

NPEXA-C91

Single input, single output

NPEXA-C911

Single input, double outputs

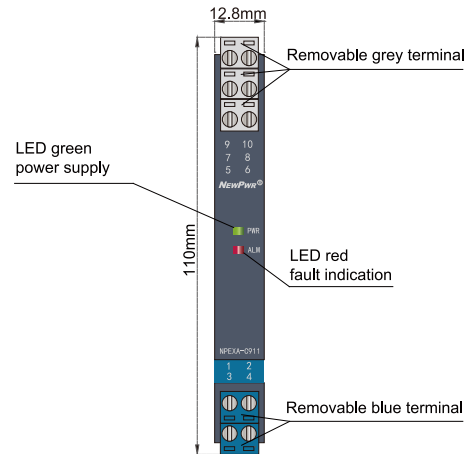
Input: potentiometer

Output: 4 ~ 20 mA

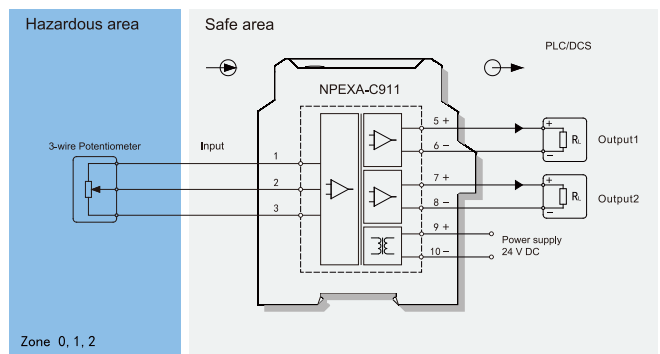
Potentiometer input isolated barrier, it converts the 3-wire potentiometer signals from a hazardous area into 4~20mA signals to a safe area by isolation. The input, output, and power supply are galvanically isolated from each other. The self-test function is also available on this device. Calibrate the apparatus or modify parameters by using a handheld programmer.

Parameters

Power supply:	18V DC ~ 60V DC (Reverse power protection)
Power dissipation:	0.8W (single output) 1.2W (double outputs)
Input signal:	3-wire potentiometer: 0 Ω ~ 10 kΩ
Output signal:	4 ~ 20mA
Load resistance:	$R_L \leq 550\Omega$
Accuracy:	0.1%F.S.
Temperature drift:	30ppm/°C
Response time:	≤ 500ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 3000V AC (intrinsically safe side / non-intrinsically safe side) ≥ 1500V AC (Power supply/non-intrinsically safe side)
Insulation resistance:	≥ 100MΩ (Input /Output/Power supply)
Operation temperature:	-20°C ~ +60°C
Storage temperature:	-40°C ~ +80°C
Dimension:	12.8mm (W) × 110mm (H) × 117mm (D)
Output states:	Default following mode, it can be configured as 4mA~20mA NE43 mode or fixed output mode.



Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)

Ex marking: [Ex ia Ga] IIC

[Ex ia Da] IIIC

Um: 250V

Certified parameters (Terminals 1, 2, 3):

$U_o=8.7V$, $I_o=33mA$, $P_o=72mW$

IIC: $C_o=5\mu F$, $L_o=28mH$

IIIC(IIIB): $C_o=49\mu F$, $L_o=84mH$

Model rules

NPEXA-C91 ☒ ☒ ☒

PB: BUS powered

Default: Terminals powered

The second output signal^{note1}

Default: null

The first output signal^{note1}

note1: output signal

Number	Output signal
1	4~20mA
2	1~5V
3	0~10mA
4	0~5V
5	0~10V
6	0~20mA