

Signal Isolator

Overview

It is applicable for accurately converting analog signals, reliable electrical isolation and providing sensor power distribution to ensure accurate and reliable transmission of various control loop signals.

Our REB2 series isolators are used reliably in various industries for many years and have been widely recognized by the customers. The product has the following advantages:

- > 15-60VAC/DC and 100-240VAC/DC power supplies
- > Fully enclosed structure, good shock resistance and high flame retardant rating.
- > Easy installation and disassembly, used with 32mm and 35mm din rail.
- > Moisture-proof, salt spray prevention mildew proof function.
- > Short-circuit protection at the output.
- > Unique circuit shielding method, strong interference suppression ability.
- > Low power consumption, low temperature drift, fast response time.
- > Conforms to RoHS standards.



Model Implication

REB1IS —

- ① Isolator series:
- ② Input signal: 1, 0~20mADC 2, 4~20mADC 3, 0~10VDC
 4, 0~5VDC 8, 0~300VDC 9, 0~75mVDC
- ③ Output signal: 0~20mADC 2, 4~20mADC 3, 0~10VDC
 4, 0~5VDC 5, two poles 4~20mADC
- ④ Auxiliary power supply: 0, No 2, 15~60VAC/DC 3, 24VDC with distribution
 4, 100~240VAC/DC 5, 24VDC 6, 24VDC powered by output loop

Parameters

Input	
Nominal value	Voltage : 0~75mV, 0~5V, 0~10V, 0~300V; Current: 0~20mA, 4~20mA
Continuous value	120% nominal value
Impedance	Current inputs 100Ω, Voltage input ≥ 100kΩ

Features	
Accuracy grade	±0.2%*
Temperature drift	≤250ppm/°CFS
Insulation resistance	≥100MΩ(500VDC·1min)
Withstand voltage	2kV/50Hz·1min(input-output) 2kV/50Hz·1min(output-power supplies) 2kV/50Hz·1min(input-power supplies)
	3kV/50Hz·1min(input-Ground)
EMC standard	GBT17626 IEC61326
* : Passive isolator accuracy is 0.5%, output load is ≤500Ω.	

Output	
Analog output	4~20mA, 0~20mA, 0~5V, 0~10V
Load	Output current ≤750Ω Output voltage: ≥2kΩ
Output protection	Short circuit protection
Max. output current	25mA

Power supplies	
Rated voltage	24VDC 15~60VAC/DC 100~240VAC/DC
Voltage range	24VDC±20% 15~60VAC/DC 85~265VAC/DC
Power consumption	≤3W ≤3VA/3W ≤5VA/5W

Environment	
Working ambient temperature	-25°C~+55°C
Storage temperature	-40°C~+85°C
Relative humidity	5%~90%(No condensation or freeze); When tem. is between +40°C and +55°C, relative humidity should be no more than 50%.
Atmosphere pressure	80 kPa~110 kPa, altitude is within 2000m.

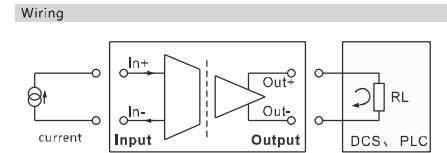
Appearance	
Installation way	32/35mm din rail
Dimension(W/T/H)	94/24/119mm(Single output), 94/34/119mm(Dual output)
Weight	About 150g
Tightening torque	0.8Nm

Specification

1. Passive isolator

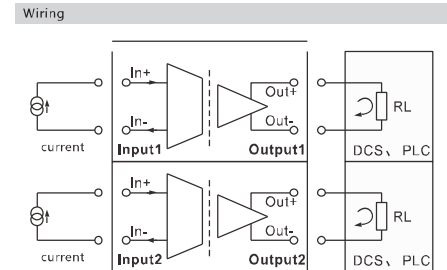
1.1. One-in and one-out

Ordering Data				
Type	Input signal	Output	Auxiliary power supply	Order No.
REB1IS-220	4~20mADC	4~20mADC	No	763047
REB1IS-110	0~20mADC	0~20mADC	No	763032



1.2. Two-in and two-out

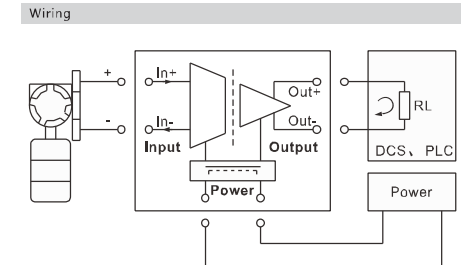
Ordering Data				
Type	Input signal	Output	Auxiliary power supply	Order No.
REB1IS-550	Two poles 4~20mADC	Two poles 4~20mADC	No	763076



2. Active isolator

2.1. Independent power supply, three-terminal isolation, one-in and one-out for the signal.

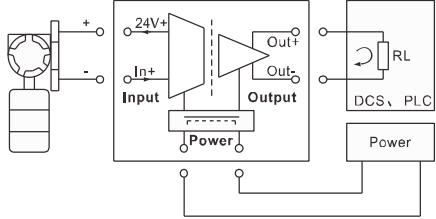
Ordering Data				
Type	Input signal	Output	Auxiliary power supply	Order No.
REB1IS-225	4~20mADC	4~20mADC	24VDC±20%	763051
REB1IS-235	4~20mADC	0~10VDC	24VDC±20%	763057
REB1IS-245	4~20mADC	0~5VDC	24VDC±20%	763058
REB1IS-325	0~10VDC	4~20mADC	24VDC±20%	763052
REB1IS-335	0~10VDC	0~10VDC	24VDC±20%	763054
REB1IS-425	0~5VDC	4~20mADC	24VDC±20%	763053
REB1IS-445	0~5VDC	0~5VDC	24VDC±20%	
REB1IS-345	0~300VDC	0~5VDC	24VDC±20%	763079
REB1IS-335	0~75mVDC	0~10VDC	24VDC±20%	763078
REB1IS-325	0~75mVDC	4~20mADC	24VDC±20%	763094
REB1IS-224	4~20mADC	4~20mADC	100~240VAC/DC	763003
REB1IS-244	4~20mADC	0~5VDC	100~240VAC/DC	
REB1IS-234	4~20mADC	0~10VDC	100~240VAC/DC	
REB1IS-314	0~10VDC	0~20mADC	100~240VAC/DC	763011
REB1IS-324	0~10VDC	4~20mADC	100~240VAC/DC	
REB1IS-424	0~5VDC	4~20mADC	100~240VAC/DC	763021
REB1IS-444	0~5VDC	0~5VDC	100~240VAC/DC	



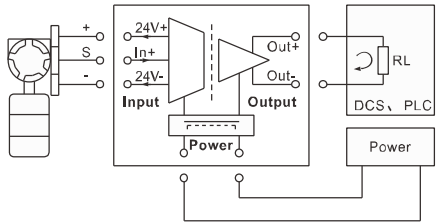
2.2. Independent power supply, three-terminal isolation, one-in and one-out for the signal, 24V power distribution at the input

Ordering Data					
Type	Input signal	Output	Auxiliary power supply	Power distribution	Order No.
REB1IS-423	0~5VDC	4~20mA DC	24VDC±20%	with 24VDC ±5% 0.6W	
REB1IS-443	0~5VDC	0~5VDC	24VDC±20%	with 24VDC ±5% 0.6W	
REB1IS-243	4~20mA DC	0~5VDC	24VDC±20%	with 24VDC ±5% 0.6W	
REB1IS-223	4~20mA DC	4~20mA DC	24VDC±20%	with 24VDC ±5% 0.6W	763034

Wiring



Power distribution two-wire

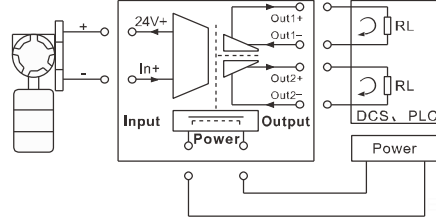


Power distribution three-wire

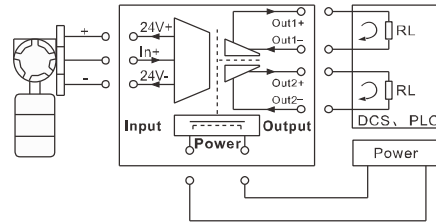
2.3. Independent power supply, four-terminal isolation, one-in and two-out for the signal, 24V power distribution at the input.

Ordering Data					
Type	Input signal	Output	Auxiliary power supply	Power distribution	Order No.
REB1IS-253	4~20mA DC	Two poles 4~20mA DC	24VDC±10%	with DC24V ±5% 0.6W	763049

Wiring



Power distribution two-wire two output

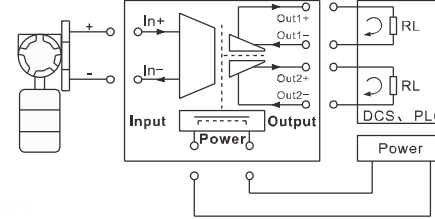


Power distribution three-wire with two output

2.4. Independent power supply, four-terminal isolation, one-in and two-out for the signal

Ordering Data				
Type	Input signal	Output	Auxiliary power supply	Order No.
REB1IS-255	4~20mA DC	two poles 4~20mA DC	24VDC±20%	763050
REB1IS-375	0~10VDC	two poles 0~10VDC	24VDC±20%	

Wiring

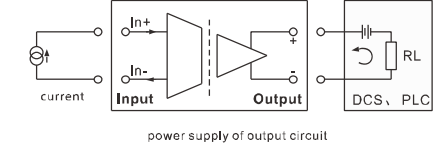


two output, two-wire

2.5. Power supplies (the output), two-terminal isolation, one-in and two-out for the signal

Ordering Data				
Type	Input signal	Output	Auxiliary power supply	Order No.
REB1IS-226	4~20mA DC	4~20mA DC	24VDC output circuit supply	

Wiring



power supply of output circuit

Dimension

