

NPEXA-C511 Single input, single output
NPEXA-C5111 Single input, double outputs
 Input: dry contact or proximity switch
 Output: relay

Digital input isolated barrier, it converts switch or proximity detector signals (dry contact or NAMUR) from a hazardous area into relay signals to a safe area by isolation. Operation mode, output 2 function and the input circuit fault detection function can be set with the DIP switch. The input, output, and power supply are galvanically isolated from each other.

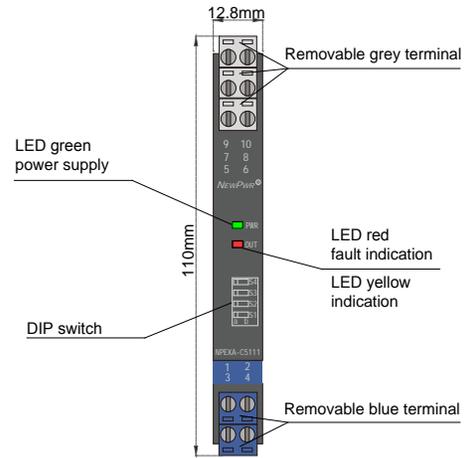
Parameters

Power supply: 18V DC ~ 60V DC (Reverse power protection)
Power dissipation: 1W
Input signal: Dry contact or NAMUR
Switching trigger point: Input signal > 2.1mA, signal "1", the yellow LED is always bright
 Input signal < 1.2mA, signal "0", the yellow LED goes out
Open-circuit voltage: Approx.8.5V
Short-circuit current: Approx.8.5mA
Output signal: Relay contact
Load capacity: 250VAC/2A, 30VDC/2A
LFD function: When input current $\leq 50\mu\text{A}$, considers the input line breakdown, the output relay de-energized. If input current $\geq 6.5\text{mA}$, considers the input circuit short-circuit, the output relay de-energized, the indicator red flashing
Relay mechanical life: > 100000 switching cycles
Switch frequency: < 10Hz
Energized/De-energized delay: < 20ms
Electromagnetic compatibility: IEC 61326-3-1
Dielectric strength: $\geq 3000\text{V AC}$ (intrinsically safe side / non-intrinsically safe side)
 $\geq 1500\text{V AC}$ (Power supply/non-intrinsically safe side)
Insulation resistance: $\geq 100\text{M}\Omega$ (Input /Output/Power supply)
Operation temperature: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$
Storage temperature: $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$
Dimension: 12.8mm (W) \times 110mm (H) \times 117mm (D)

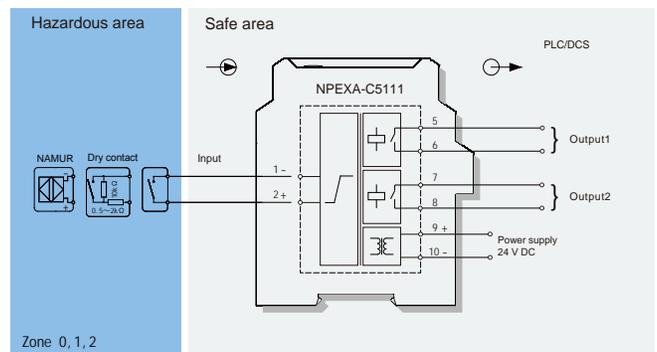
DIP switch settings

NPEXA-C511/NPEXA-C5111(NPEXA-C511 can set S1、S2)

Switch	State	a	b
S1		output1 normal mode	inverted mode
S2		LFD on	LFD off
S3		output2 normal mode	fault signal output



Wiring diagram



Explosive-proof parameters

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

Ex marking: [Ex ia Ga] IIC

Um: 250V

Certified parameters (Terminals 1, 2):

Uo=10.5V, Io=11.3mA, Po=29.7mW

II C: Co=0.97 μF , Lo=100mH

II B: Co=11 μF , Lo=300mH

II A: Co=52 μF , Lo=700mH