



**DECLARATION OF CONFORMITY**

This document is the conformity declaration concerning safety switches and relays, conform to the Machine Directive 2006/42/CE and the Directive 2004/108/CE.

**ELECTRONIC SAFETY SWITCHES**

Range	Safety Standards	Approvals/conformity
TRITHON N MKTS	EN 60947-5-2/3	CE



Test conditions :  
Switching Current = 200 mA/21,5 VDC  
Power Supply = 21,5 VDC  
Ambient temperature = +25 °C

Performance Level (PL) = e  
Safety category = with AWAX  
MTTFd = 100 years  
Checking period=1/year  
Checking after 3 months of not using

The new requirements do not impact the product. Low-voltage switchgear and controlgear including dimensional standardization is EN 60947-5-1:2004/A1:2009  
This range of safety switches is designed to replace mechanical safety switches used on doors and crancckases of dangerous machines. It uses our process ACOTOM® or ACOTOM<sub>3</sub>®.  
All the safety switches and safety modules are designed and manufactured following UL508/CSA C22.2 regulation.  
Safety switches and safety modules must be used following diagramm and directives described in our data sheet.

FOR COMITRONC-BTI 14 sep. 2014  
MR PAYS,

PROCESS ACOTOM®



# TRITHON N MKTS technical data sheet

Thank you for your confidence in BTI products.  
This product has been designed and manufactured to the highest quality standards.

## 1. Scope

The device is a safety sensor with a code system using our great ACOTOM2® process, associated with a safety module AWAX, of detecting opening of the protective dangerous machines particularly in environments industrial extreme temperatures where hygiene is recommended in the presence of frequent aggressive cleaning. Consists of two cylindrical elements in 316L stainless steel, one named transmitter, the other receiver, it provides two lines of static contacts NO isolated decoding system. It also provides a static auxiliary line PNP or NPN (depending on version) to indicate the status «open door» to a PLC or signaling.

## 2. Fixing and wiring

The two elements of TRITHON sensor set very easily using 2 screws M4 flathead meet the agro-food standards. The receiver is equipped with a 50 cm diameter 7 mm silicone cord provided with a molded-M12.

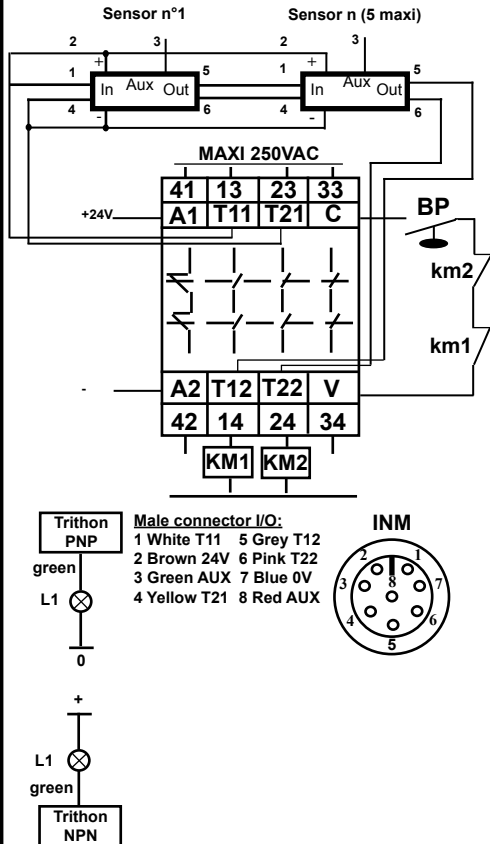
## 3. Operation

TRITHON is powered by T11 / T21 AWAX terminals associated housing. When the two pins located on the side of the transmitter and receiver are face to face, there is recognition of the code, both NO contacts close and auxiliary line opens. If the code is not recognized or if the alignment is not achieved, the safety contacts open, and the auxiliary drives the output voltage. It is advisable to keep a minimum distance of 1 mm between the two elements. This product should not be used as a mechanical stop. The detection is performed at a maximum distance of 7mm.

## 4. Technical characteristics

Supply Voltage	24 VDC max	
Current	35 mA	
Protection	Par AWAX with T11/T21	
Diagnostic line	PNP 225 mA	
Temperature	-30 °C / +110 °C	
Protection class	IP69K	
Detection / Hysteresis	7 mm / 1 mm	
Misalignment	+/- 30°	
Sizes	Emitter	Receiver
	72 x 13mm	72 x 30mm
Weight	Emitter	Receiver
	100g	300g

## 5. Wiring



## 6. Sizes

