

EVS-C53 series

Voltage Transducer

1. Brief introduction

EVS-C53 Voltage transducer uses special Isolation Barrier technology 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 ★ Included primary resistor
- ★ Good linearity ★ Galvanic isolation between primary and secondary circuit ★ Low power consumption
- ★ High immunity to external interference ★ Low thermal drift
- ★ Higher voltage can measure than EV-C53

2. Order information (see right chart)

Nominal Voltage:

50 125 150 250 500 750
1000 1500 2000 2500 3000Vrms

Nominal output:

O5: $0 \pm 5V$

O9: $0 \pm 50mA$

Power supply:

P4: $\pm 15Vdc$

EVS-C53-xxxPxOx

Nominal
Voltage(V):

50
150
250
500
1000
1500
2000
2500
3000

Power supply:
P4: $\pm 15Vdc$

Nominal output:
O5: $0 \pm 5V$
O9: $0 \pm 50mA$

3. Eletrical data

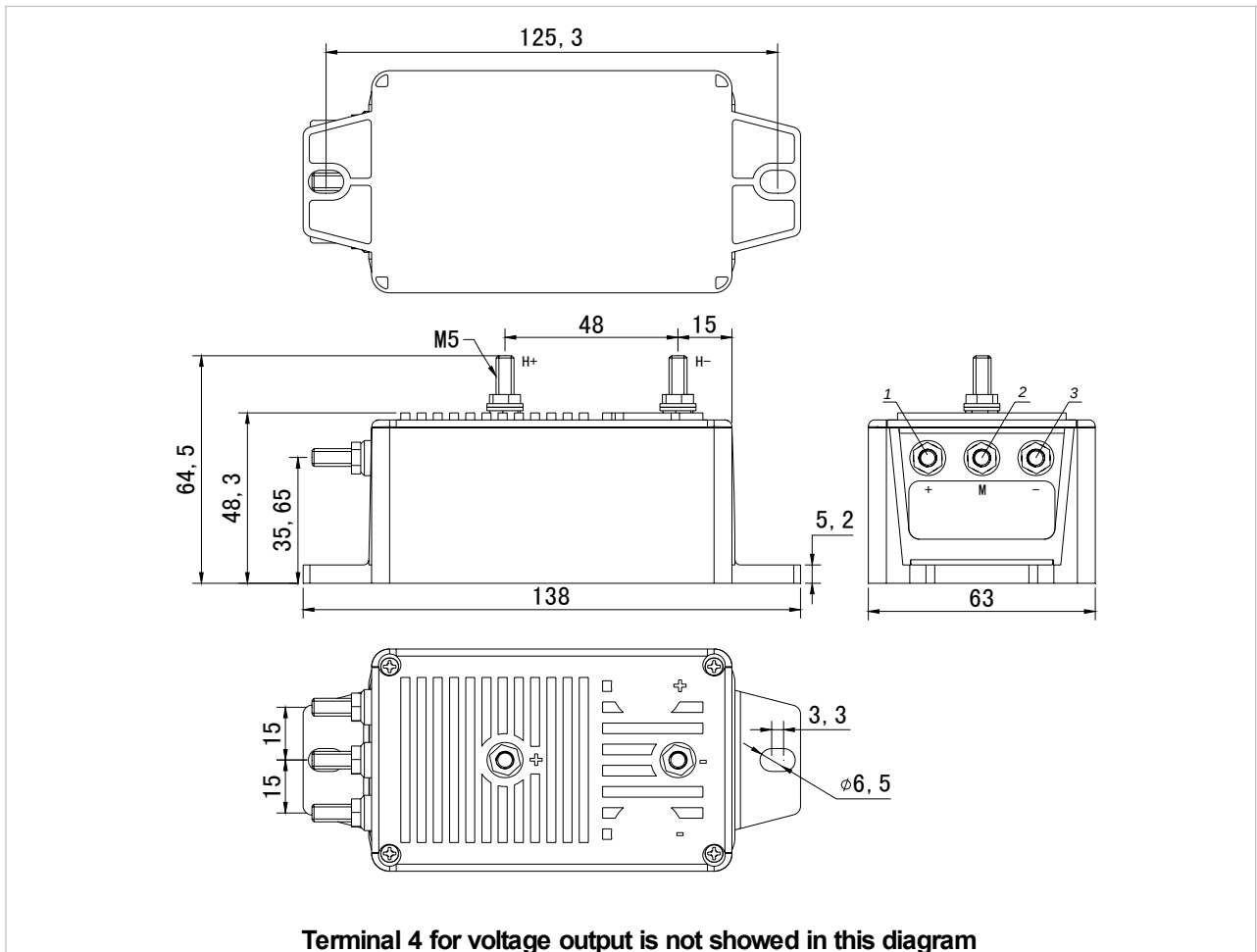
Vpn	Primary nominal voltage (Vrms)	50 500 2500	125 750 3000	1000	150 1500	250 2000
Vp	Primary voltage, measuring range(Vrms)	150% x Vpn				
Isn (for current output)	Secondary Current output	50mA				
Vsn(for voltage output)	Secondary Voltage output	0±5V				
X	Accuracy (Ta =+25℃)	≤0.5%				
EL	Linearity error	≤0.1%				
Vc	Power supply voltage	Pn(±5%)				
Iofs	Offset current (Ta =+25℃)	≤±0.15mA				
Tr	Response time	≤ 10uS				
f	Frequency bandwidth	DC-1KHZ (-3dB)				
Ic	Current consumption	50mA (for current output: + Is)				
RL	Load resistance	≤ 150Ω(for current output) or >5KΩ (for voltage output)				
Rp	Primary input resistance	60MΩ				

Vd Isolation test(50HZ,1min) 6.0KV

4. General data:

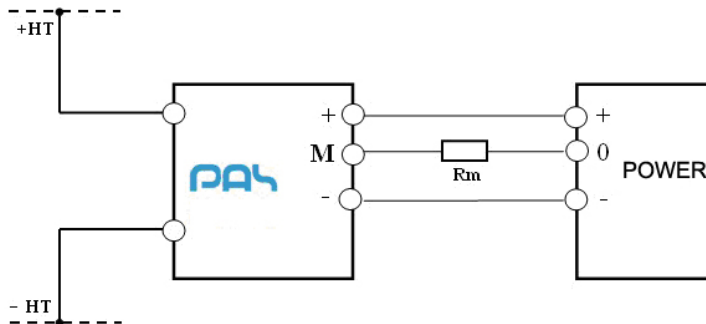
Ta	Ambient operating temperature	-40 - +85 °C
Ts	Ambient storage temperature	-50 - +90 °C
W	Mass	350g
St	Standards	EN 50178
Ha	Ambient operating humidity	20-90% RH
	Case material	According to UL94-V0

5. Dimensions



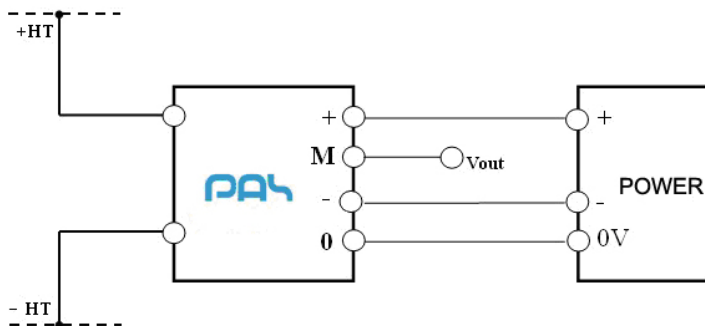
General tolerance	$\pm 1\text{mm}$		
Terminals	Input: 2 x M5	Output: 3 x M5 (or 4 x M5,for voltage output)	
Fastening	Bottom: 2 x $\Phi 6.5\text{mm}$	Side: 2 x $\Phi 4.8\text{mm}$	

6. Connection



Current output connection

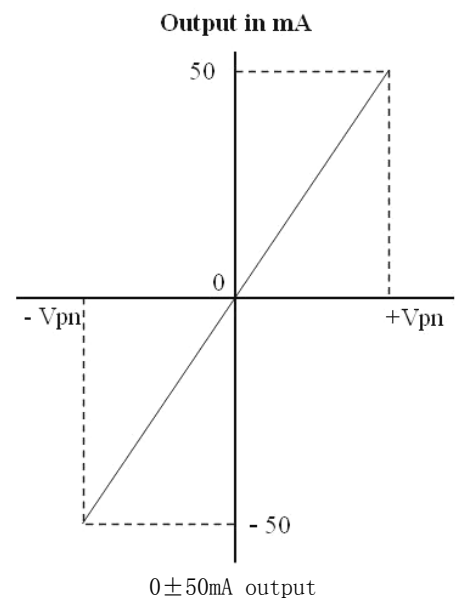
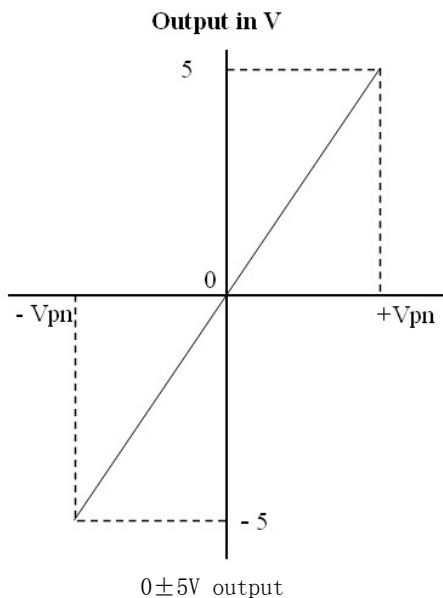
Pin	Definition
1	+ Supply voltage+
2	M Output
3	- Supply voltage-
/	/



Voltage output connection

Pin	Definition
1	+ Supply voltage+
2	M Output
3	- Supply voltage-
4	0 Supply GND

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.