

NPEXA-C27

Single input, single output

NPEXA-C277

Single input, double outputs

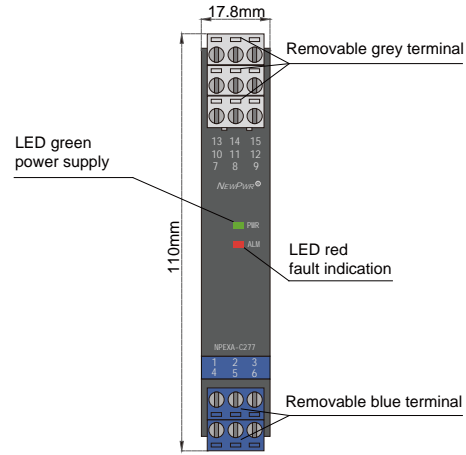
Input: Resistance

Output: 1:1 Resistance

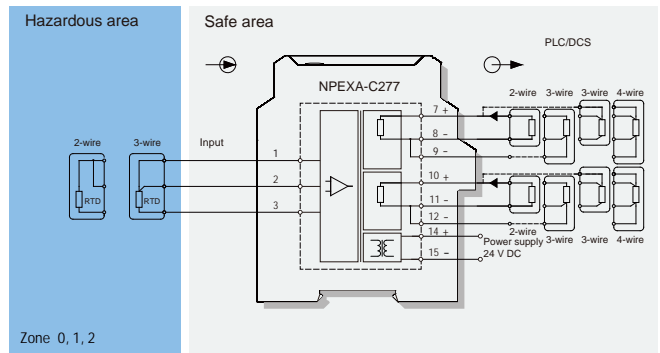
Resistance input isolated barrier, it transfers the resistance signals from a hazardous area to a safe area. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.

Parameters

Power supply:	18V DC ~ 60V DC (Reverse power protection)
Power dissipation:	0.4W
Input signal:	18Ω ~ 400Ω
Line resistance:	≤ 20Ω per line (RTD)
Output signal:	1:1 resistance
Exciting current:	0.1mA ~ 10mA
Conversion accuracy:	excitation current accuracy 0.5mA ~ 10mA ± 0.1%F.S. or < 0.2Ω (select max)
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:	17.8mm (W) × 110mm (H) × 117mm (D)
Output states:	Whatever input fault status (except breakage, breakage output about 16Ω), the output follows the input within measuring range. the maximum output value would not exceed 430Ω)



Wiring diagram



Explosive-proof parameters

China National Quality Supervision and Test Centre for Explosion Protected Electrical Products (CQST)

Ex marking: [Ex ia Ga] IIC

Um: 250V

Certified parameters (Terminals 1, 3; 2, 3):

Uo=8.7V, Io=33mA, Po=72mW

II C: Co=5μF, Lo=3mH

II B: Co=35μF, Lo=9mH

II A: Co=700μF, Lo=24mH