Schneider Electric XPSAC3721P

Schneider Electric XPSAC3721P XPS AC Emergency Stop Module

User Instruction Manual

1. Introduction

This manual provides essential information for the safe and effective use of the **Schneider Electric XPSAC3721P XPS AC Emergency Stop Module**. This device is designed for monitoring a single safety function in industrial applications.

The XPSAC3721P is a safety relay that offers an optimal solution for supervising critical safety functions such as emergency stops, safety switches, coded magnetic switches, and validation controls. It operates on a 230 V AC supply and is built to meet stringent safety standards.

Figure 1: Schneider Electric XPSAC3721P XPS AC Emergency Stop Module. This image displays the red and black safety relay, highlighting its terminal connections and the product label with specifications.

2. Setup and Installation

Proper installation is crucial for the safe and reliable operation of the XPSAC3721P module. Ensure all local and national electrical codes are followed.

2.1. Electrical Connections

- **Power Supply:** Connect the 230 V AC, 50/60 Hz power supply to terminals A1 and A2. Ensure a suitable fuse is installed in the A1/A2 circuit as indicated on the device.
- **Safety Inputs:** Connect emergency stop buttons, safety switches, or other safety devices to the input terminals (e.g., 13, 14, 23, 24, 33, 34, Y1, Y2). Refer to the wiring diagram on the device for specific connections.
- **Output Contacts:** The module provides safety output contacts (e.g., K1, K2, Y43, Y44) for controlling machinery. Connect these outputs to the control circuit of the equipment to be stopped.
- **Protective Earth (PE):** Ensure the protective earth terminal is properly connected to the system's ground.

2.2. Environmental Conditions

The module is designed to operate within an ambient temperature range of -10 °C to 55 °C. Install the device in an environment free from excessive dust, moisture, and corrosive gases.

3. Operating Instructions

The XPSAC3721P module continuously monitors the state of connected safety devices. Its operation is largely automatic once correctly installed.

3.1. Power-Up and Status Indicators

- Upon power-up, the module performs a self-test.
- The A1/A2 Fuse indicator (LED) will illuminate if the power supply is present and the fuse is intact.
- The K1/K2 indicators (LEDs) provide status feedback on the internal safety relays. These LEDs will indicate the state of the safety outputs.

3.2. Safety Function Monitoring

When the connected safety devices are in a safe state (e.g., emergency stop button released, safety gate closed), the module's internal relays will energize, closing the safety output contacts (K1, K2, Y43, Y44) to allow machine operation.

In the event of a safety function activation (e.g., emergency stop pressed, safety gate opened), the module will de-energize its internal relays within a response time of 100ms, opening the safety output contacts and bringing the machine to a safe stop.

4. Maintenance

The XPSAC3721P module is designed for minimal maintenance. However, regular inspections are recommended to ensure continued safe operation.

- **Visual Inspection:** Periodically inspect the module for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** Keep the module clean and free from dust and debris. Use a soft, dry cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Functional Testing:** Regularly test the safety function connected to the module (e.g., activate the emergency stop) to verify that the module responds correctly and brings the machine to a safe state.

Note: Information regarding the availability of spare parts for this product is currently unavailable.

5. Troubleshooting

If the XPSAC3721P module or the connected safety circuit is not functioning as expected, follow these troubleshooting steps:

1. **No Power/Indicators Off:**
    - Check the main power supply to terminals A1 and A2.
    - Verify the A1/A2 fuse. Replace if blown.
    - Ensure all power connections are secure.
2. **Safety Outputs Not Activating (K1/K2 LEDs Off when expected):**

- Check the state of all connected safety input devices (e.g., emergency stop buttons, safety gates). Ensure they are in their safe, closed, or released position.
- Inspect wiring to input terminals for breaks or short circuits.
- Verify that the reset conditions (if applicable to your safety circuit design) are met.

3. **Safety Outputs Not Deactivating (K1/K2 LEDs On when expected to be Off):**
   - Check if any safety input device is stuck in an activated state.
   - Inspect wiring to input terminals for unintended connections or short circuits.
4. **Unusual Behavior:**
   - If the module exhibits erratic behavior, power cycle the device.
   - If problems persist, contact Schneider Electric technical support.

6. Technical Specifications

Parameter	Value
Model Number	XPSAC3721P
Nominal Supply Voltage	230 V AC – 15% to +10%
Supply Frequency	50/60 Hz
Maximum Power Consumption	6 VA AC
Operating Ambient Temperature	-10 °C to 55 °C
Product Dimensions (L x W x H)	10.3 x 2.8 x 11.9 cm
Product Weight	0.21 kg (236 grams)
Response Time	≤ 100 ms
AC15-C300 Rating	Ue=230V AC / Ie=0.75A
DC13 Rating	Ue=24V DC / Ie=2A
Standards	EN/IEC 60947-5-1

7. Warranty and Support

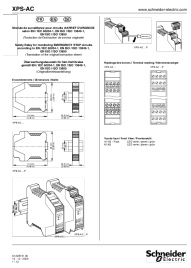
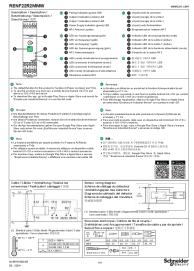
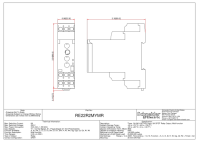
For warranty information, please refer to the terms and conditions provided at the time of purchase or contact your authorized Schneider Electric distributor. Specific warranty details are not included in this manual.

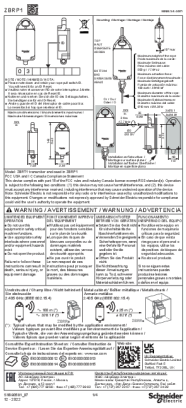
For technical support, product inquiries, or service, please contact Schneider Electric customer service or visit their official website. Ensure you have your product model number (XPSAC3721P) and any relevant purchase details ready when seeking support.

Manufacturer: Schneider Electric

Manufacturer Address: FR 92506 Rueil Malmaison

Related Documents - XPSAC3721P

	Schneider Electric XPS-AC Safety Relay for Emergency Stop Monitoring This document provides comprehensive technical information, safety guidelines, and operational details for the Schneider Electric XPS-AC safety relay. It covers features, specifications, wiring diagrams, functional diagrams, and compliance standards for monitoring emergency stop circuits.
	Schneider Electric RNF22R2MMW Timer Relay Technical Specification Detailed technical specifications, functions, LED indications, wiring diagrams, and setup guide for the Schneider Electric RNF22R2MMW timer relay. This document covers various operational modes and electrical connections.
	Zelio Logic Catalogue Janvier 2022 - Schneider Electric Logic Modules Comprehensive catalog of Schneider Electric's Zelio Logic compact and modular logic modules. Details features, technical specifications, references, programming software (Zelio Soft 2), communication options (Modbus, Ethernet, Modem), and accessories for industrial automation applications.
	Schneider Electric RE22R2MYMR Multifunction Relay Technical Specifications Detailed technical specifications, dimensions, and product information for the Schneider Electric RE22R2MYMR multifunction relay, featuring 8A DPDT output and 24-240V AC/DC input.

	[ZBRP1 Rope Pull Switch: Installation and Operation Guide] Comprehensive guide for the Schneider Electric ZBRP1 rope pull switch, covering mounting, specifications, safety warnings, and teach/unteach procedures. Learn how to install and configure this industrial safety component.
	[Schneider Electric Harmony Timer Relays RE22R2MMU Data Sheet] Detailed product data sheet for the Schneider Electric Harmony Timer Relay, model RE22R2MMU. Includes specifications, technical descriptions of functions, dimensions, wiring diagrams, environmental data, and ordering information.