



PANEL DETECTION

A NEW ERA OF AUTOMATIC MONITORING



PROTECTING PEOPLE, PROPERTY, AND PROCESSES.



THE NEXT LEVEL OF PROTECTION

DETECT UNSEEN DANGERS

Troax Panel Detection is one of a kind, a revolutionary system for automatic monitoring of machine guards. A patent pending device cleverly incorporated in the panel fixing to detect the presence and absence of panels. It's safety on a completely new level for the era of Industry 4.0.

Troax Panel Detection is made for industries that put safety and efficiency first. By detecting demounted panels, you're not only protecting people and machinery, but also reducing the risk of occupational injuries as well as avoiding costs for accidents, repairs, and interruptions.

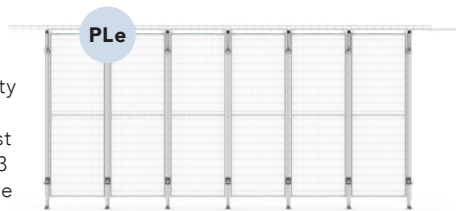
PLUG AND PROTECT



UP TO 200 PANELS WITH 1 CABLE

With Troax Panel Detection, you can monitor up to 200 panels with one single cable to your safety PLC. Fewer cables mean less hours for connecting wires and a less complex system. Connect the devices to your existing PLC and you're good to go.

SUITABLE UP TO SIL 3 AND PL_e
Potentially hazardous machines and robots require the most reliable safety functionality. That's why Troax Panel Detection is designed for the highest level of safety. It's suitable up to SIL 3 and PL_e, allowing you to keep people safe at work and sleep good at night.



THIS IS HOW IT WORKS

By fitting a Troax Panel Detection unit on every post, you create a double channel system that becomes redundant with its two-signal design. Panels without the need for removal

during service or maintenance can be locked into place using a special kit that includes one-way screws. To create a safe system, the panels must be either monitored or locked.

COMPLETE AND DOCUMENTED

A SYSTEM WITHIN A SYSTEM

Troax Panel Detection is designed for Troax's machine guard solutions. It's easy to assemble and can be retrofitted on our quick-release Rapid Fix system. All in all, Troax Panel Detection is a complete and documented solution with a bullet-proof installation process.

SCAN ME TO MEET YOUR NEW SENSE



FACTS AND FIGURES

TECHNICAL SPECIFICATIONS

Art nr:	89051550	89051551 / 89051552	89051553
Name:	Panel Detection Standard	Panel Detection Right/Left	Panel Detection End Contact
Service temperature:	0–60 °C		
Storage temperature (in sealed packaging):	–20–80 °C		
Humidity:	< 70 % (no condensation)		
Nominal current:	6.5 mA	3.3 mA	10.3 mA
Power supply:	12–24V ± 20 %		
Surge voltage max:	500V		
Serial connection (loop):	Up to 100 units	1 unit per serial connection	
Holding force:	3,000 Newton	NA	
Impact resistance (Impact on panel):	1,600 Joule	NA	
Response time:	< 1ms	NA	
Risk time:	< 1ms	NA	
Connection:	2× M12 Female (Max 0.6 Nm)	M12 Male (Max 0.6 Nm)	
Poles:	5		
Safety outputs:	2 NC	1 NC	NA
Local signalling:	2× Red/Green LEDs	Red/Green LED	
IP Class:	52	54	
Weight:	387g	65g	
Dimensions:	93×58×50 mm	28×35 mm	
Color:	Grey, black text		
Mission time:	20 years		
MTTFO:	7,773 years	17,192 years	
Safety level up to:	SIL 3 (IEC 61508:2010) PLe (ISO 13849-1:2015)		
Additional standards:	Fixed guard system (ISO 14120:2015) Type 2 interlocking device (ISO 14119:2013) Low level coded (ISO 14119:2013)		NA
	Type A system (IEC 61508:2010) Hardware fault tolerance 1 (IEC 61508:2010) Category 3 (ISO 13849-1:2015)		

FEW COMPONENTS FOR MAXIMUM USE



STANDARD



RIGHT



LEFT



END CONTACT

YOU DECIDE THE ACTIONS

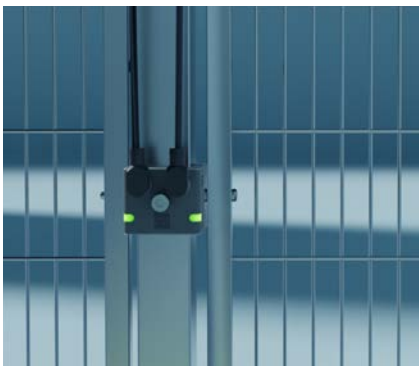
FOLLOW THE LIGHTS

Thanks to Troax Panel Detection, an unsecured panel due to human error during maintenance is a thing of the past. Each unit is equipped with green and red LEDs. When a service technician removes a panel, the corresponding light on the unit turns from green to red. This indicates that a particular panel is removed. Green means go, red means no.

- **VISUAL WARNINGS**
- **PREVENT RESTART**
- **STOP THE MACHINE**

TRIGGER AND ALERT

Simultaneously, the signal to the PLC is cut, triggering different kinds of actions. Warn people around the machine with flashing lights, prevent restart, and if comes to it, even stop the machine. With Troax Panel Detection, you're in complete control and can decide the actions based on your existing processes. It's entirely up to you.





YOUR NEW SENSE OF REALITY

A SIXTH SENSE FOR INDUSTRIES

Some people have the power of perception beyond the human senses, a sixth sense, also known as intuition. A strong gut feeling or an unexplainable sense of knowing. For the rest of us, there's Troax Panel Detection, a new era in safe manufacturing.

SAFE HAS BECOME EVEN SAFER

Troax Panel Detection is the next big thing in machine guarding. A thing that changes the game for owners and managers, but also how you perceive the reality of risks in your production. Tap into this new sense of yours. It's safer and smarter that way.

- **REDUCE THE RISK OF INJURIES**
- **AVOID COSTS AND LEGAL ISSUES**
- **PUT SAFETY FIRST**

A SAFER TOMORROW
■ SINCE 1955 →

