



Single Element DC Current Transducer NB-DI1B0-□□KD



■Overview

DI1B0 series products are single element DC current isolation transducer, which isolates the measured DC current signals through isolated components, and outputs linear signals such as 0-5V, 0-10V, 0-20mA, 4-20mA and so on. Widely used in power grid monitoring, PhotoVoltaic plants, motor signal monitoring, railway system signal monitoring and other industries.

■Features

- ❖ Advanced SMT technology, to ensure high precision and long-term stability;
- ❖ It is insulated between input signals and output signals; Insulation voltage can reach 2500VDC or greater.
- ❖ Strong anti-interference ability; Withstand high surge voltage impact.
- ❖ Supporting various signal output modes like 0-5Vdc,0-10Vdc,0-20mA, 4-20mA ect.
- ❖ Various power supplying modes,supporting: +12Vdc, +15Vdc, +24Vdc, 220V etc
- ❖ Compact designs, only 25mm in width suitable for 35mm DIN Rail;
- ❖ Quality certifications:ISO9001,CE,ROHS.

■Applications

- ❖ AC current signal monitoring in power grid system;
- ❖ AC current signal monitoring in Industrial controlling and monitoring System.
- ❖ AC current signal monitoring in railway signal monitoring system;
- ❖ AC current signal monitoring inPhotoVoltaic Plants

■Dimentions

- ❖ Length: 116mm
- ❖ Width: 25mm
- ❖ Height: 87mm
- ❖ Hole size: ϕ 22mm

■Part Number Guide

Company Code		Product type	Input type	Input element	Insolation	waveform		output	Aux. Power	Product style	Accuracy
NB	-	D	Direct current	I current	1 single	B 2-isolated	0 No	A 0-5V B 0-10V C 0-20m D 4-20m	2 12VDC 3 15VDC 4 24VDC	K K style	D Class 1.0

Note: The main model is NB-DI1B0-□□KD, and Box inside represents the codes variable.

Example:

- eg1: NB-DI1B0-A4KD single element direct current transducer, 2-isolated,output 0-5V,Aux.power 24V, K style, accuracy class 1.0
eg2: NB-DI1B0-C2KD single element direct current transducer, 2-isolated,output 0-20mA, Aux.Power 12V, K style, accuracy class 1.0
eg3: NB-DI1B0-D3KD single element direct current transducer, 2-isolated,output 4-20mA, Aux.Power 15V, K style, accuracy class 1.0

■Technical parameter

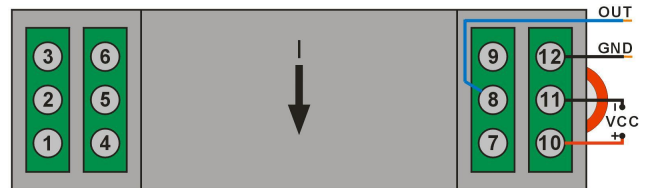
- ❖ Accuracy: Class 1.0
- ❖ Aux.Power: +12V、+15V、+24V (optional)
- ❖ Input scale: DC 20~400A (量程订制)
- ❖ Output: 0-5V、0-10V、0-20mA、4-20mA (optional)
- ❖ Operation temperature: -10℃~+60℃
- ❖ Load capacity: Voltage output $\geq$ 2K Ω ; Current output $\leq$ 250 Ω
- ❖ Static power: $\leq$ 0.3W
- ❖ Rated power: $\leq$ 0.7W
- ❖ Load of Insulation voltage: DC 2500V
- ❖ Responsive time: $\leq$ 200ms
- ❖ Thermal drift: $\leq$ 500PPm/℃
- ❖ Lightning surge: Power source end:2000V; Input end:10000A;Output end:500V;
- ❖ Case style: K style

■Instructions

- ❖ Ensure correct wiring connection to avoid possible damage to the products,and installation gap between each product should be not less than 5mm.
- ❖ Under the strong magnetic environment, the shielding signal wires should be in good conditions, against the magnetic interference.
- ❖ The product has lightning protection ability,however,lightning measures be taken when the input and output lines are exposed to the outdoor environment, .
- ❖ Do not take apart or modify the product.
- ❖ Please keep the products cool,dry ,and away from humidity or high temperature.

■Wiring

- ❖ Wiring diagram for auxiliary power supply of 12V、15V、24V.



P.S. Current hole-thru; Terminal 8 and 12 are for output; terminal 10 and 11 are for power supply. Terminal 12 is GND for output and Aux.power; Terminal 1-7 and 9 are void,no wiring.