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Stahl 9350/20-11-10

STAHL 9350/20-11-10 ICS PAK Switching Repeater Module User Manual

Model: 9350/20-11-10 | Brand: Stahl

1. Introduction

This user manual provides essential information for the installation, operation, and maintenance of the STAHL 9350/20-11-10 ICS PAK Switching Repeater Module. Please read this manual thoroughly before using the device to ensure safe and efficient operation.
The STAHL 9350/20-11-10 is a switching repeater module designed for industrial applications, providing intrinsically safe circuits for hazardous locations. It is a critical component in control and automation systems.

2. Safety Information

WARNING: Substitution of components may impair intrinsic safety.
Always adhere to local and national electrical codes and regulations. Installation and maintenance should only be performed by qualified personnel.
This device provides intrinsically safe circuits for approved Class I, II, III, Div. 1, Groups A,B,C,D,E,F,G hazardous locations when installed per document 93 506 01 31 0.
Nonincendive Class I, Div. 2, Groups A,B,C,D. 10.6V / 360 Ohms. Provides intrinsically safe circuits for Class I, Groups A,B,C,D, Class II Groups E,F,G, Class III. Refer to document 93 506 01 31 0 for installation and entity parameters.

3. Product Overview

The STAHL 9350/20-11-10 ICS PAK Switching Repeater Module is a compact and robust device designed for reliable signal transmission in industrial environments, particularly those requiring intrinsic safety.

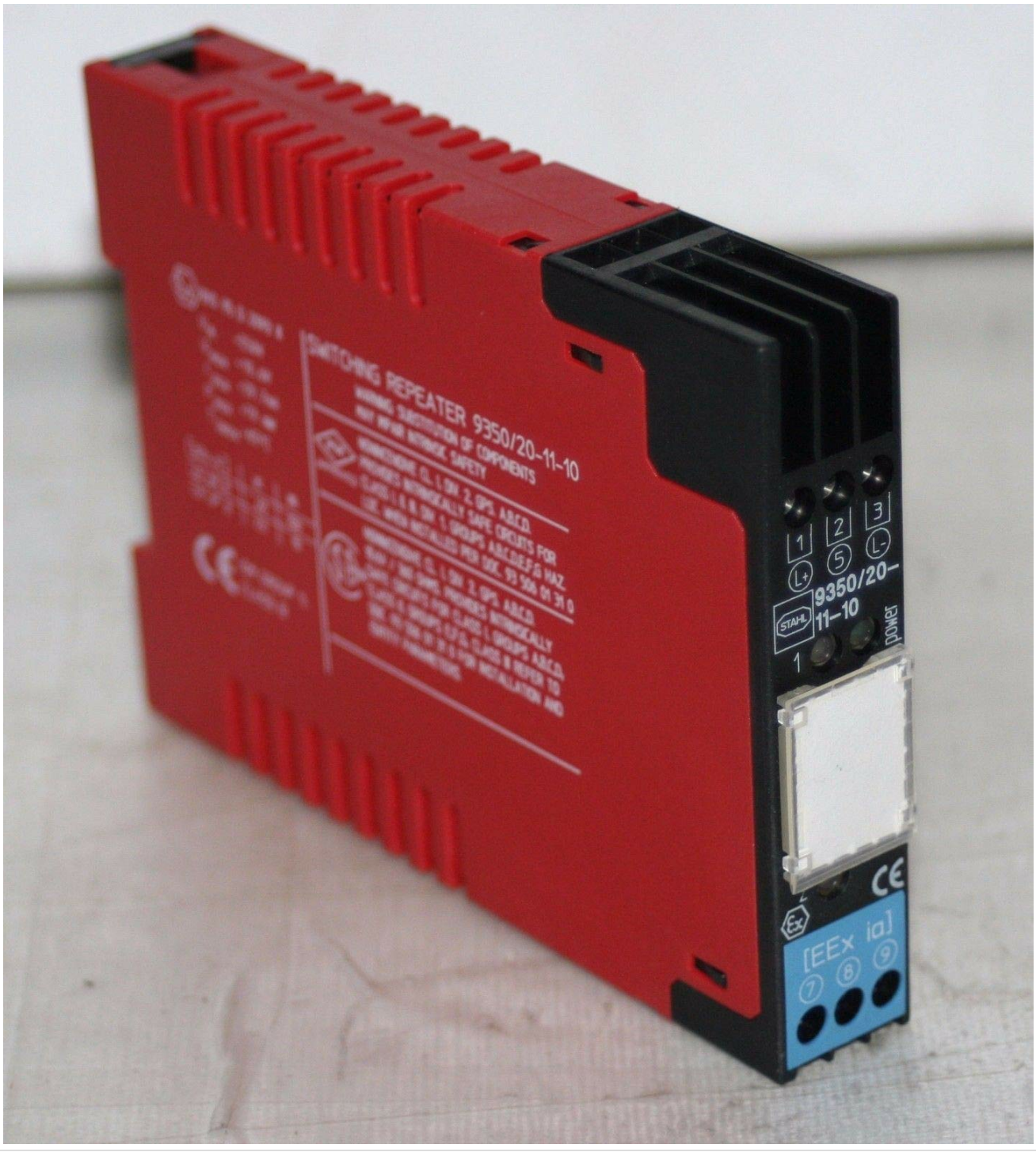
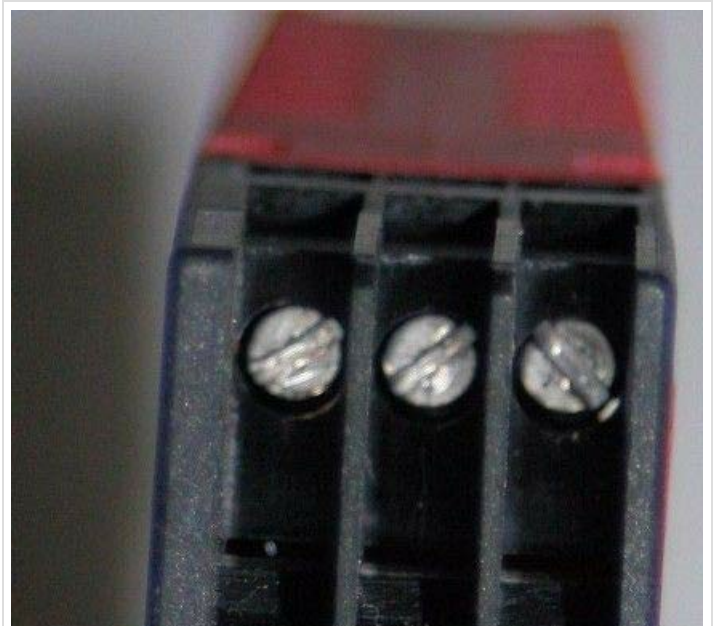


Figure 3.1: Front view of the STAHL 9350/20-11-10 module, showing the main body and terminal connections.

Figure 3.2: Side view of the module, displaying key safety certifications and electrical parameters such as U_m, U_{max}, I_{max}, P_{max}, and T_{umax}.



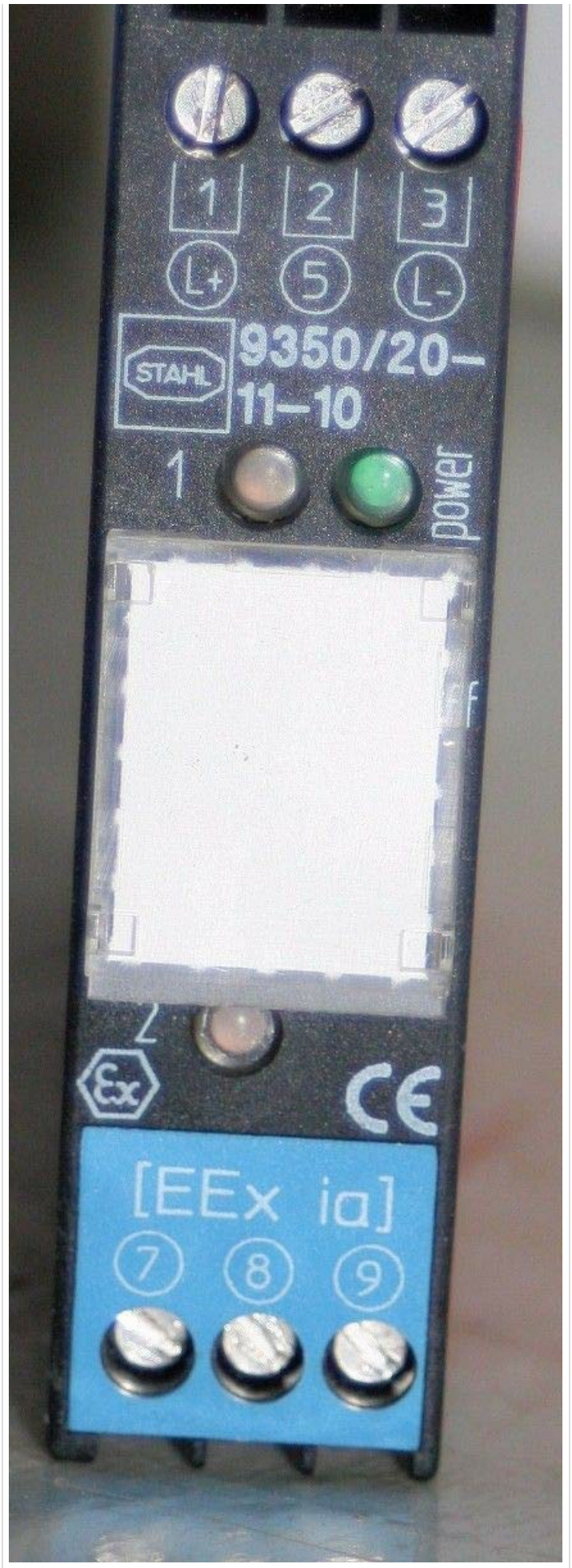


Figure 3.3: Close-up view of the terminal blocks and indicator lights on the module. Shows connections for L+, L-, and intrinsically safe circuits.

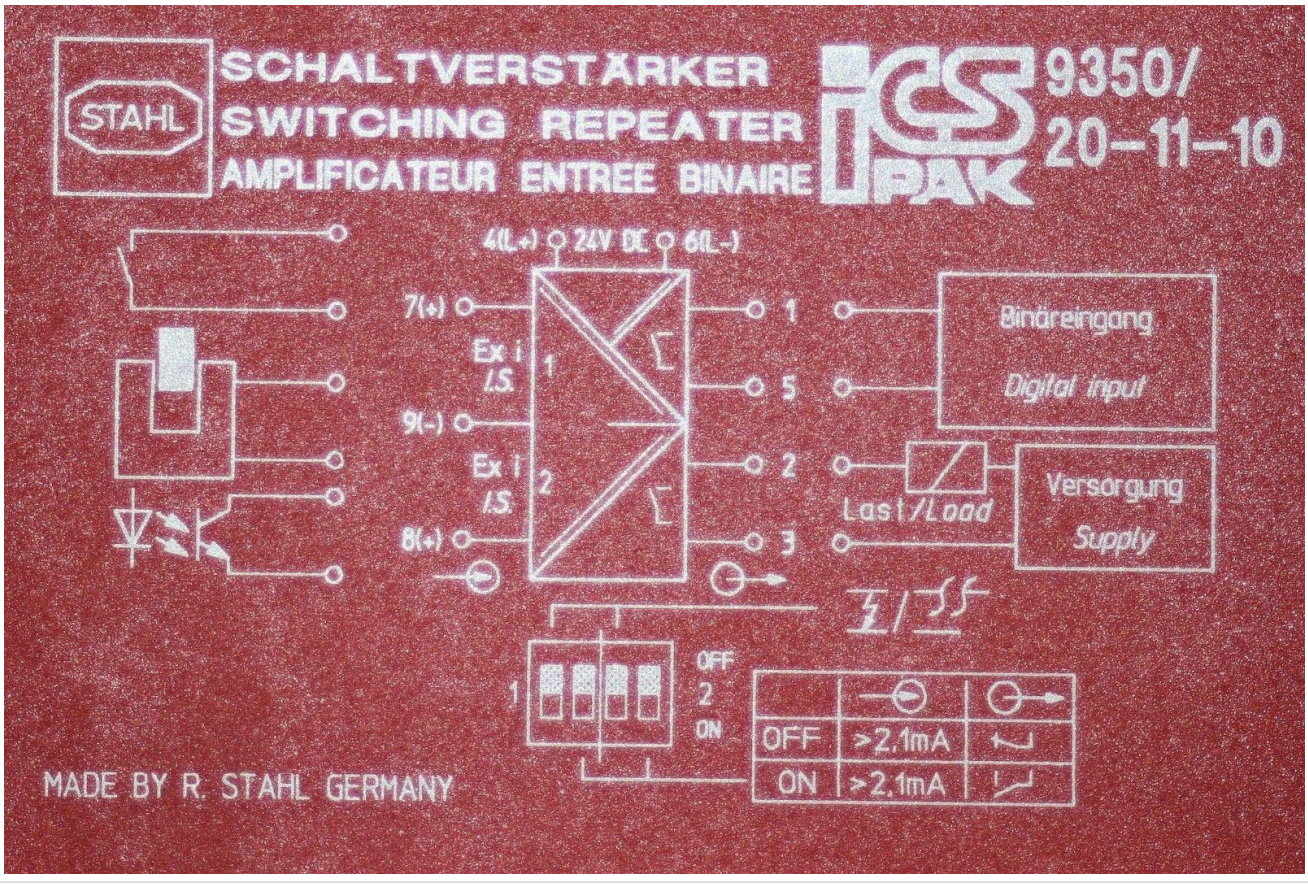


Figure 3.4: Detailed wiring diagram for the STAHL 9350/20-11-10 module, illustrating connections for digital input, load, and supply, along with DIP switch settings.

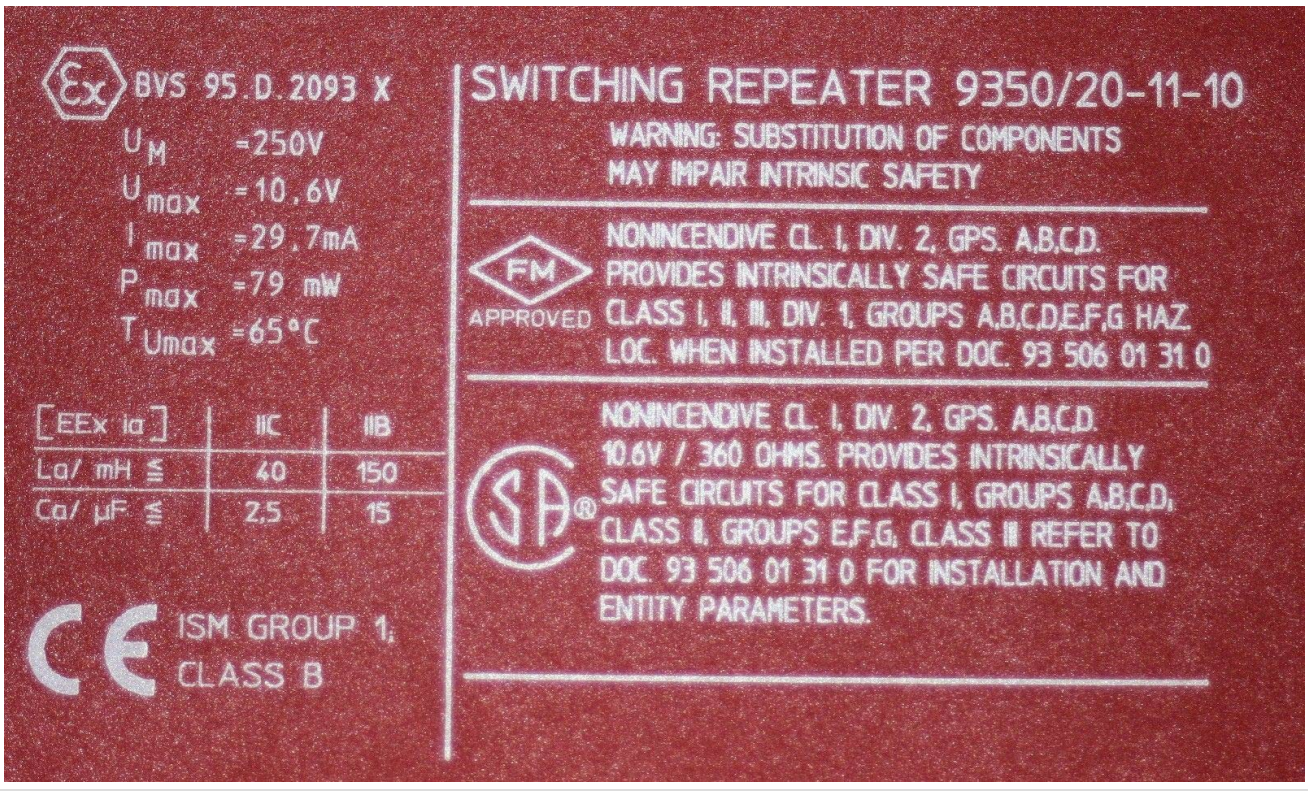


Figure 3.5: Close-up of the product label showing detailed electrical and safety specifications, including nonincendive and intrinsically safe circuit parameters.

4. Setup and Installation

The STAHL 9350/20-11-10 module is designed for DIN rail mounting within an appropriate enclosure. Ensure the

environment meets the specified operating conditions.

4.1 Wiring Connections

Refer to Figure 3.4 for the detailed wiring diagram. Ensure all connections are secure and comply with intrinsic safety requirements.

- **Power Supply:** Connect 24V-DC to the designated terminals.
- **Input:** Connect the digital input signal to the appropriate terminals.
- **Output:** Connect the load to the output terminals.

4.2 DIP Switch Configuration

The module features DIP switches for specific configurations. Consult the wiring diagram (Figure 3.4) for switch settings related to current limits (e.g., >2.1mA).

5. Operating Instructions

Once installed and wired correctly, the module operates automatically based on its configuration. The indicator lights on the front panel provide status feedback.

- **Power Indicator:** A green LED indicates that the module is receiving power.
- **Status Indicator:** An amber LED may indicate the status of the input or output signal, depending on the specific application.

The module acts as a switching repeater, transmitting signals while maintaining intrinsic safety barriers.

6. Maintenance

The STAHL 9350/20-11-10 module is designed for long-term, reliable operation with minimal maintenance. Regular inspections are recommended.

- **Visual Inspection:** Periodically check for any signs of physical damage, loose connections, or corrosion.
- **Cleaning:** If necessary, clean the exterior of the module with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Component Replacement:** As stated in the safety information, substitution of components may impair intrinsic safety. Only use genuine STAHL replacement parts if repair is authorized and necessary.

7. Troubleshooting

This section provides guidance for common issues. For problems not listed here, contact qualified technical support.

Problem	Possible Cause	Solution
No power indicator light	No 24V-DC supply; incorrect wiring; faulty power supply.	Check 24V-DC power source; verify power connections; test power supply unit.
Module not responding to input	Incorrect input wiring; faulty input device; incorrect DIP switch setting.	Verify input wiring; test input device; check DIP switch configuration against diagram.

Problem	Possible Cause	Solution
Output not activating	Incorrect output wiring; faulty load; module malfunction.	Verify output wiring; test the connected load; if problem persists, contact support.

8. Technical Specifications

Parameter	Value
Model	9350/20-11-10
Brand	Stahl
Input Voltage	24V-DC
Product Dimensions	4.25 x 3.25 x 1 inches
Item Weight	0.3 Pounds (4.8 ounces)
Max Voltage (U_m)	250V
Max Output Voltage (U_{max})	10.6V
Max Output Current (I_{max})	29.7mA
Max Output Power (P_{max})	79 mW
Max Ambient Temperature (T_{umax})	65°C
Intrinsic Safety Certification	[EEx ia] IIC, IIB (refer to doc. 93 506 01 31 0)
Nonincendive Certification	Class I, Div. 2, Groups A,B,C,D

9. Warranty and Support

For warranty information and technical support, please contact STAHL directly or your authorized distributor. Refer to the official STAHL website for the most current contact details and support resources.
When contacting support, please provide the model number (9350/20-11-10) and any relevant details about your issue.

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