**3.2 Wiring of Analog Input**

- **Specifications**
  - **Analog input range**
    - Digital output value
    - Resolution
  - **Isolation method**
    - Between input terminal and PLC: Photocoupler

**4.1 Applicable CPU modules**

- **Model name**
  - MELSEC iQ-F FX5U User's Manual (Hardware)
  - MELSEC iQ-F FX5UC User's Manual (Hardware)

**4.3 Power Supply Specifications**

- **Input**
  - Internal supply: 100 to 240 V AC power supply
  - Internal supply: 24 V DC power supply

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For detailed specifications and precautions, please refer to the manual sections on installation and specifications.
1. Outline

The FX5-4AD-ADP expansion adapter for analog input (hereinafter called 4AD-ADP) is a device for inputting analog signals in a user program. The following shows the specifications of the product. Before use, read this manual and manuals of other equipment.

1.1 Specifications

- **Analog Input**: 4 channels, input points 4 points (4 channels)
- **Input**: 4 to 20 mA, 0 to 12800 (1.25 kΩ), 0 to 20 mA, 0 to 16000 (1.25 kΩ), 0 to 10 V, 0 to 16000 (625 kΩ)
- **Accuracy**: ±0.3% (±48 digit) for 4 to 20 mA, 0 to 12800, 1.25 kΩ
- **A/D conversion circuit**: 180 kΩ, 820 kΩ
- **Current**: 20 mA
- **Power supply**: 24 V DC
- **Power consumption**: 2 W
- **Dimensions (WxDxH)**: 90 x 54 x 30 mm

1.2 External Dimensions, Part Names, and Terminal Layout

![Image of the external dimensions, part names, and terminal layout of the FX5-4AD-ADP expansion adapter for analog input.]

1.3 Wiring of Analog Input

For the terminal configurations, refer to section 1.3 of the manual for more details.

2. Wiring

- **Wiring Precautions**
  - Use shielded twisted pair cable for the analog input lines, and ensure that the shield is connected to the control cabinet. The grounding resistance should be 100 Ω, but it should be less than or equal to 500 Ω.
  - Bring the grounding points close to the PLC as much as possible so that the ground potential difference is minimized.
  - The ground wire size should be RHW-2 (2×0.34 mm²) or BVR-2 (2×0.5 mm²).
  - terminals and ground block
  - Dimensions (WxDxH): 90 x 54 x 30 mm

3. Wiring

3.1 Terminal Block Configuration

- **Wiring Precautions**
  - Use shielded twisted pair cable for the analog input lines, and ensure that the shield is connected to the control cabinet. The grounding resistance should be 100 Ω, but it should be less than or equal to 500 Ω.
  - Bring the grounding points close to the PLC as much as possible so that the ground potential difference is minimized.
  - The ground wire size should be RHW-2 (2×0.34 mm²) or BVR-2 (2×0.5 mm²).

4. Specifications

4.1 CPU Module Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU module type</td>
<td>Mitsubishi MELSEC iQ-F FX5UC CPU module (Hardware)</td>
</tr>
<tr>
<td>Power supply voltage</td>
<td>24 V DC</td>
</tr>
<tr>
<td>Power consumption</td>
<td>2 W</td>
</tr>
<tr>
<td>Dimensions (WxDxH)</td>
<td>90 x 54 x 30 mm</td>
</tr>
</tbody>
</table>

4.2 Analog Input Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>4-channel input</td>
</tr>
<tr>
<td>Input voltage range</td>
<td>0 to 10 V, 0 to 16000 (625 kΩ)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.3% (±48 digit) for 4 to 20 mA, 0 to 12800, 1.25 kΩ</td>
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</tbody>
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4.3 Power Supply Specifications

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<td>Dimensions (WxDxH)</td>
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</tr>
</tbody>
</table>

5. Installation

5.1 Wiring the product

- **Installation Precautions**
  - Use shielded twisted pair cable for the analog input lines, and ensure that the shield is connected to the control cabinet. The grounding resistance should be 100 Ω, but it should be less than or equal to 500 Ω.
  - Bring the grounding points close to the PLC as much as possible so that the ground potential difference is minimized.
  - The ground wire size should be RHW-2 (2×0.34 mm²) or BVR-2 (2×0.5 mm²).

6. Troubleshooting

For troubleshooting, refer to the following manuals:

- MELSEC-Q Q6 FX-002Q User's Manual (Hardware)
- MELSEC-Q Q6 FX-004Q User's Manual (Hardware)
- MELSEC-Q Q6 FX-008Q User's Manual (Hardware)
- MELSEC-Q Q6 FX-016Q User's Manual (Hardware)
- MELSEC-Q Q6 FX-032Q User's Manual (Hardware)
- MELSEC-Q Q6 FX-064Q User's Manual (Hardware)
- MELSEC-Q Q6 FX-128Q User's Manual (Hardware)

7. Warranty

- The product has been manufactured as a general purpose product for general use. The product is not intended for use in applications where critical system performance is required such as in aviation, aerospace, medicine, or passenger movement vehicles. Therefore, no warranty is given regarding performance in such applications.

8. For safe use

- This product has been manufactured as a general purpose product for general use. It is intended for use in applications where critical system performance is not required.