

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.

ELECTROMECHANICAL SAFETY SWITCHES

Range	Safety Standards	Approvals/conformity
OPTO 2S	ISO13849-1/ EN 954-1	CE

PL=c acc. EN ISO 13849-1
 Safety category = 1
 Classification=PDF-S
 (hop=24h, dop=360d/y,
 tcy=300s)
 B10d=2 000 000
 In=50mA
 Temperature=+25°C
 TM= 20 years
 Checking period=1/year
 Type 4 acc. ISO 14119
 average level on request



U.S. market : All products are manufactured with UL components and 94VO housing

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

Description :

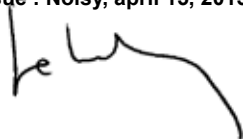
Coded safety-sensor with process Acotom® conform to EN 60947-5-1 & EN 60947-5-3.

Person authorized for the compilation of the technical documentation :

Christophe PAYS from COMITRONIC-BTI



Place and date of issue : Noisy, april 15, 2015MRS LEFOULON,



OPTO2S technical data sheet

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

1. Application field

The OPTO2S FURTIF is a non-contact coded and stand-alone electromechanical switch of category 1 using our process ACOTOM®. It allows the detection of the opening of tight access areas, manholes or trap doors on dangerous machines. Composed of two elements in PA6 (transmitter and receiver), it provides two NO contacts lines protected by a 250mA fast fuse. It reaches safety category 4 when connected to a safety relay. The closing of the 2 lines is synchronized.

2. Compliance with the standards

The OPTO2S FURTIF complies with the European standards EN 60947-5-3 and category 1e according to ISO13849-1. Protection to IP67 according to EN60529.

3. Mounting instructions

Fitted with two mounting brackets, the OPTO2S FURTIF can be easily fixed using 3 mm diameter screws (washers provided).

Anti tamper screws and tool sold in option.

The receiver is fitted out with a PVC multiwire cable diam. 5 mm and standard length 3, 6 or 12 m (other lengths on request).

4. Operating instructions

The OPTO2S FURTIF is supplied with 12Vdc or 24Vac/dc following version. When both targets of transmitter and receiver are face to face, if the code is recognized, the NO lines close.

The yellow led on the receiver lights up.

1mm distance between both elements is recommended. Detection is made at a max. distance of 7 mm.

5. Recommendations

The OPTO2S is not compatible with the SR mode of the AWAX module.

When the OPTO 2S supplies inductance loads like a contactor coil for example, it is recommended to put a RC filter on its terminals to increase the life expectancy of the switch. The installation has to be checked periodically. Our engineers team stays at your disposal to answer your questions and analyse all your specific demands (studies, specific needs...).

UL/CSA approval: in process.

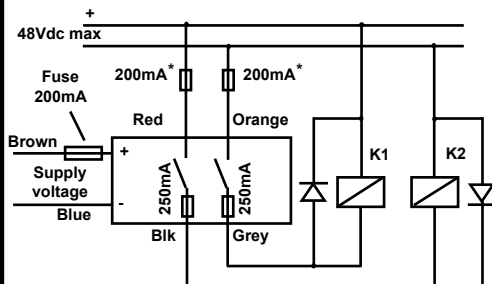
6. This Information concerning only European Union

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.

7. Technical features

Supply voltage	12 VDC ou 24 VAC/DC	
	+10% , -15%	
Current consumption	10-53 mA(dc) / 60 mA-150 mA(ac)	
Detection/Hysteresis	7 mm / 2 mm / lateral +/- 3 mm	
Protection des lignes	250 mA Fast Fuse	
Max current switching	AC1-DC13-250 mA / 48V	
Code / IP	410 / IP 67	
Temperature max	-20 °C / +60 °C (dc) / +40 °C (ac)	
Size L x l x h	Emitteur	Receiver
	70 x 12 x 16	70 x 16 x 16
Weight	25g	35g
Speed moving	5 mm/s	

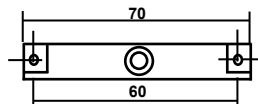
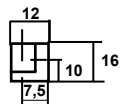
8. Wiring



*The use of a 200mA fast fuse is advised

9. Dimensions

Emitter



Receiver

