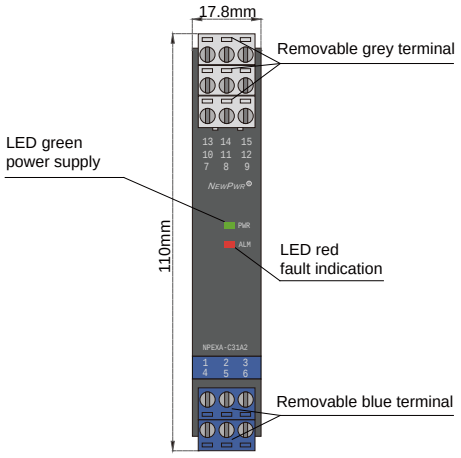
NPEXA-C31A2

Single input, three outputs

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA , relay

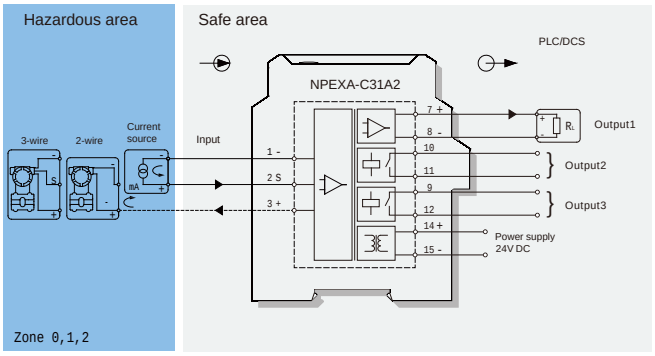
Analog input isolated barrier, it detects loop current and converts it from a hazardous area into 4~20mA signals to a safe area by isolation, two relay alarm outputs. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Calibrate the apparatus or modify parameters by using a handheld programmer.



Parameters

Power supply:	18V DC ~ 60V DC (Reverse power protection)
Power dissipation:	1.8W
Input signal:	4 ~ 20mA
Input resistance:	approx. 100Ω
Available voltage:	open-circuit voltage ≤ 26V voltage: ≥ 16V at 20mA
Output signal:	Output1: 4 ~ 20mA Output2, Output3: relay contact (alarm value, hysteresis and delay time can be set)
Load resistance:	R_L ≤ 550Ω
Load capacity:	250VAC/2A, 30VDC/2A
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:	17.8mm (W) × 110mm (H) × 117mm (D)
Output states:	Whatever input fault status (except breakage or short circuit, the output is 0V/mA), the output follows the input within measuring range. And the maximum value would not exceed the 110% of the upper limit of the measuring range (e.g. When the output signal type is 0 ~ 20mA, the minimum output value may be 0mA, the maximum output value would not exceed 22mA)

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, 2):
Uo=10.5V
II C: Co=1.61μF
II B: Co=11.7μF
II A: Co=52μF
Certified parameters (Terminals 1, 3):
Uo=28V, Io=93mA, Po=651mW
II C: Co=0.04μF, Lo=2.8mH
II B: Co=0.45μF, Lo=8.4mH
II A: Co=1.5μF, Lo=22.4mH

Model rules

NPEXA-C3☒A2☒

PB: BUS powered
Default: Terminals powered

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