Chapter 3 \ Installation and Wiring Precautions

3.1 Installation

The module is designed to be mounted in a standard 50 mm high cut-out in the panel. It can be mounted either horizontally or vertically. The module is designed for wall mounting and includes the terminal block and wiring harness. Prior to installation, be sure to read this manual and Part 3. Precautions on Installation. If you have any questions or the product may have a failure, make an inquiry to our company. Our company shall not be liable to compensate for any loss arising from events not covered by the warranty except the charge-free warranty period for the replacement product shall not be extended.

Pre-Caution:
- Make sure that the module is securely mounted in the panel.
- Ensure that the module is not located in a location where it can be easily knocked or bumped.
- Do not touch powered wires. It may cause a malfunction.
- When performing wiring, be sure to disconnect the power.
- Do not apply excessive force to the module when mounting it in the panel.
- Do not apply excessive force to the terminal block when wiring.

3.2 Wiring Precautions

3.2.1 Check the stripping length using the strip gauge of this module.
- Check the connections with a tester contact.
- Use properly insulated terminals.
- Do not use the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.2.2 Applicable wire
- Recommended (Usable electric wire)

3.2.3 Wiring direction
- It is recommended that the wires be connected with a tester contact.
- Use properly insulated terminals.
- Do not use the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.2.4 Wiring distance
- It is recommended that the wires be connected with a tester contact.
- Use properly insulated terminals.
- Do not use the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.3 Connection

3.3.1 Current Sensor Input
- The current sensor input is configured to accept a maximum input of 1000A. It is recommended that the connections be made with a tester contact.
- Use properly insulated terminals.
- Do not use the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.3.2 Power Source Side
- The power source side is configured to accept a maximum input of 1000V. It is recommended that the connections be made with a tester contact.
- Use properly insulated terminals.
- Do not use the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.3.3 Load Side
- The load side is configured to accept a maximum input of 1000V. It is recommended that the connections be made with a tester contact.
- Use properly insulated terminals.
- Do not use the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.3.4 Wiring
- It is recommended that the wires be connected with a tester contact.
- Use properly insulated terminals.
- Do not use the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.4 Precautions for Start-up and Maintenance

3.4.1 Start-up
- Do not start the module if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.4.2 Maintenance
- Do not perform maintenance if the connections are not properly insulated.
- Use the module only if the connections are properly insulated.

3.5 Troubleshooting

3.5.1 Error Codes
- Error Code 1: Overcurrent
- Error Code 2: Short Circuit
- Error Code 3: Overvoltage
- Error Code 4: Undervoltage

3.5.2 Error Conditions
- Overcurrent: Current exceeds the rated value.
- Short Circuit: Short circuit detected.
- Overvoltage: Voltage exceeds the rated value.
- Undervoltage: Voltage is below the rated value.

3.5.3 Error Handling
- If an error occurs, stop the operation immediately, and take an appropriate action such as isolation protection.
- If the error persists, contact our company for assistance.

Chapter 4 \ Specifications

4.1 Names and Functions of Parts of RE81WH are provided below.

4.1.1 Names
- MEA: Main Energy Analyzer
- ALM1: Alarm 1
- ALM2: Alarm 2

4.1.2 Functions
- MEA: Measures the input current and voltage.
- ALM1: Alarm 1 indicator.
- ALM2: Alarm 2 indicator.

4.2 Names and Functions of LEDs

4.2.1 Names
- LED1: Operating indicator (Green)
- LED2: Operating indicator (Red)
- LED3: Operating indicator (Amber)

4.2.2 Functions
- LED1: Indicates the module is operating normally.
- LED2: Indicates the module is operating in alarm mode.
- LED3: Indicates the module is in maintenance mode.

Chapter 5 \ Troubleshooting

5.1 General

5.1.1 Troubleshooting
- If a problem occurs, refer to the Troubleshooting Guide provided in the manual or contact our company for assistance.

5.1.2 Error Code Table
- Error Code 1: Overcurrent
- Error Code 2: Short Circuit
- Error Code 3: Overvoltage
- Error Code 4: Undervoltage

Chapter 6 \ References

6.1 Related Standards

6.1.1 EN61010-1:2010
- Equipment designed to be used by the public
- Equipment intended for use in a professional environment
- Equipment intended for use in a domestic environment

6.1.2 IEC 61000-4-2:2008
- Electromagnetic compatibility and radio spectrum Matters

Chapter 7 \ Appendices

7.1 Replacement of Plastic Part

7.1.1 Replacing Plastic Part
- If a plastic part is damaged, replace it with a new one before using the module.

7.1.2 Replacing Plastic Part
- If a plastic part is damaged, replace it with a new one before using the module.

7.1.3 Replacing Plastic Part
- If a plastic part is damaged, replace it with a new one before using the module.

Chapter 8 \ Customer Service

8.1 Contact Information

8.1.1 Contact Information
- Mitsubishi Electric Corporation
- Address: 2-10-1, Higashiyama-ku, Tokyo 139-8549, Japan
- Telephone: +81-3-3221-2111
- Fax: +81-3-3221-2112

8.1.2 Contact Information
- Mitsubishi Electric Corporation
- Address: 2-10-1, Higashiyama-ku, Tokyo 139-8549, Japan
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