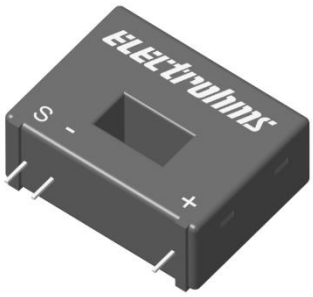
I_{pn} = 25A



Features
- Plastic outer case compliant to UL 94-V0

Advantage
- Very good linearity
- Excellent accuracy
- Wide frequency bandwidth
- Optimized response time
- Current overload capability.
- No insertion losses

Applications
- Battery supplied applications
- Uninterruptible power supplies (UPS)
- Switched mode power supplies (SMPS)
- AC, DC pulsed in electrical & electronic equipment

Application domain
- Commercial
- Industrial

Standards
- EN 50178
- UL508

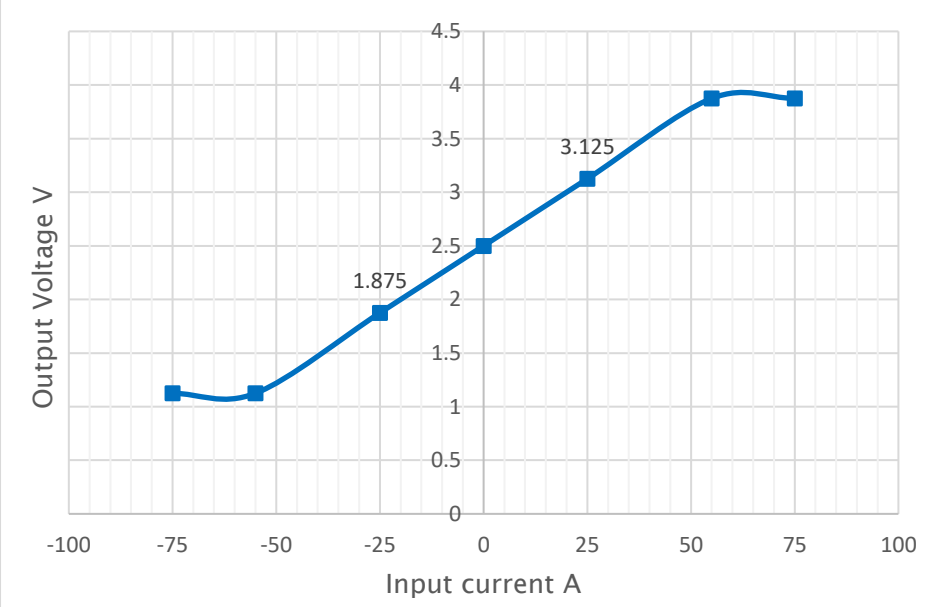
Insulation Characteristics

Parameters	Symbol	Value	Units
Dielectric strength between primary and secondary terminals,50Hz, 60 seconds	V_d	2.5	kVrms
Comparative tracking index	CTI	250	V
Insulation resistance at 500 VDC	R_{is}	>100	MΩ
Creepage distance		14.50	mm
Clearance distance		11.50	mm

Specifications (Unless otherwise specified temperature is 25°C)

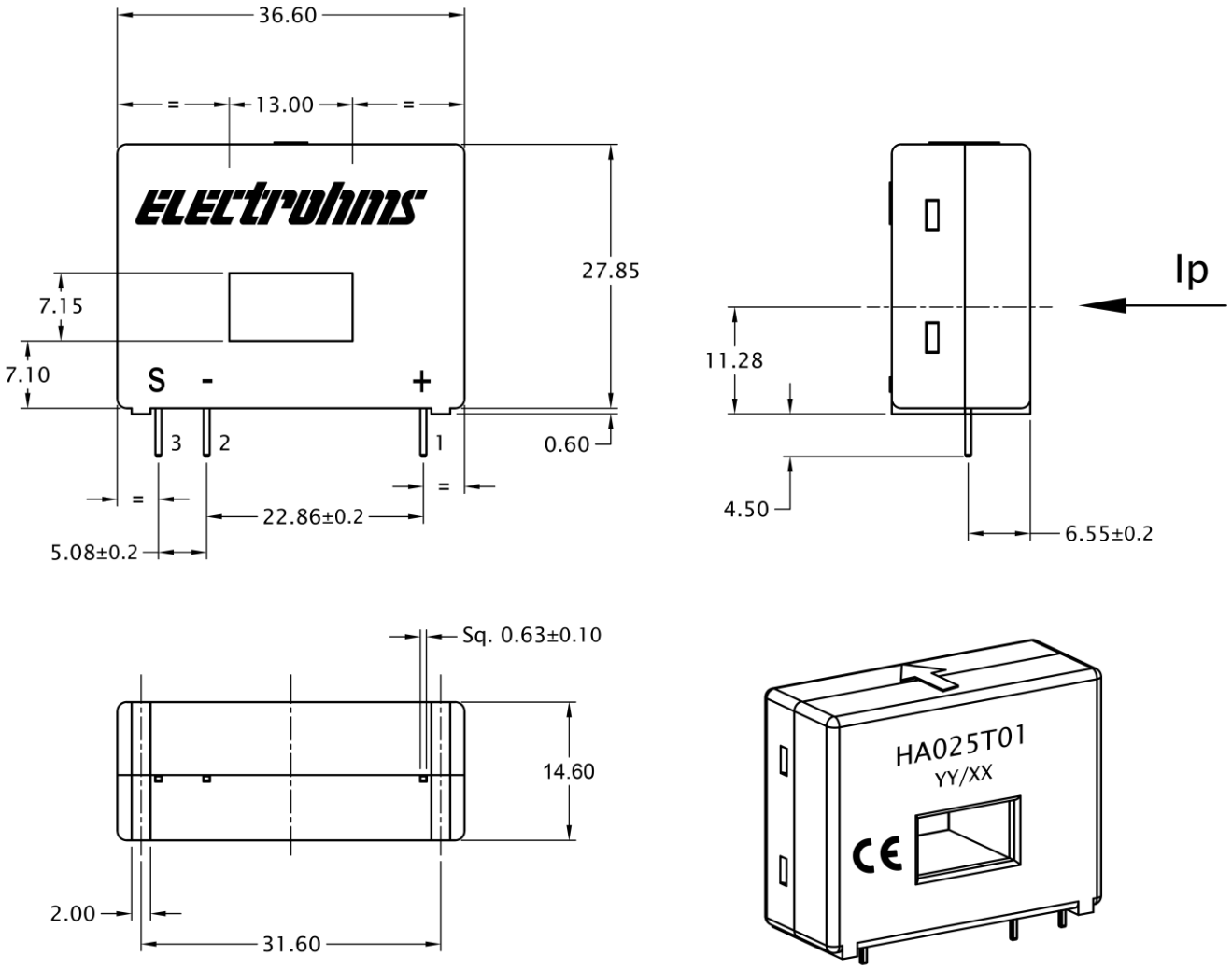
Parameters	Symbol	Condition	Min	Typ	Max	Units
Input current nominal	I_{pn}			25		Arms
Input current measuring range	I_P		-56		+56	A
Burden resistance	R_b		2000			Ω
Resistance of secondary winding	R_s			35.0		Ω
Voltage output at I_{pn}= 0	V_{out}			2.5 ±0.025		V
Voltage output at I_{pn}	V_{out}			2.5 ±0.625		V
Number of secondary turns	N_s			1080		
Theoretical sensitivity	G_{th}			25		mV/A
Supply voltage	V_s	±5%		+5.0		V
Current consumption	I_c	V_s = +5 V		12 +$I_{o/p}$ + (V_{out} /R_b)		mA
Overall accuracy at I_{pn}	I_o		-0.65		+0.65	% of I_{pn}
Linearity error	Σ_l			< 0.2		% of I_{pn}
Temperature coefficient of V_{out}				100		ppm/K
Reaction time 10% I_{pn}				<100		ns
Response time 90% of I_{pn}	t_{ra}			<400		ns
Frequency bandwidth	BW	-1dB, small signal bw	0		200	kHz
Ambient operating temperature	T_A		-40		+85	°C
Ambient storage temperature	T_s		-40		+85	°C
Mass	m			13		g

Input & Output Characteristics

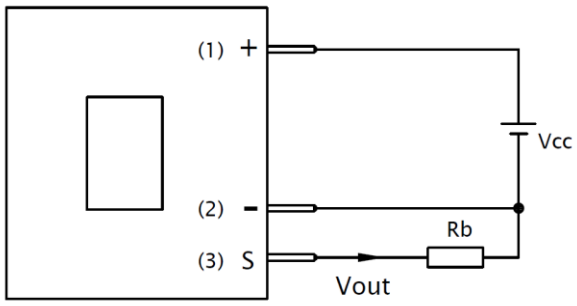


Mechanical dimensions

GENERAL TOL. ± 0.50 mm	
ALL DIMENSIONS ARE IN 'mm'	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.
- $+I_p$ indicates primary current flowing in the direction of the arrow.

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 (»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.