

HV-C54 series

Voltage Transducer



1. Brief introduction

HV-C54 voltage transducer uses Hall effect(closed loop principle) to measure AC and DC or Pulsed voltages. The primary input voltage and the output signal is highly electric isolated. It can be used in Power Utility, Converters, Traction, Telecom, Oil & Gas, and New energy fields.

- ★ AC,DC, Pulsed voltage measurement
- ★ Excellent accuracy
- ★ Galvanic isolation between primary and secondary circuit
- ★ Very good linearity
- ★ High immunity to external interference
- ★ Low thermal drift

HV-C54-0.01P2O8

2. Order information (see right chart)

Nominal current (voltage):
0-10mArms (voltage:100-2500Vrms)

Nominal output:
O9: 0±50mArms

Power supply:
P2: ±12-15Vdc

Nominal input:
0.01Arms

Power supply:
P2: ±12-15Vdc

Nominal output:
O9: 0±50mA

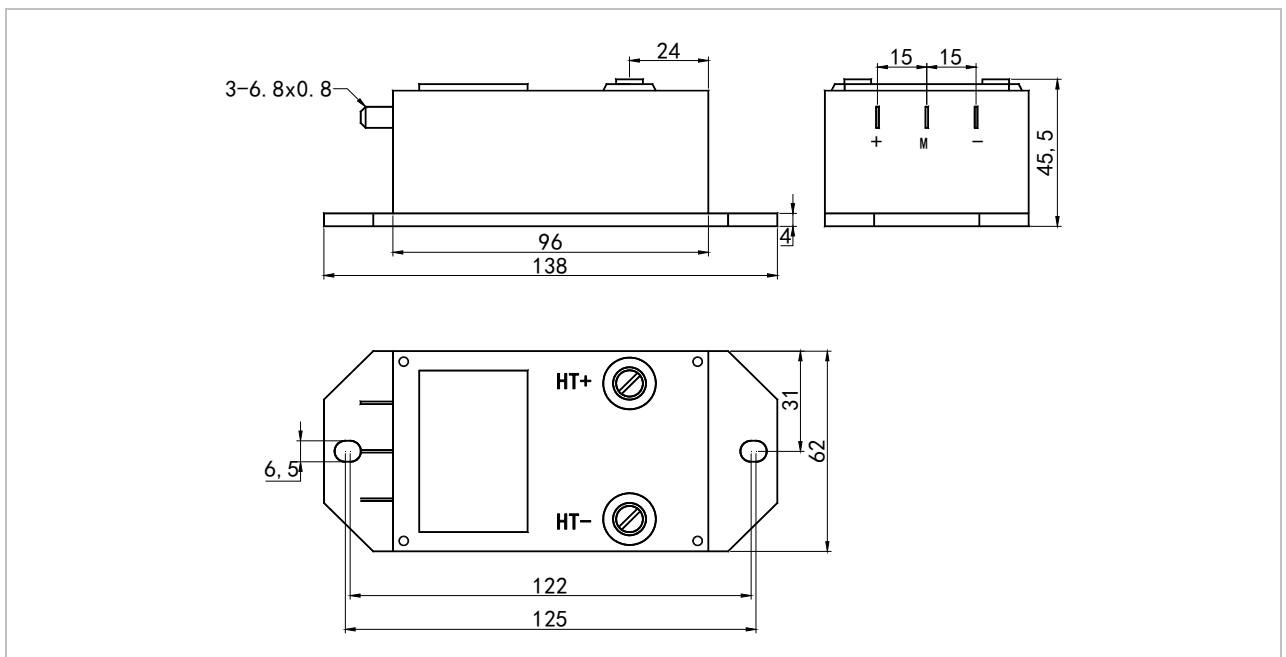
3. Eletrical data

I _{pn}	Primary nominal current (rms)	10mA
V _{pn}	Primary nominal voltage (rms)	10-2500
I _p	Input current range(rms)	20mA
KN	Conversion ratio	10000:2000
I _{sn}	Output secondary current(rms)	50mA
X	Accuracy (Ta =+25℃)	≤0.5%
EL	Linearity error	≤0.1%
Vc	Power supply voltage	Pn(±5%)
I _{ofs}	Offset current (Ta =+25℃)	≤±0.1mA
Tr	Response time	≤ 100uS
I _c	Current consumption	10mA + I _s
R _m	Measuring resistance (@I _{pN} ,@ ±15V)	≤150Ω
R _s	Secondary coil resistance	60Ω
R _p	Primary coil resistance	1900Ω
V _d	Isolation test(50HZ,1min)	6.0KV

4. General data :

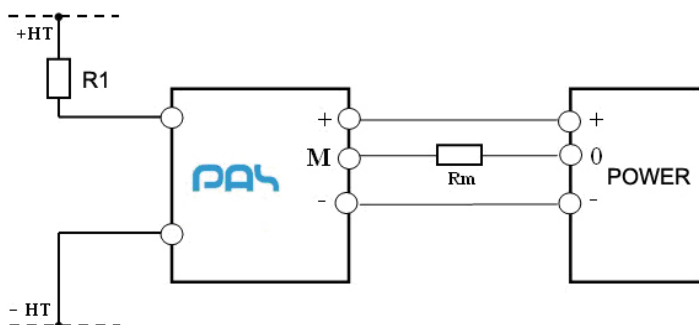
Ta	Ambient operating temperature	-25 - +70 °C
Ts	Ambient storage temperature	-45- +85 °C
W	Mass	250g
St	Standards	EN 50178
Ha	Ambient operating humidity	20-90% RH
	Case material	According to UL94-V0

5. Dimensions



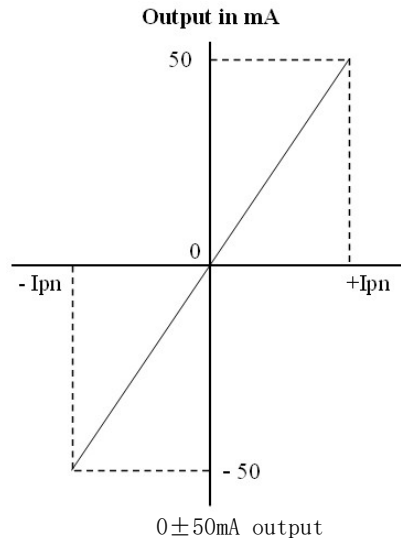
General tolerance	± 1mm
Terminals	Voltage input: 2 x M5
Fastening	2 xΦ6.2mm

6. Connection



Pin	Definition
+	Supply voltage+
M	Output
-	Supply voltage-

7. Output figure



8. Safety items



1. Only qualified people can operate with such electrical products.
2. Wrong connection may destroy the products.
3. ESD protection is necessary, please follow the correct process.
4. Do not use in the environment with conductive dust and corrosive gas.
5. Strong vibration and very high temperature may damage the products.



1. After the installation, the bus bar may be connected to the high voltage equipment, please do not touch the exposed parts of the transducers to avoid electric shock!



Note: 1.Passion technology company reserves the right to modify the datasheets at any time without previous notifications.
2.Any question about the datasheet, please contact our TCS.