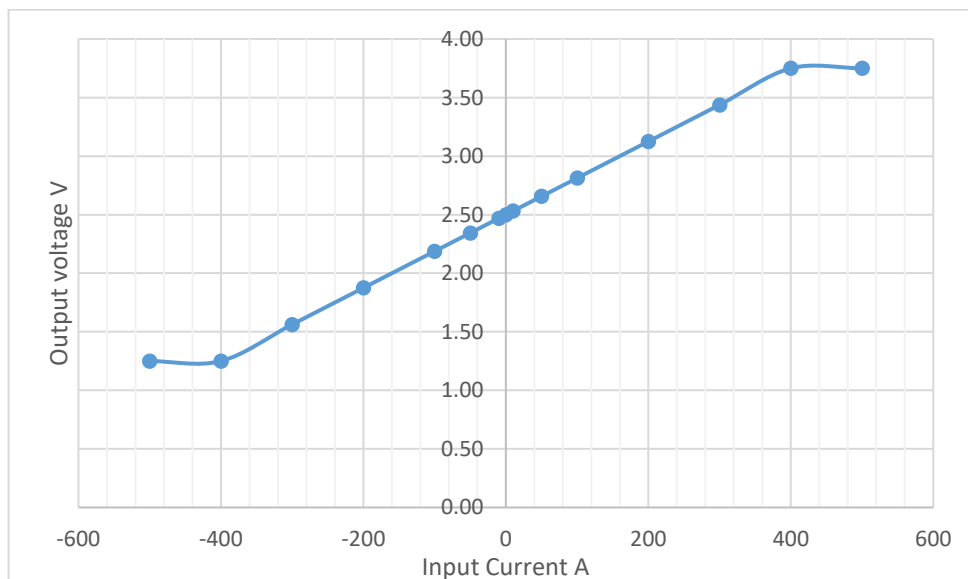
Insulation Characteristics

Parameters	Symbol	Value	Units
Dielectric strength between primary and secondary terminals, 50 Hz, 60 seconds	V_d	3.0	kV
Comparative tracking index	CTI	250	V
Insulation resistance at 500 VDC	R_{is}	>100	MΩ
Creepage distance		7.00	mm
Clearance distance		4.50	mm

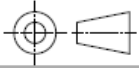
Specifications (Unless otherwise specified temperature is 25°C)

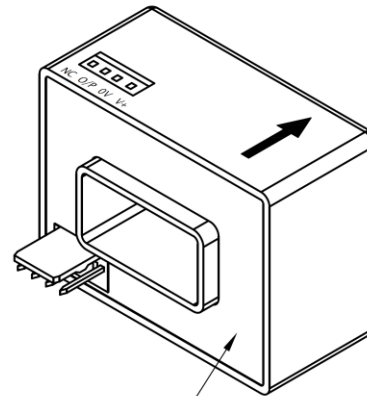
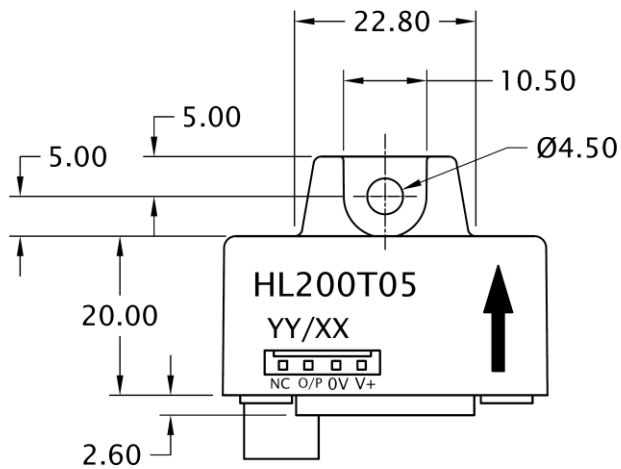
Parameters	Symbol	Condition	Min	Typ	Max	Units
Input current nominal	I_{pn}			200		Arms
Input current measuring range	I_p		-400		+400	A
Burden resistance	R_b		10			k Ω
Output offset voltage	V_{off}	at $I_p = 0$		$V_s/2$		V
Output voltage (Note 1)	V_{out}	at $\pm I_{pn}$, $R_b = 10k\Omega$, $V_s = 5V$		$V_{off} \pm 0.625$		V
Output sensitivity	V_{sens}	$V_s = 5V$		3.125		mV/A
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	$V_s = 5V$		<1		%
Linearity error	Σ_L	$V_s = 5V$		<1		%
Temperature coefficient of V_{out}	TV_{out}	-40 to +85 °C		0.1		%
Temperature coefficient of V_{off}	TV_{off}	-40 to +85 °C		1.0		mV/k
Response time at 90% of I_{pn}	t_r			10		μs
Frequency bandwidth	BW	-3dB, small signal bw	DC		20	kHz
di/dt accurately followed	di/dt			>50		A/ μs
Ambient operating temperature	T_A		-40		+85	°C
Ambient storage temperature	T_S		-40		+85	°C
Mass	m			70		g

Note: 1) Since the output is ratiometric, offset & output values will vary based on the actual value of the supply voltage (V_s)

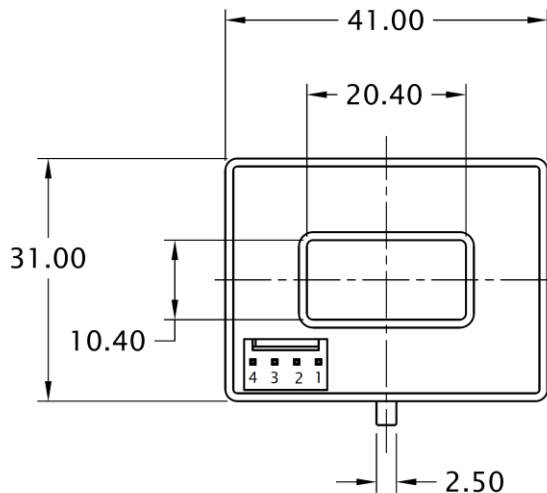
Input & Output Characteristics at $V_s = 5V$ 

Mechanical dimensions

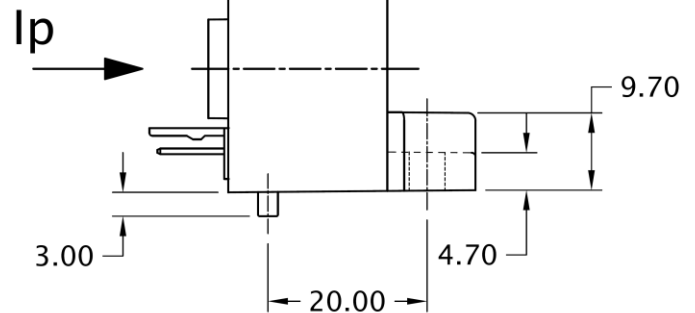
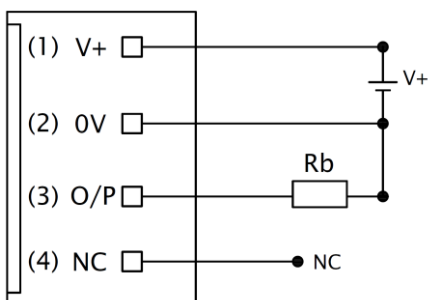
GENERAL TOL. ± 0.5 mm	
ALL DIMENSIONS ARE IN 'mm'	SCALE - NTS



Potted surface



Potted surface

**Connection Diagram**

- Connector on the product: Connector header, part no-22-04-1041, Molex
- Suggested mating connector: Connector housing, part no-22-01-1042, & corresponding pin part no: 08-50-0114, Molex
- Sensor mounting: Hole 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
- 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