

SYH&AQYE BST-I-W1-A5-O5-P2

AC Transmitter Current Sensor User Manual

Model: BST-I-W1-A5-O5-P2 | Brand: SYH&AQYE

1. INTRODUCTION

The SYH&AQYE AC Transmitter Current Sensor, Model BST-I-W1-A5-O5-P2, is a high-precision device designed for accurate current measurement in various industrial applications. This transmitter converts AC current signals into a DC voltage output, making it suitable for integration into automatic control and dispatching systems.

Key features include a 0.1% grade accuracy for quick response, support for international standard DIN35MM card slot rail installation, improved stainless steel terminal blocks for fast wiring, and strong anti-interference ability for stable performance.

2. SPECIFICATIONS

Parameter	Value
Item Type	Transmitter
Model	BST-I-W1-A5-O5-P2
Channel Configuration	One-in one-out
Power Supply Voltage	DC 24V \pm 10%
Rated Power Consumption	\leq 1W
Response Time	\leq 100MS
Insulation Strength	2000V AC / 1MIN
Insulation Resistance	\geq 100M Ω
Ambient Temperature	-20-55 (°C)
Material	ABS flame retardant plastic

Parameter	Value
Input	AC 0-10A
Output	DC 0-10V

3. PACKAGE CONTENTS

The package for the BST-I-W1-A5-O5-P2 AC Transmitter Current Sensor includes:

- 1 x Transmitter

4. SETUP AND INSTALLATION

The AC Current Transmitter is designed for easy installation using the international standard DIN35MM card slot rail. Ensure the power supply is disconnected before proceeding with installation and wiring.

4.1 Physical Installation

Mount the transmitter securely onto a standard DIN35MM rail in your electrical enclosure. Ensure adequate ventilation around the device to maintain optimal operating temperature.



Figure 4.1: Front view of the AC Current Transmitter, highlighting its compact design and label with model and specifications.

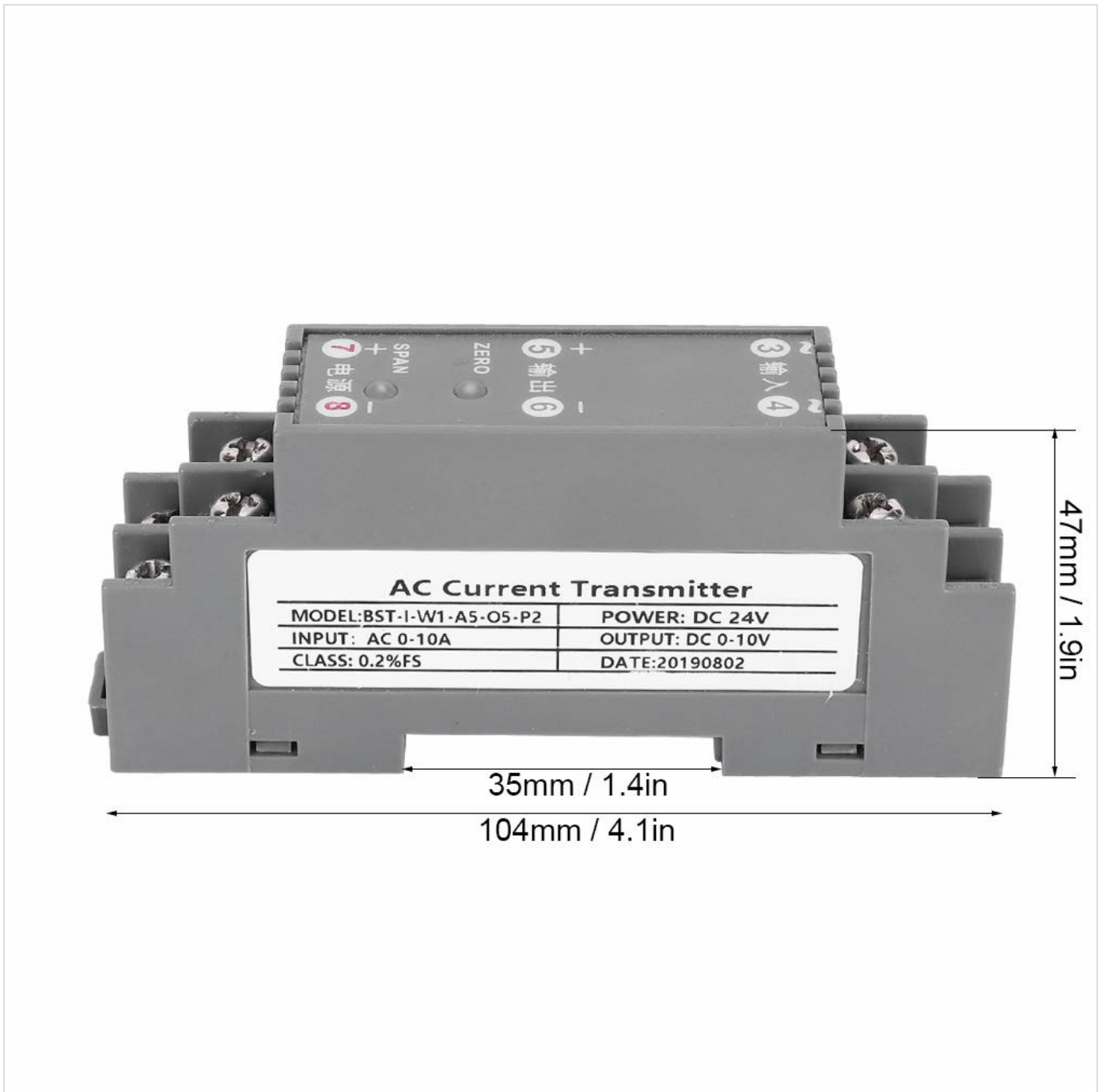


Figure 4.2: Dimensions of the AC Current Transmitter, crucial for space planning during installation.

4.2 Wiring Connections

The transmitter features improved stainless steel terminal blocks for reliable and fast wiring. Refer to the markings on the device for correct input, output, and power supply connections. Ensure all connections are firm and secure to prevent intermittent operation or damage.

- **Power Supply:** Connect DC 24V \pm 10% to the designated power terminals (typically marked 7 and 8).
- **Input:** Connect the AC current source (0-10A) to the input terminals (typically marked 3 and 4).
- **Output:** Connect your control system or measurement device to the DC 0-10V output terminals (typically marked 5 and 6).



Figure 4.3: Top view of the transmitter, clearly showing the labeled terminals for power, input, and output connections.

Important: Always verify wiring against the device's labels and local electrical codes before applying power. Incorrect wiring can lead to device malfunction or safety hazards.

5. OPERATING INSTRUCTIONS

Once properly installed and wired, the AC Current Transmitter operates automatically. It continuously converts the AC input current (0-10A) into a proportional DC voltage output (0-10V).

- **Response Speed:** The transmitter boasts a quick response speed of $\leq 100\text{MS}$, ensuring real-time current monitoring.
- **Stability:** Designed with strong anti-interference capabilities, the device maintains good stability even in electrically noisy environments, preventing false readings due to instant waves.



Figure 5.1: The transmitter's robust design ensures good stability and strong anti-interference capabilities for reliable operation.

High precision transmitter Quick response

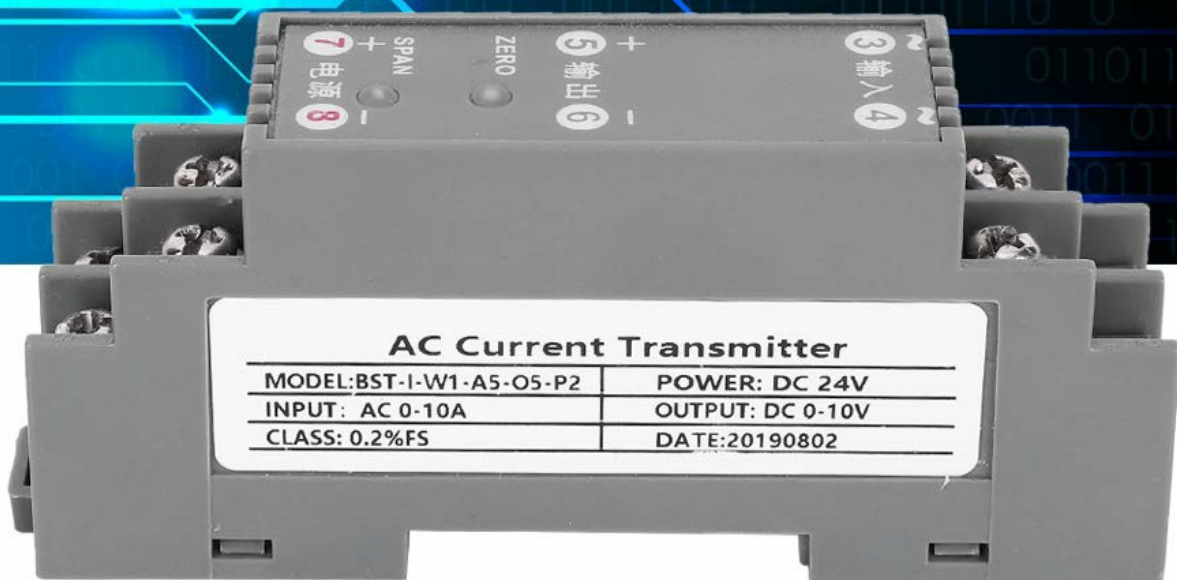


Figure 5.2: The device is engineered for high precision and quick response, essential for critical control systems.

6. MAINTENANCE

The AC Current Transmitter is designed for long-term, reliable operation with minimal maintenance. However, periodic checks can help ensure its continued performance.

- **Cleaning:** Keep the device clean and free from dust and debris. Use a soft, dry cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Connections:** Periodically inspect wiring connections to ensure they remain tight and free from corrosion.
- **Environmental Conditions:** Ensure the operating environment remains within the specified ambient temperature range (-20 to 55 °C) and humidity levels to prevent damage.

7. TROUBLESHOOTING

If you encounter issues with your AC Current Transmitter, consider the following troubleshooting steps:

- **No Output/Incorrect Reading:**

- Verify that the DC 24V power supply is connected correctly and is within the specified voltage range.
- Check all input and output wiring for correct polarity and secure connections.
- Ensure the AC input current is within the 0-10A range.
- Inspect for any visible damage to the device or its terminals.

- **Intermittent Operation:**

- Check for loose wiring connections.
- Ensure the operating environment is stable and free from excessive electrical noise or temperature fluctuations.

If problems persist after performing these checks, contact SYH&AQYE customer support for further assistance.

8. WARRANTY AND SUPPORT

This SYH&AQYE product is covered by a standard manufacturer's warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or visit the official SYH&AQYE website.

For technical support, troubleshooting assistance, or warranty claims, please contact SYH&AQYE customer service through their official channels. Provide your product model number (BST-I-W1-A5-O5-P2) and a detailed description of the issue when seeking support.

You can find more information and contact details on the [SYH&AQYE Store on Amazon](#).