# **PACSafe Interface Modules for Light Curtains**

Reliable, Fast, and Simple Safety

Emerson PACSafe Interface Modules provide isolated safety output contacts for light curtains and other primary safety devices with External Device Monitoring (EDM). Featuring 6 amp hard contact outputs, these modules are an integral part of a complete safety solution.

## **Reliable and Fast Performance**

PACSafe Interface Modules operate on 24 VDC inputs and provide isolated redundant output channels for interfacing DC safety controls (such as safety light curtains or other safety modules) to safety circuits. The outputs of the modules follow the action of the safety outputs from the primary safety device which control it, within a 20ms switching delay time. Normally open outputs are each rated for up to 6 amps, 250 VAC/ 24VDC. A series connection of normally closed contacts provides monitoring and forced-guided contacts allow the safety device to detect failures.

Featuring an enclosure designed to withstand temperature, humidity, and vibration, PACSafe Interface Modules will work when and where you need them.

# **Simple Installation**

With preset functionality, PACSafe Interface Modules make installation quick and easy. No configuration is needed so you can connect to light curtains right out of the box and begin creating your basic safety solution immediately.

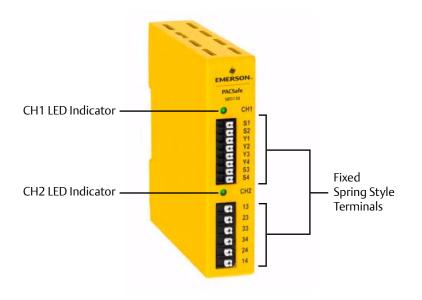


# **Total Safety Solution**

PACSafe Interface Modules are part of Emerson's comprehensive machine safety portfolio. These Safety Relay Modules, when integrated with Emerson's PACSafe Configurable Safety Controllers and accessories, connect seamlessly with the rest of Emerson's PACSystems and PACMotion standard control solutions. Portfolio options include E-stop monitoring, muting safety, and safety mats. With all of these possibilities, PACSafe brings advanced machine safety to Emerson's comprehensive portfolio as your complete automation provider.

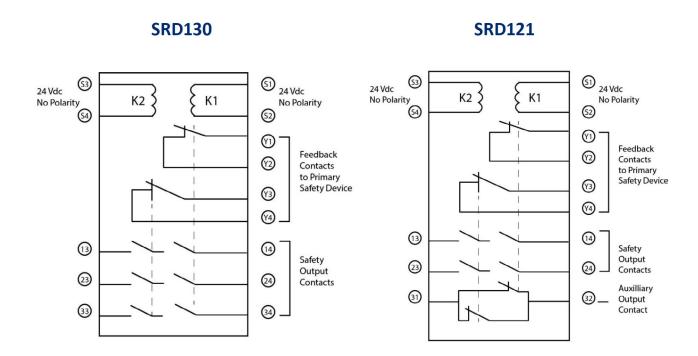


## **Features and Indicators**



- 24 VDC operation
- Normally closed outputs for connection to the primary safety device's monitoring input
- 22.5 mm (0.9in) DIN-rail mountable housing
- Standard push-in spring clamp connectors mean quick, easy, toolless installation.

# **PACSafe Interface Module Internal Diagrams**



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# **Specifications**

	IC225SRD130	IC225SRD121
Device Type	Safety Relay	
Safety Module Type	Interface Module	
LCD Display	No	
Expandable	No	
Dimension	97.5h x 100w x 22.5d mm	
Relative Humidity	90% @ 50° C	
Max Operating Temperature	50° C	
Input Operation	Simultaneous or Concurrent	
Number of Safe Inputs	1 Dual (Typ controlled by an OSSD Pair)	
Input Configuration	Qty 2, 24VDC	
Safety Inputs (Solid-State)	50 mA @ 24 V DC +/- 15% Each Point	
Independently Controlled Safe Outputs	1	
Output Configuration	3 NO	2 NO
Non-Safe Output Configuration	-	1 NC
Non-Safe Output Rating	-	Relay - 6 A @240VAC/24VDC
Safe Output Rating	Relay - 6 A @240VAC/24VDC	
Splittable Safe Output	No	
Mechanical Life	20 million operations	
Power Consumption	0.1 A	
Response Time	20mS (max.)	
Supply Voltage	24 V dc +/- 15%	
Туре	Spring Clamp	
Removable Terminals	No	
Vibration	10-55 Hz at 0.35 mm	
Electrical Life	1,000,000 cycles @ 450 VA	
IP Rating	IP20	
PL Rating	e	
Safety Category Rating	4	
SIL Rating	3	
SISTEMA Value	PFHd = 2.1 x 10-10 (Probability of a dangerous Failure per Hour)	

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# **Ordering Information**

Part Number	Description	
IC225SRD130	PACSafe Interface Module for use with light curtains, 3 normally open redundant-outputs	
IC225SRD121	PACSafe Interface Module for use with light curtains, 3 normally open redundant-outputs and 1 normally closed non-safety auxiliary output	

WARNING: Not for use as a safety monitoring module

- 1. DO NOT connect E-stop switches, 2-hand control actuators/switches, safety interlock switches, or similar devices directly to this Interface Module.
- 2. ALWAYS connect terminals Y1-Y2 and Y3-Y4 of this Interface Module to the monitoring input of the primary safety device that controls it.

This Interface Module does not have the circuitry required to perform a self-check. A single fault inside the unit or in external devices (like switches or emergency stop buttons) can go undetected and create an unsafe condition. Failure to properly connect this Interface Module to a primary safety device with a monitoring function could result in serious injury or death.

The user is responsible for satisfying all local, state, and national laws, rules, codes, and regulations relating to the use of this product and its application. Every effort has been made to provide complete application, installation, operation, and maintenance instructions. Please contact an Applications Engineer with any questions regarding this product.

The user is responsible for making sure that all machine operators, maintenance personnel, electricians, and supervisors are thoroughly familiar with and understand all instructions regarding the installation, maintenance, and use of this product, and with the machinery it controls. The user and any personnel involved with the installation and use of this product must be thoroughly familiar with all applicable standards, some of which are listed within the specifications. Emerson Intelligent Platforms. makes no claim regarding a specific recommendation of any organization, the accuracy or effectiveness of any information provided, or the appropriateness of the provided information for a specific application.

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