

 $V_{PN} = 500V$ 





#### Features

- Plastic outer case compliant to UL 94-V0
- Bipolar and isolated measurement
- Current output.

## Applications

- Auxiliary converters
- Inverters
- Propulsion and braking chopper
- AC & DC power drives

## **Application domain**

- Industrial
- Traction

## Advantage

- Low power consumptions
- Excellent accuracy
- Good response time
- Low temperature drift
- High immunity to external interferences.
- Compact design

## Insulation characteristics

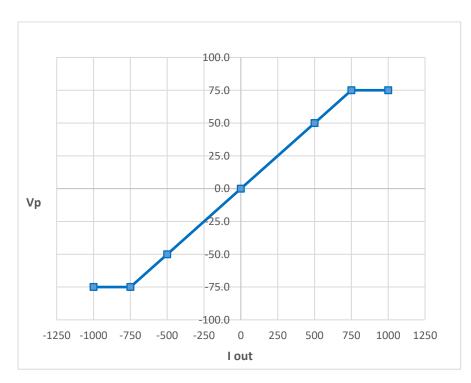
Parameters	Symbol	Value	Unit
Dielectric strength between input and output terminals,50Hz, 60 seconds.	Vd	7.5	kVrms
Comparative Tracking Index	CTI	250	V
Insulation Resistance (500Vdc)	RIS	>200	MΩ
Creepage distance in mm	See mechanical dimension drawing		
Clearance distance in mm	See mechanical dimension drawing		



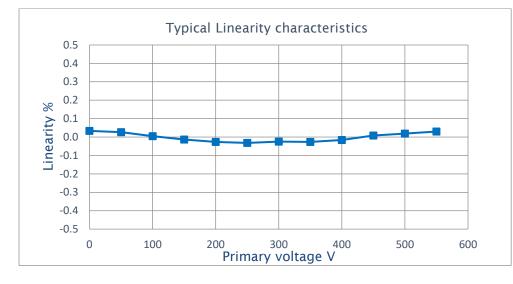
# **Specifications** (Unless otherwise specified temperature is 25°C)

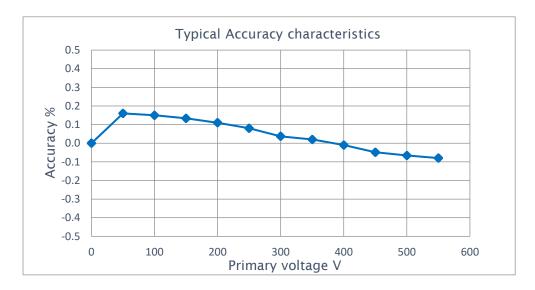
Parameter	Symbol	Condition	Min	Тур	Max	Unit
Primary voltage Nominal	V			500		Vrms
Primary voltage, measuring range	V <sub>PM</sub>		-750		+750	V
Burden resistance	R <sub>b</sub>		40	50	60	Ω
Output Current @V <sub>PN</sub>	l out			50		mA
Supply Voltage	±Vs		±13.5	±24	±26.4	V
Current consumption @Vs =±24V	I c	@25°C		50 + I <sub>оит</sub>		mA
Offset current	I <sub>o</sub>			±70		μA
Temperature variation of I <sub>o</sub>	I <sub>OT</sub>	-40 to +85 °C		±200		μA
Sensitivity	G			100		μA/V
Sensitivity error	Σ <sub>G</sub>			0.2		%
Thermal drift of sensitivity		-40 to +85 °C		±0.5		%
Linearity error	Σ	±500V Range		±0.5		$\%$ of $V_{\mbox{\tiny PN}}$
Overall accuracy	X <sub>G</sub>	-40 to +85 °C		±1		$\%$ of $V_{\mbox{\tiny PN}}$
Response time @ 90 % of V <sub>PN</sub>	T			50	60	μS
Frequency bandwidth	BW	kHz at -3dB		14		kHz
Input Resistance	R <sub>P</sub>			900		kΩ
Input power loss @ V <sub>PN</sub>	P <sub>P</sub>			0.277		W
Ambient operating temperature				-40 to +85		°C
Ambient storage temperature				-50 to +90		°C
Mass				520		g

# Input & Output Characteristics





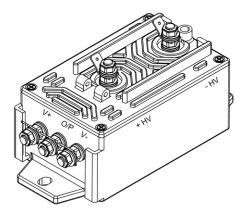


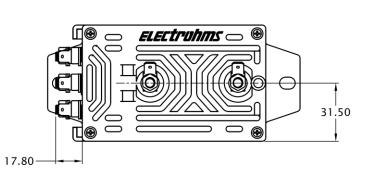


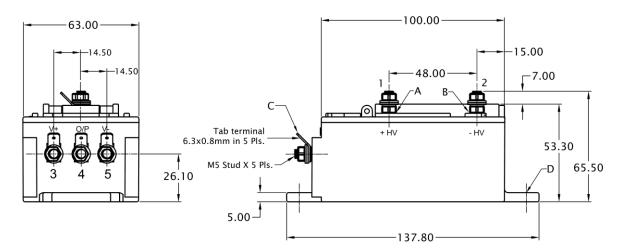


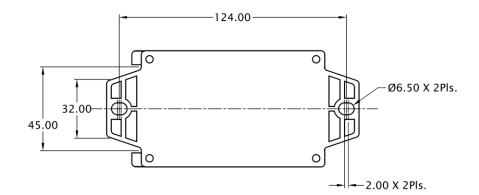
# **Mechanical dimensions**

ALL DIMENSIONS ARE IN 'mm'	SCALE -NTS
GENERAL TOL. ± 1.0 mm	$\bigoplus \square$

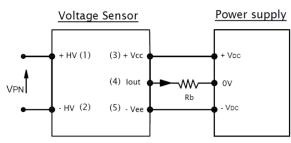








## **Connection Diagram:**



	Clearance distance in mm	Creepage distance in mm
A - B	38	60
A - C	41	60
B - D	45	58



- Connector on the product: M5 Studs with Faston tab Part no- 61365-1, TE Connectivity AMP Connectors
- Suggested mating connector: Faston receptacle terminal Part no- 63609-2, TE Connectivity AMP Connectors
- Input & Output connection M5 Studs in 5 Places, recommended fastening torque 2.2 N-m
- Sensor mounting: 2 slots X Ø 6.5mm, M6 steel screws, recommended fastening torque 4.6 N-m
- Output is positive when HV+ input terminal is higher potential than HV- terminal
- Power supply and output terminal is not protected against polarity reversal
- Protective covers are assembled on the transducer for high voltage terminals on request with different part number.

### Wiring and mounting instructions

Each configuration being different, please consult us for advice. (Note that non-proper installation or incorrect use of the sensor can result in sensor poor performances or malfunction)

## 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
- Ignoring this warning can lead to injury and/or cause serious damage.
- A protective housing or additional shield could be used.
- This Sensors must be used in electrical or electronic systems as per the applicable standards.
- 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.