C Series
Resistance Repeater

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➔ Introductions

This resistance repeater converts the resistance signals to 1:1 resistance signals.

The input, output, and power supply are galvanically isolated from each other. It can be interfaced with all kinds of device, such as DCS, PLC and other systems.

➔ Parameters

Power supply:

Connection type: Terminals (14+, 15-) or DIN rail connector

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

Input (1, 2, 3; 4, 5, 6):

Input signal: 2/3-wire resistance signal

Signal range: 18 Ω ~ 400 Ω

Line resistance: ≤ 20 Ω per line

Output (7, 8, 9; 10, 11, 12):

Output signal: 1:1 input resistance signal

Output drive current: 0.1 ~ 10 mA

Transmission characteristics:

Output drive current	Accuracy
0.5 ~ 10 mA	± 0.1% F.S. or < 0.2 Ω (Choose the maximum value)

NOTE: The transmission accuracy of resistance decreases with the decrease of drive current.

Response time: ≤ 0.5 s

Temperature drift: 30 ppm/℃

Electromagnetic compatibility: Accordance to IEC 61326-3-1

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

≥ 1500 V AC (Input /Output/Power supply)

Insulation resistance: ≥ 100 MΩ (Input /Output/Power supply)

Ambient conditions:

Operation temperature: −20 ℃ ~ +60 ℃

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

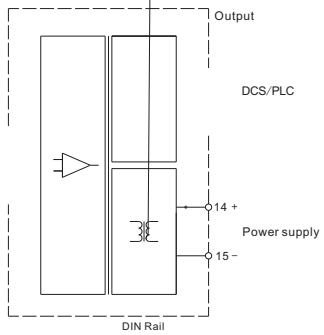
Atmosphere pressure: 80 kPa ~ 106 kPa

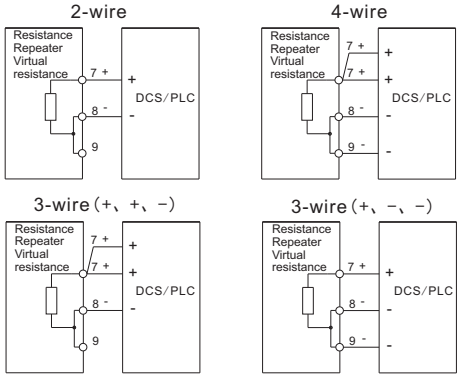
Storage temperature: −40 ℃ ~ +80 ℃

Power dissipation: 0.4 W

Model number		Output1	Output2	Power supply	
		1:1resistance signal	1:1resistance signal	Terminals	DIN rail
Single input, single output	NPRR-C1D	■		■	
	NPRR-C1DPB	■		■	■
Single input, double output	NPRR-C2D	■	■	■	
	NPRR-C2DPB	■	■	■	■
Double input, double output	NPRR-C3D	■	■	■	
	NPRR-C3DPB	■	■	■	■

Single input, single output





B. Snap metal lock onto mounting rail, then rotate the devices, as figure B, press down the devices onto mounting rail, make sure that the BUS connector pins of devices and BUS socket are in close contact.

C. Pry the metal lock off the rail with screwdriver as arrow shown, pull downward the springs, and rotate the devices.

D. Remove the devices as arrow shows.

❍ As far as possible to mount it vertically, In order to dissipation the heat of the apparatus.