

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
OPTOPUS DEC	ISO13849-1 EN 60947-5-3	CE

Performance Level (PL) = e
 Safety category = with AWAX
 MTTFd = 420 years
 CCF = 90 %
 TM= 20 years
 Checking period = 1/year
 Type 4 acc. ISO 14119
 average level on request



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 crancases of dangerous machines. It uses our process ACOTOM® or ACOTOM₃®.

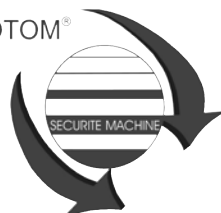
All the safety switches and safety modules are designed and manufactured following UL508/CSA C22.2 regulation.

Safety switches and safety modules must be used following diagramm and directives described in our data sheet.

* Process Acotom₃® approved by TUV.

FOR BTI 2 mar. 2015
 CHRISTOPHE PAYS

PROCESS ACOTOM®



OPTOPUS DEC Datasheet V1.4

Thank you for your confidence in BTI products.

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

1. Application

The OPTOPUS DEC safety switch is designed to protect mobile doors using the ACOTOM[®] electronic process. Housed in a polycarbonate housing (also available in stainless steel 316L), it is well adapted for the tiny accesses of machines. Its two opposite NO static channels outputs inform a safety module (AWAX, which manages the safety function) about the switch and door status. The 'OPTOPUS DEC' has a PNP NC auxiliary line and 'OPTOPUS DEC NA' has NPN NC auxiliary line compatible with PLC. (ABS Housing for NA type).

2. Mounting & wiring

With two square lugs, the two parts of the OPTOPUS DEC can be easily fixed with M3 screws (ZU3 stainless steel washers provided). Special anti-tamper steel screws (M3x20) and tools are provided in option. The receiver is provided with a standard 3, 6 or 12mm PVC cable (others lengths on request).

3. Operating instructions

The power (Blue/Brown) can be supplied either from the Awax (on T11/T21 terminals of AWAX), or be supplied from an external power supply 24VAC/DC. (ex. BA8F1524).

When the two targets of the transmitter and receiver are facing each other (from 0 to 7 mm), the two safety contacts (Red/Black and Grey/Orange) are closed and the white auxiliary line is open.

In the case where a guarddoor is open, the two NO safety lines open, sending the signal to the safety module. The status is indicated to the PLC by the auxiliary line.

4. IP69K

For the version OX, the protection IP 69K is not valid on the cable side face.

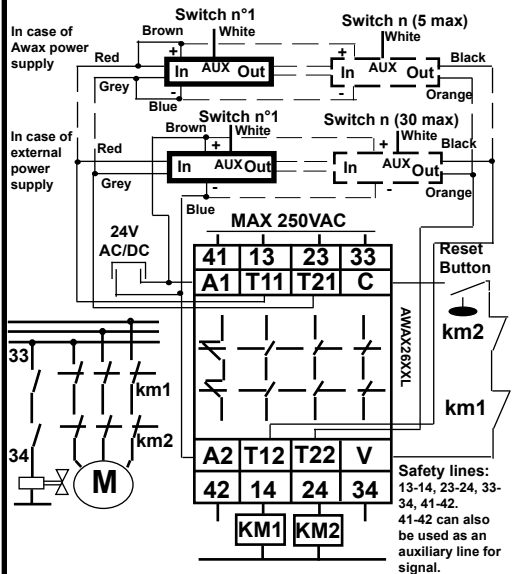
5. Information concerning only European Union

According to the standard EN 50178, the power supply must be isolated for a test voltage of 1800Vac applied, or the device must withstand a surge voltage of 4000V in case of overvoltage.

6. Technical features

Popper Supply	24Vac/dc +10% -15% & 30mA DC / 70mA	
Safety output	24 VDC / 300mA	
Auxiliary output	DEC: NC PNP / NA: NC NPN & I=300mA	
Protection	IP67 / IP69K (SS316L)	
Temperature	-20 °C / +60°C	
Detection / hyst.	ON:9 mm / OFF:10 mm / lateral +/- 4 mm	
Size LxHxh	Emitteur	Receiver
	70 x 16 x 12 mm	70 x 16 x 16mm
Weight	Emitteur	Receiver 3m
	poly:20g / 316L:65g	poly:150g/316L:190g

7. Technical features



8. Dimensions (mm)

