

NexBot Vision 212-011 Safety Controller SIL3/PLe

NexBot
Robotics

SKU: NXB-CTL-212-011 | Category: Controllers & Software > Robot Controllers > Safety Controllers

Overview

The NexBot Vision 212-011 is a dedicated safety controller designed to manage and monitor safety-related functions within automated robotic work cells. This controller serves as the core of a robot's safety system, processing inputs from devices like emergency stops, light curtains, and safety mats to ensure the immediate and safe cessation of hazardous motion. Its primary function is to provide a reliable and certified safety architecture for applications where human-robot collaboration or interaction is necessary. The controller is engineered for high-reliability applications, achieving a Safety Integrity Level of SIL3 (IEC 62061) and Performance Level 'e' (ISO 13849-1). This is made possible through its dual-channel, monitored architecture which provides internal redundancy to protect against single points of failure. The unit features 24 configurable safe digital inputs and 8 safe digital outputs, allowing for flexible integration of a wide range of safety devices. With a processing response time under 10 ms, the controller ensures that safety commands are executed with minimal latency, a critical factor in preventing accidents. Key applications include fenceless collaborative robot setups, high-speed packaging lines, and complex machine tending operations where operators frequently enter the workspace. The 212-011 controller simplifies the implementation of safety zones, muting functions, and safe-speed monitoring. Integration into the broader factory network is streamlined via its built-in PROFINET interface with PROFIsafe support, allowing for both safety and standard communication over a single network. Configuration is performed through a dedicated, intuitive software environment that allows for logic programming and diagnostics. The compact, DIN rail mountable design ensures easy installation within standard control cabinets, minimizing footprint and simplifying wiring.

Technical Specifications

Parameter	Value	Unit
Weight	0.8	kg
Material	Polycarbonate/ABS Blend	
Voltage	24VDC	
IP Rating	IP20	
Country of Origin	CH	
Protocol	PROFINET	

Parameter	Value	Unit
Dimensions	220 x 120 x 45 mm	

Safety Notice: This product must be installed and operated by qualified personnel in accordance with applicable safety standards (ISO 10218, IEC 61508).