

## EC 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.

## SAFETY SWITCHES

We hereby certify that the hereafter described safety components both in its basic design and construction conforms to the applicable European Directives.

Name of products :

Range	Safety Standards	Approvals/conformity
AMX5CK	EN 62061 / ISO 13849-1	CE



PL=d acc. EN ISO 13849-1  
SIL 2 acc. EN 62061  
Classification=PDF-S  
acc. EN 60947-5-3  
Input Power Supply = 24VDC  
Checking period=1/year  
PFH=1,42 E-08  
PFD=1,24 E-03  
PROOF TEST=20 a  
dop=365 j  
hop=24 h  
F=1/h  
B10d=2.000.000  
Supply : 24 VDC PELV/SELV  
Type 4 acc. ISO 14119  
average level on request

Description :

Coded safety switch with process Acotom<sub>3</sub>® for detects the position of the doors. It can used without safety relay.

Person authorized for the compilation of the technical documentation :

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Place and date of issue : Noisy, 18 dec. 2014

Authorised signature  
Michel Conte  
Director

# AMX5 CK technical data sheet

V2.9

Thank you for your confidence in BTI products.

This product has been designed and manufactured according to the highest quality standards.

## 1. Application

The AMX5CK is a coded electronic autonomous sensor using our process ACOTOM<sub>3</sub>® allowing to detects the opening of the mobil protectors on dangerous machines. It is the first switch in the world that can detect its own safety failure and that prevents the safety line from closing. Moreover, this switch offers a high level of reliability.

The housing of the both elements (the transmitter and the receiver) is in polycarbonate.

Like all safety product, this switch must be periodically checked.

## 2. Fixing and wiring

With two square lugs, the two parts of the AMX5 CK can be easily fixed with diam. 4mm screws (ZU4 washers provided).

Optional special anti-tamper screws and tool.

The receiver is equipped with a key lock switch, two coded keys and a male connector 8 points.

## 3. Functioning

The AMX5 CK is supplied with 24V AC or DC.

### 1/ Held key:

In this position, the AUX2 line is constantly open. The dual color LED lights up in green color.

When the two targets of the transmitter and receiver are facing each other, and if the code is recognized, the two NO lines close and the AUX1 line open. The yellow LED lights up.

If the code is not recognized, if there is a misalignment or if the switch detects the failure of one of its safety contacts, the yellow LED is lit off, the safety lines are not controlled and the AUX1 line is closed.

### 2/ Free key:

The safety lines and the aux1 line are open. The dual color LED lights up in red color. The yellow LED is lit off. The aux2 line is constantly closed. This key position locks the receiver which does not take into account the presence of the transmitter.

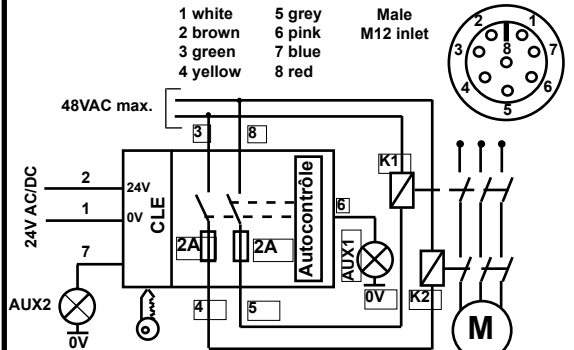
When it is not supplied, the safety lines and the 1 and 2 auxiliary lines are open.

Please check that the safety switch works properly after each operation realised on the switch according to the safety rules. needs...).

## 4. Technical characteristics

Supply voltage	24 VAC/DC -15% / +10% 50/60Hz	
Consumption	40mA (DC) / 50mA (AC)	
Temperature	-25 °C / +60 °C	
Protection (EN60529)	IP65	
Safety line	48 VAC/DC / 2A pilot duty & general use	
Auxiliary output	24 V (PNP NF) / 250mA general use	
Detection/Hysteresis	10 mm / 2 mm / lateral +/- 9mm	
Size L x l x h	Emitter	Receiver
	92 x 49 x 23	92 x 49 x 27
Weight	Transmitter:	Poly. 144g
	Receiver:	Poly. 210g

## 5. Wiring



\* Any overloading or short-circuit on the safety lines lead to their opening irremediably. If you think there is any risk, we advise you to protect the lines with a 1.6A fast fuse.

## 6. Dimensions (mm)

