RS422 Input
Isolated Safety Barrier

Nanjing New Power Electric Co., Ltd.

➔ Introductions

This isolated safety barrier converts the RS422 digital signals from a hazardous area into RS485/RS232/RS422 digital signals to a safe area, and also provides power to the transmitter.

The input, output, and power supply are galvanically isolated from each other.

➔ Parameters

Explosive-proof grade: [Ex ia Ga] IIC

Power supply:

Connection type: Terminals (4+, 5-)

Rated voltage: 8 V DC ~ 60 V DC

Input (1, 2, 4, 5):

Input signal: RS422 digital signal

Control mode: full-duplex

Distribution (3, 6):

Distribution setting: Refer to rotary switch setting

Voltage tolerance: ± 0%

Output: RS485/RS232/RS422 digital signal

Transmission characteristics:

Transmission delay: ≤ 5 μs

Transmission rate: ≤ 56 kbps

Electromagnetic compatibility: Accordance to IEC 6 326-3-

Dielectric strength (1 mA leakage current, 1 minute test time):

≥ 3000 V AC (intrinsically safe side / non-intrinsically safe side)

≥ 500 V AC (non-intrinsically safe side /non-intrinsically safe side)

Insulation resistance: ≥ 00 MΩ (Input /Output/Power supply)

Parameters certified by China National Quality Supervision and Test Centre for Explosion Protected Electrical Products (CQST):

U_m: 250 V

Terminals , 2; 4, 5:

U_o: 7.6 V I_o: 77 mA P_o: 47 mW C_o: 7 μF L_o: 6 mH

NPEXA-C73 [X]

The output signal[note]

➔ **Attention**

❍ Isolated Safety Barriers degree of protection is IP 20 and must be protected from undesirable ambient conditions (waterproofing, small foreign objects). It is suitable for installation in the control room or high density field cabinet, DIN 35 mm installation is convenient for installation and displacement.