

EV-C53 series

Voltage Transducer



1. Brief introduction

EV-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

2. Order information (see right chart)

Nominal Voltage:

50 125 150 250 500
750 1000 1500 2000V

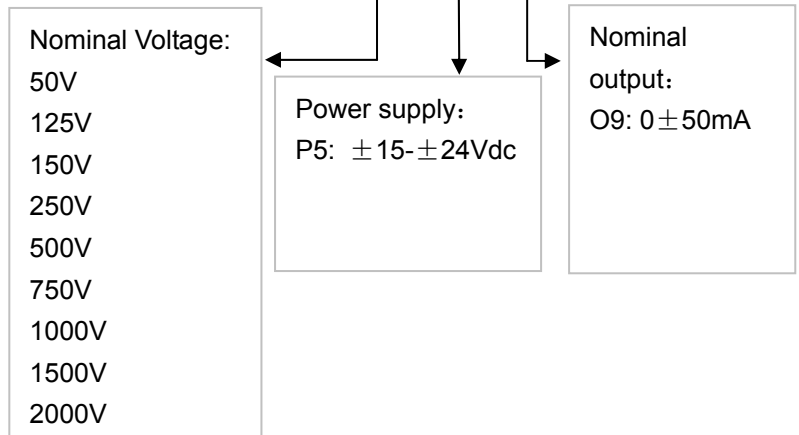
Nominal output:

O9: $0 \pm 50\text{mA}$

Power supply:

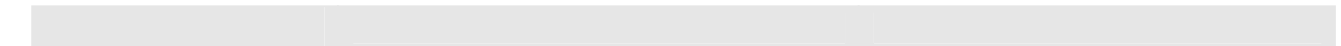
P5: $\pm 15 - \pm 24\text{Vdc}$

EV-C53-xxxPxOx



3. Eletrical data

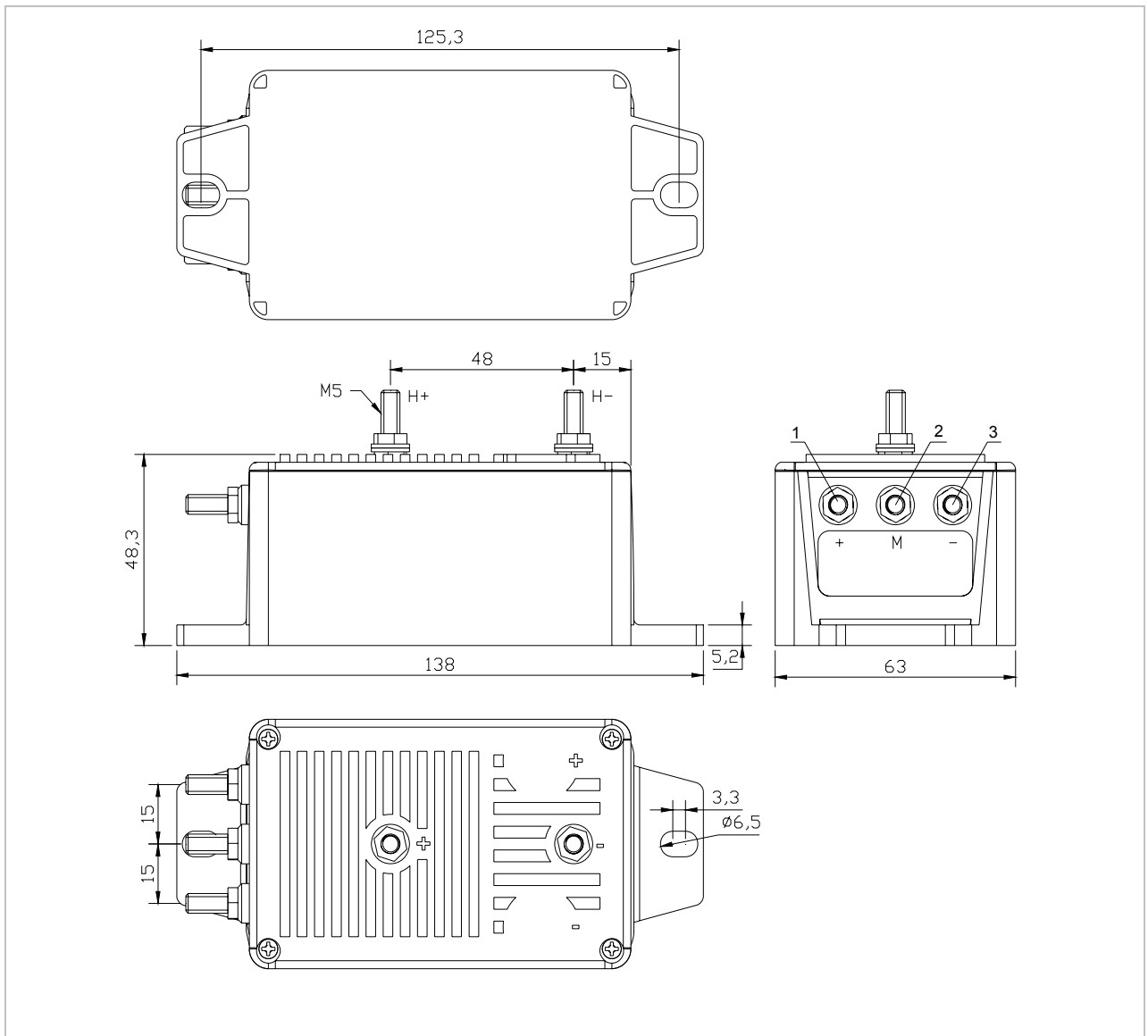
V _{pn}	Primary nominal voltage (Vrms)	50 125 150 250 500 750 1000 1500 2000V
V _p	Primary voltage, measuring range(Vrms)	150% x V _{pn}
I _{sn}	Secondary Current output	50mA
X	Accuracy (Ta =+25°C)	≤0.5%
E _L	Linearity error	≤0.1%
V _c	Power supply voltage	Pn(±5%)
I _{ofs}	Offset current (Ta =+25°C)	≤±0.15mA
T _r	Response time	≤ 10uS
f	Frequency bandwidth	DC-13KHZ
I _c	Current consumption	50mA + I _s
R _L	Load resistance	≤50Ω
R _p	Primary input resistance	6MΩ
V _d	Isolation test(50HZ,1min)	5KV



4. General data:

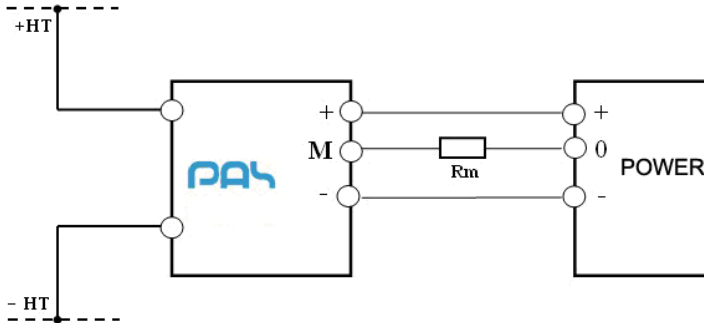
Ta	Ambient operating temperature	-40 - +85 °C
Ts	Ambient storage temperature	-50 - +90 °C
W	Mass	350g
St	Standards	EN 50178
Ha	Ambient operating humidity	20-90% RH
	Case material	According to UL94-V0

5. Dimensions



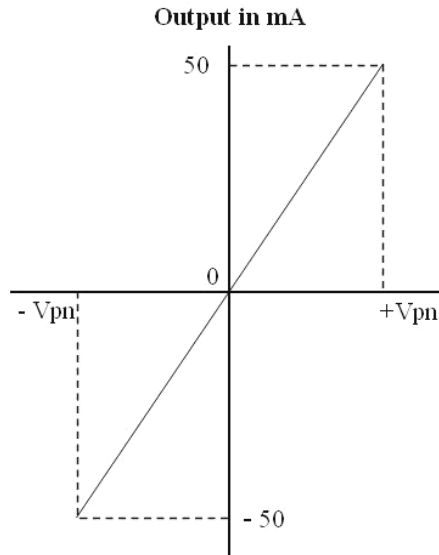
General tolerance	± 1mm	
Terminals	Input: 2 x M5	Output: 2 x M5
Fastening	Bottom: 2 x Ø6.5mm	Side: 2 x Ø4.8mm

6. Connection



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

7. Output figure



0±50mA output

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.