

GDU1-C53 series

DC Voltage Transducer



1. Brief introduction

GDU1-C53 DC voltage transducer uses professional High-Linearity Analog Optocouplers technology to measure DC voltage with a DIN mounting case. The output signal could be standard DC signals that can be accepted by electronic circuit e.g. PLC. The primary input circuit and the output signal is highly electric isolated. It can be used in Power Utility, Telecom, Oil & Gas, and New energy fields.

- ★ DC voltage measurement ★ Good accuracy
- ★ Good linearity ★ Galvanic isolation between primary and secondary circuit ★ Low power consumption
- ★ Compact size ★ Standard RMS signal output

2. Order information (see right chart)

Nominal Input(Vdc):

50 150 250 500 750
1000 1500 2000

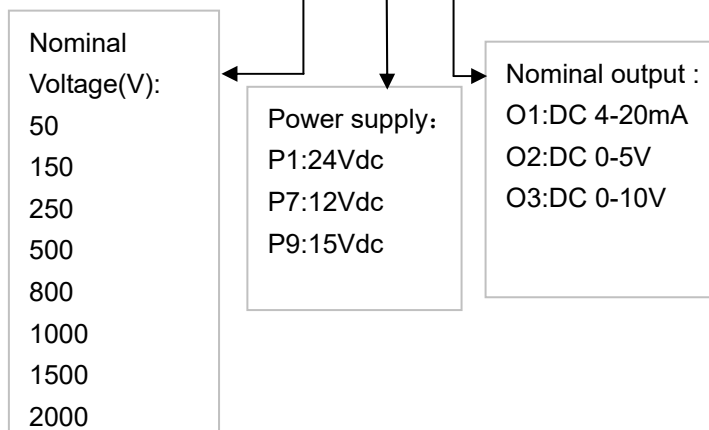
Nominal output:

O1:DC 4-20mA O2:DC 0-5V O3:DC 0-10V

Power supply:

P1:24Vdc P7:12Vdc P9:15Vdc

GDU1-C53-xxxPx Ox



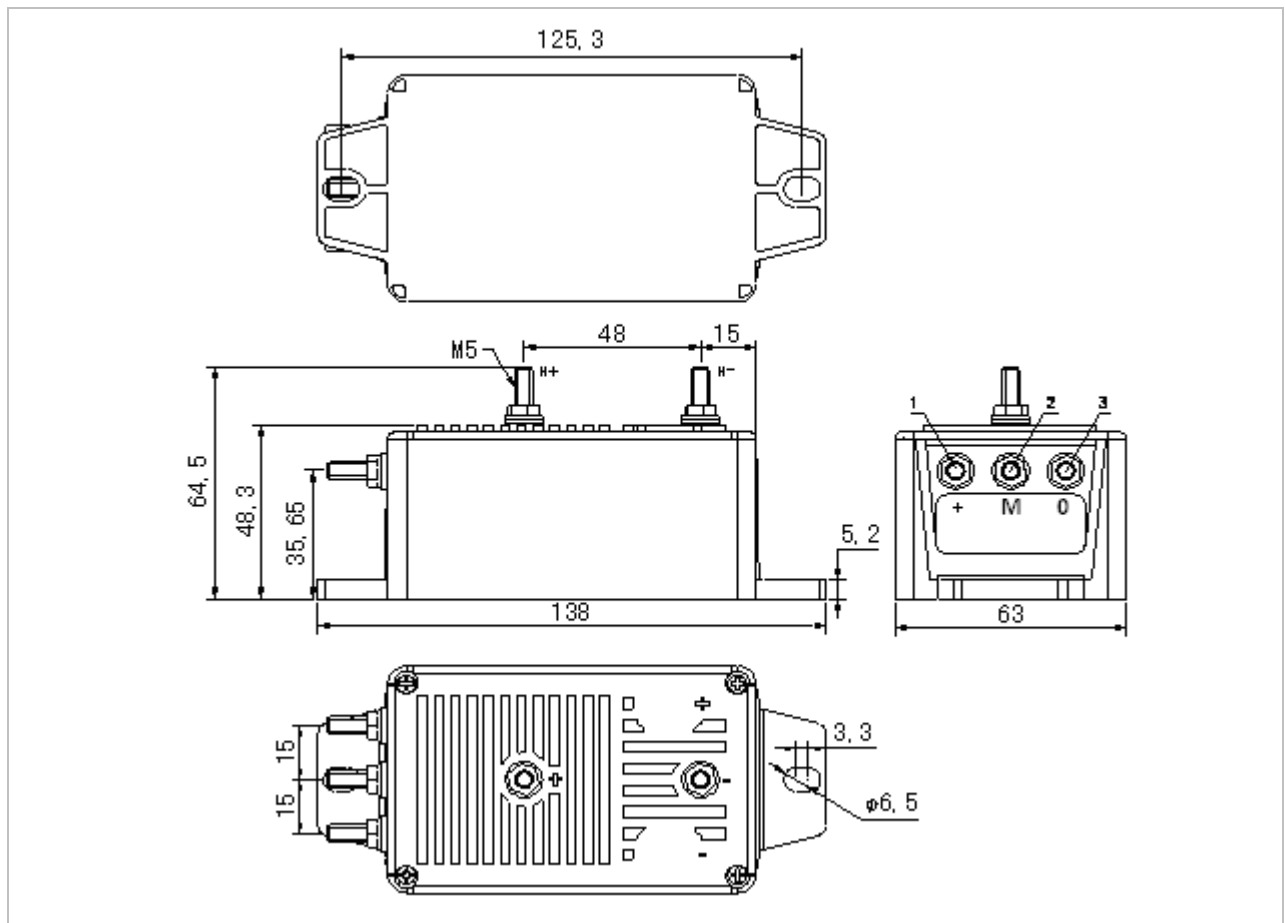
3. Eletrical data

Vpn	Primary nominal voltage (Vdc)	50 150 250 500 800 1000 1500 2000
Vp	Primary voltage measuring range	120% x Vpn
Vsn (For Voltage output)	Secondary Voltage output	DC0-5V, DC0-10V etc
Isn (for current output)	Secondary Current output	DC 4-20mA,DC 0-20mA etc
X	Accuracy (Ta =+25℃)	≤0.5%
EL	Linearity error	≤0.2%
Vc	Power supply voltage(±5%)	DC24V DC12V DC15V
Vofs (for voltage output)	Offset voltage (@Ta =+25℃)	≤50mV(for voltage output)
Iofs(for current output)	Offset current (@Ta =+25℃)	≤80uA (for current output)
Tr	Response time	≤ 100mS
f	Frequency bandwidth	DC
Ic	Current consumption	≤50mA (for current output : + Is)
RL	Load resistance	>5KΩ(for voltage output) ≤450Ω(for current output)
Vd	Isolation test(AC,1min,50Hz)	AC5KV

4. General data :

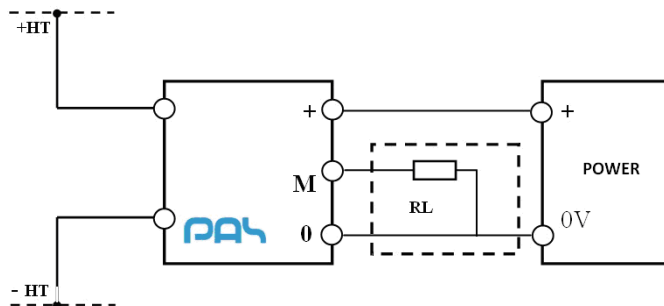
Ta	Ambient operating temperature	-25 - +85 °C
Ts	Ambient storage temperature	-40 - +85 °C
W	Mass	≈300g
St	Standards	EN50178
Ha	Ambient operating humidity	0-95% RH
	Case material	According to UL94-V0

5. Dimensions



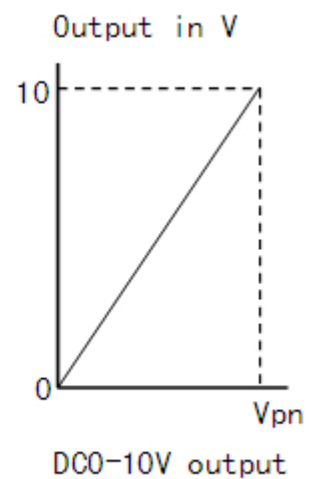
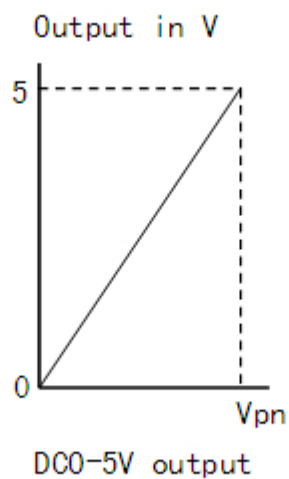
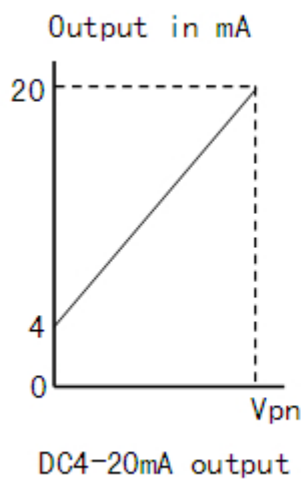
General tolerance	± 1mm
Primary hole size	No holes
Fastening	Bottom: 2 x Ø6.5mm

6. Connection



PIN	Defines
1	(+) Power +
2	(M) Signal output
3	(0) Power 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. The Potentiometers on the product are used by PAS internal, the user can not calibrate.
6. 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.