C Series
60 mA Digital Output
Isolated Safety Barrier

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➔ Introductions

By switch signals controlling, this isolated safety barrier transfers the digital signals (wet contact) from a safe area into current signals to a hazardous area, and drives field device like intrinsically safe valves, audible alarms, etc.

The input and output are galvanically isolated from each other. The apparatus was designed with various kinds of advantages, for instance, high reliability and fast response, etc. It can be interfaced with all kinds of device and DCS, PLC and other systems.

➔ Parameters

Explosive-proof grade: [Ex ia Ga] IIB

Loop Power supply: 20 V DC ~ 30 V DC

Input (5, 6; 7, 8):

Input signal: Wet contact

Output (1, 2; 3, 4):

Max. Output voltage: 22 V

Min. Output voltage: 12 V

Output current: ≤ 60 mA

Electromagnetic compatibility: Accordance to IEC 61326-3-1

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

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

Insulation resistance: ≥ 100 MΩ (Input /Output)

Parameters certified by National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI):

U_m: 250 V

Terminals 1, 2; Terminals 3, 4:

U_o: 25.2 V I_o: 170 mA P_o: 1.08 W C_o: 0.82 μF L_o: 4 mH

Ambient conditions:

Operation temperature: −20 ℃ ~ +60 ℃

Relative humidity: 10% RH ~ 90% RH (40 ℃)

Atmosphere pressure: 80 kPa ~ 106 kPa

Storage temperature: −40 ℃ ~ +80 ℃

➔ Support model type

NPEXB-C513L ■

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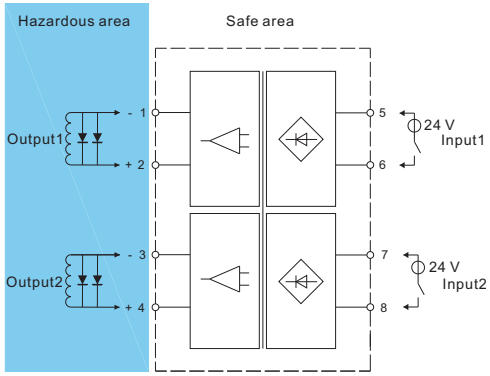
➔ Output equivalent circuit

➔ Output characteristics diagram

➔ Wiring diagram

Double input, double output



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