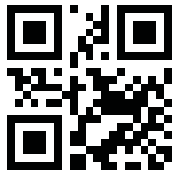


C Series Single Channel RTD Isolated Safety Barrier



→ Introductions

This isolated safety barrier converts the thermal resistance signals from a hazardous area into current or voltage signals to a safe area. DIN rail power supply function can be selected in ordering.

The input, output, and power supply are galvanically isolated from each other. Calibrate the apparatus or modify parameters by using a handheld programmer.

→ Parameters

Explosive-proof grade: [Ex ia Ga] IIC; [Ex ia Da] IIIC

Power supply:

Connection type: Terminals (9+, 10-) or DIN rail connector

Rated voltage: 18V DC ~ 60V DC (Recommended: 24V DC)

Input (1, 2, 3): 2/3-wire RTD

The input signal needs to be determined when ordering and can also be programmed. Other signal types is required special customization, please see the productlabel for details.

Line resistance: $\leq 20 \Omega$ per line

Output (5, 6; 7, 8):

Output current: 0(4) ~ 20 mA; 0 ~ 10 mA; 20 ~ 4 mA

Output voltage: 0(1) ~ 5 V; 0 ~ 10 V

Note: 4~20mA Outputs can be configured NAMUR NE 43.

Output ripple: $\leq 5 \text{ mV}_{\text{rms}}$ (Load resistance: 250 Ω)

Load resistance:

0(4) ~ 20 mA, 20 ~ 4 mA: $\leq 550 \Omega$; 0 ~ 10 mA: $\leq 1.1 \text{ k}\Omega$

0(1) ~ 5 V: $\geq 1 \text{ M}\Omega$; 0 ~ 10 V: $\geq 2 \text{ M}\Omega$

Other load resistance is required special customization, please see the productlabel for details.

Transmission characteristics (25 °C $\pm$ 2 °C):

Response time: $\leq 0.5 \text{ s}$

Temperature drift: 30 ppm/°C

Electromagnetic

$\geq 1500 \text{ VAC}$ (Pow

Insulation resista

Parameters cer

Inspection Center

Instrumentation (I

U_m : 250 V

Terminals 1, 2, 3:

U_o : 8.7 V I_o : 33 mA

IIC: C_o : 5 μ F; L_o : 2 mH

IIIC(IIB): C_o : 49 μ F

Ambient condition

Operation tempera

Relative humidity: 1

Atmosphere pressu

Storage temperatur

Power dissipation:

0.8 W (24 V DC, sir

1.2 W (24 V DC, do

→ **Wiring diagram**

installation in the control room or high density field
ca
