

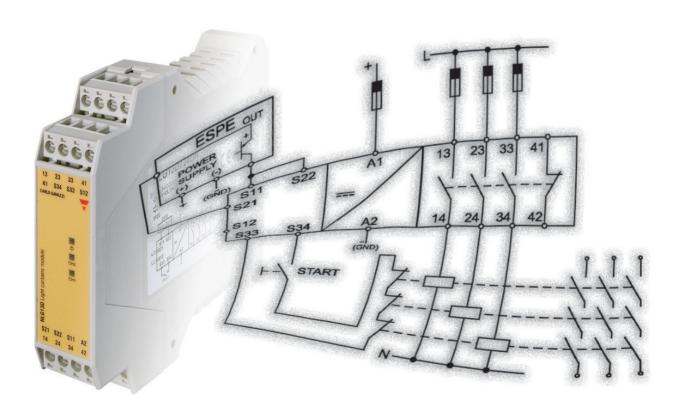


Safety Modules

Safety modules play their role in the risk reduction phase of the machine development process. If, for instance, the installation of a fixed gate appears to be impossible, but a moving gate has to be opened to load and unload the appliance, the machine has to be safely stopped when the gate is open. This is what Carlo Gavazzi's safety gate modules are designed for.

Specialized modules are also avaiable to manage emergency stop buttons, light curtains, two hand controls, or safety mats. Carlo Gavazzi provides easy installation, simple working mode and immediate fault detection with excellent reliability.







NESO2D and NSC13D Series



If the safety input device is a mechanical safety switch (like our PS21S safety limit switch for safety gates or the emergency stop button EMPB) the NES02 and NES13 are the ideal solution to operate up to safety category 4, in compliance with EN954. If the input device is a safety magnetic switch like our SMS Series, NSO02 and NSO13 are the ideal counterpart. If one of the contacts is normally closed, the NSC02 and NSC13 are the most effective solution.

NLG02D and NLG13D Series



The NLG02 and NLG13 allow stopping dangerous activities when the operator enters a risky area. These Carlo Gavazzi devices assure absolute safety, accepting the transistor output of our SB Series light curtains and providing a safety relay output.

NT12D Series



Being the natural completion of our SM Series safety mats, the NT12D provides a category 3 certified safety system, complying with EN954. This device monitors the dangerous area for operator access.

MF1C Series



Measuring the regenerated voltage on a motor's coils, is the best way to determine if the tool on a motor's shaft is moving. This operation must be performed safely in order to comply with safety category 3. The MF1C provides this function, allowing for the opening of the lock of a safety gate only when the motion of a motor has come to a complete stop.

ND12D Series



Two-hand (no tie-down) systems are indispensable when there is no way to keep the operator away from the dangerous area. The ND12D two hand module of category IIIC, in compliance with EN 574, is connected to a 2-hand safety button system. This special device allows the machine to function only if both buttons are pressed simultaneously.

NE14D Series



In some cases, extra safety outputs are required to control the machine's operation. The NE14D expansion module provides four additional safety outputs while maintaining the safety category of the system.