

**NEPEAN**  
Power

# Single Element AC Current Transducer

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NEPEAN ELECTRONICS



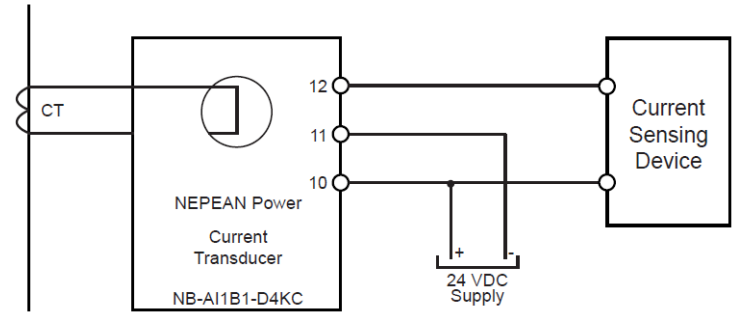
NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

The NEPEAN Power Single Element AC Current Transducer isolates the measured AC current signals through isolated components and converts into proportional linear signals 4-20mA. These transducers are appropriate for use in a vast range of industry applications such as mining, oil and gas, power grid monitoring, motor signal monitoring, railways and more.

## Features

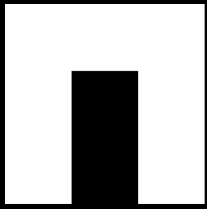
- Utilises advanced SMT technology to ensure high precision and long-term stability
- Insulated between input signals and output signals
- Strong anti-interference ability allowing the transducer withstand high surge voltage impact
- Compact design suitable for DIN rail installation

## Connection Diagram



## Technical Specification

<b>Part Number</b>	NB-AI1B1-D4KC
<b>Basic Accuracy</b>	Class 0.5
<b>Power Supply</b>	24V
<b>Input Current Range</b>	AC 30A-300A
<b>Input Frequency</b>	50-3000Hz
<b>Output Signals</b>	4-20mA
<b>Operating Temperature</b>	-10°C to 60°C
<b>Load of Output Voltage</b>	≥2KΩ
<b>Load of Output Current</b>	≤250Ω
<b>Static Power</b>	≤0.3W
<b>Rated Power</b>	≤0.7W
<b>Load of Insulation Voltage</b>	DC 2500V
<b>Response Time</b>	≤300ms
<b>Thermal Drift</b>	≤300PPm/°C
<b>Lightning Surge</b>	<b>Power End</b> 2000V <b>Input End</b> 10000A <b>Output End</b> 500V
<b>Case Style</b>	K
<b>Case Materials</b>	ABS (flame retardant)
<b>Installation</b>	35mm DIN Rail
<b>Dimensions</b>	116mm x 25mm x 87mm
<b>Hole Diameter</b>	6.2mm



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The NEPEAN Power Single Element AC Current Transducer isolates the measured AC current input signals, converts and exports linear signals 4-20mA. These transducers are appropriate for use in a vast range of industry applications such as mining, oil and gas, power grid monitoring, motor signal monitoring, railways and more.

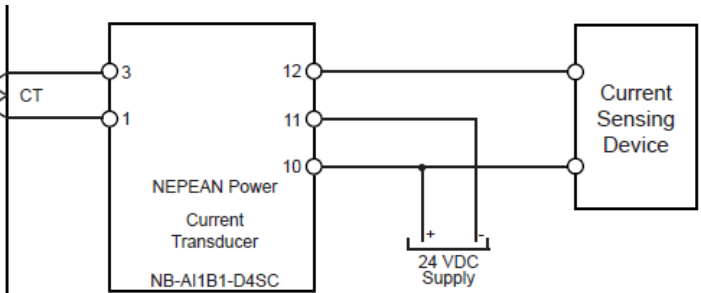
### Features

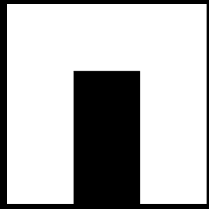
- Utilises advanced SMT technology to ensure high precision and long-term stability
- Insulated between input signals and output signals
- Strong anti-interference ability allowing the transducer withstand high surge voltage impact
- Compact design suitable for DIN rail installation

### Technical Specification

<b>Part Number</b>	NB-A11B1-D4SC
<b>Basic Accuracy</b>	Class 0.5
<b>Power Supply</b>	24V
<b>Input Current Range</b>	AC 0-5A
<b>Input Frequency</b>	50-3000Hz
<b>Output Signals</b>	4-20mA
<b>Operating Temperature</b>	-10°C to 60°C
<b>Load of Output</b>	≥2KΩ
<b>Voltage Current</b>	≤250Ω
<b>Static Power</b>	≤0.3W
<b>Rated Power</b>	≤0.7W
<b>Load of Insulation Voltage</b>	DC 2500V
<b>Response Time</b>	≤300ms
<b>Thermal Drift</b>	≤300PPm/°C
<b>Lightening Surge</b>	<b>Power End</b> 2000V <b>Input End</b> 10000A <b>Output End</b> 500V
<b>Case Style</b>	S
<b>Case Materials</b>	ABS (flame retardant)
<b>Installation</b>	35mm DIN Rail
<b>Dimensions</b>	116mm x 25mm x 42mm

### Connection Diagram





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# Single Element DC Current Transducer

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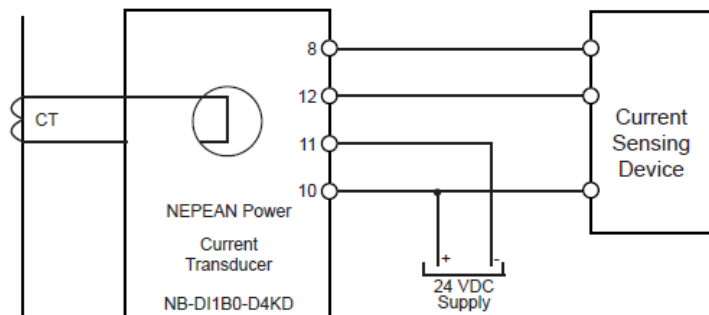
NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

The NEPEAN Power Single Element DC Current Transducer isolates the measured DC current signals through isolated components, converts and exports linear signals 4-20mA. These transducers are appropriate for use in a vast range of industry applications such as mining, oil and gas, power grid monitoring, motor signal monitoring, railways and more.

## Features

- Utilises advanced SMT technology to ensure high precision and long-term stability
- Insulated between input signals and output signals
- Strong anti-interference ability allowing the transducer withstand high surge voltage impact
- Compact design suitable for DIN rail installation
- Complies to ISO9001, CE, ROHS

## Connection Diagram



## Technical Specification

<b>Part Number</b>	NB-DI1B0-D4KD						
<b>Basic Accuracy</b>	Class 1.0						
<b>Power Supply</b>	24V						
<b>Input Current Range</b>	DC 20-400A						
<b>Input Frequency</b>	50-3000Hz						
<b>Output Signals</b>	4-20mA						
<b>Operating Temperature</b>	-10°C to 60°C						
<b>Load of Output Voltage</b>	≥2KΩ						
<b>Output Current</b>	≤250Ω						
<b>Static Power</b>	≤0.3W						
<b>Rated Power</b>	≤0.7W						
<b>Load of Insulation Voltage</b>	DC 2500V						
<b>Response Time</b>	≤200ms						
<b>Thermal Drift</b>	≤500PPm/°C						
<b>Lightning Surge</b>	<table border="0"> <tr> <td><b>Power End</b></td> <td>2000V</td> </tr> <tr> <td><b>Input End</b></td> <td>10000A</td> </tr> <tr> <td><b>Output End</b></td> <td>500V</td> </tr> </table>	<b>Power End</b>	2000V	<b>Input End</b>	10000A	<b>Output End</b>	500V
<b>Power End</b>	2000V						
<b>Input End</b>	10000A						
<b>Output End</b>	500V						
<b>Case Style</b>	K						
<b>Case Materials</b>	ABS (flame retardant)						
<b>Installation</b>	35mm DIN Rail						
<b>Dimensions</b>	116mm x 25mm x 87mm						
<b>Hole Diameter</b>	22mm						

# Triple Element AC Current Transducer

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The NEPEAN Power Triple Element AC Current Transducer detects AC currents through a wire and generates a signal which is proportional to that current. The generated signal could be analog voltage, current or even a digital output. The generated signal can then be used to display the measured current in an ammeter, or can be stored for further analysis in a data acquisition system so it can also be used for the purpose of control.

## Features

- Advanced SMT technology to ensure high precision and long term stability
- Insulated between input and output signals; Insulation voltage can reach 2500VDC or greater.
- Strong anti-interference ability. Withstands high surge voltage impact
- Capable of supporting various signal output modes
- Capable of supporting various power supplying modes
- Compact design suitable for DIN rail installation
- Quality certifications

## Technical Specification

<b>Part Number</b>	NB-AI3B1-D4EC
<b>Basic Accuracy</b>	Class 0.5
<b>Power Supply</b>	24V DC
<b>Input Current Range</b>	AC 0~5A AC
<b>Input Frequency</b>	50~3000Hz
<b>Output Signals</b>	4-20mA
<b>Operating Temperature</b>	-10°C to 60°C
<b>Load of Output Voltage</b>	≥2KΩ
<b>Output Current</b>	≤250Ω
<b>Static Power</b>	≤0.5W
<b>Rated Power</b>	≤1.5W
<b>Load of Insulation Voltage</b>	DC 2500V
<b>Response Time</b>	≤300ms
<b>Thermal Drift</b>	≤300PPm/°C
<b>Lightening Surge</b>	<b>Power End</b> 2000V <b>Input End</b> 10000A <b>Output End</b> 500V
<b>Case Style</b>	E
<b>Case Materials</b>	ABS (flame retardant)
<b>Installation</b>	35mm DIN Rail
<b>Dimensions</b>	116mm x 25mm x 87mm
<b>Hole Diameter</b>	6.2mm