COMITRONIC - BTI

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RoHS Compliant

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	Conformity
EPINUS2K-NT-MKTS	EN 60947-5-3	CE
TRITHON P/N MKTS	EN 60947-5-3	CE
ANATOM78S-N-MKTS	EN 60947-5-3	CE

Safety category = up to 4 with AWAX
Performance Level = up to e with AWAX
MTTFd = 100 years
Power Supply=24VDC
In=200mA/24VDC
Temperature=+25°C
TM= 20 years
Checking period=1/year
Type 4 acc. ISO 14119
average level on request

+

Description :
Coded safety-sensor with process Acotom$_2$® and holding force principle in combination with the AWAX serie of safety-monitoring modules from COMITRONIC-BTI or an equivalent safety-oriented control system fulfilling the requirements of the EN 60947-5-3.

Person authorized for the compilation of the technical documentation :
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Authorised signature
Michel Conte
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PROCESS ACOTOM®
BTI
SECURITE MACHINE

V0.0 : draft technical manual

Launching year 2014

Datasheet of the EPINUS 2K-NT-MKTS

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

1. Application field

The EPINUS is a coded magnetic sensor using our ACOTOM2® method for detecting the opening safety gate giving access to hazardous areas and keep them magnetically closed.
This product is suitable for aggressive environments in the food. It has two lines of static control to indicate openness to the controller mismatch AWAX our range, which ensures the cutting of the dangerous function. An auxiliary line NC indicates the opening of the door by returning the power supply voltage, even when mounted in series. The holding force is 20N.

2. Mounting instructions

With two legs brackets the EPINUS attaches very easily with M4 screws (not included) and support washers stainless ZU4 provided. Ability to mount stainless steel tamperproof screws optional (OBH4 kit). The receiver is equipped with a multiconductor cable silicone diam. 7 mm and length about 50cm 8p with M12 connector. The minimum bending radius of the cable is 50 mm.

3. Operating mode

This product is supplied with 24VDC by AWAX case [30 sensors in series with external power (4=+24V et 5=0V) or 5 sensors with self-power by AWAX (4=T11 and 5=T21)]. When the target of the transmitter and receiver are aligned, lines, 6/1 and 2/7 are closed. The auxiliary static contact 3 is open. The opening of a guard causes the high impedance of the two safety lines and closing the auxiliary line route and pointing out the failure of the controller AWAX discrepancy. If a controller is used, connect its input PNP to pin # 3 of EPINUS. This type of sensor works at transmitter / receiver to benefit from the magnetic holding touch.

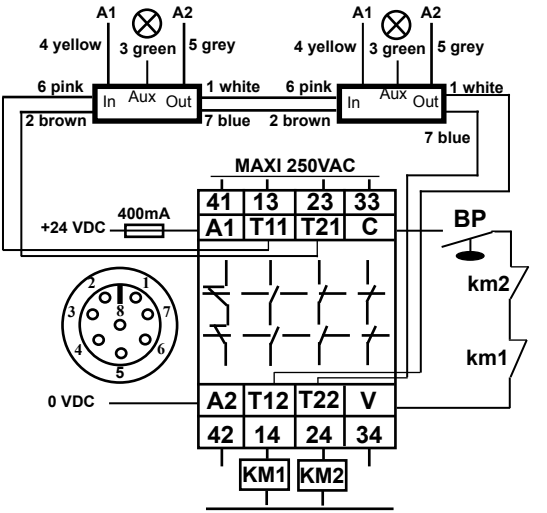
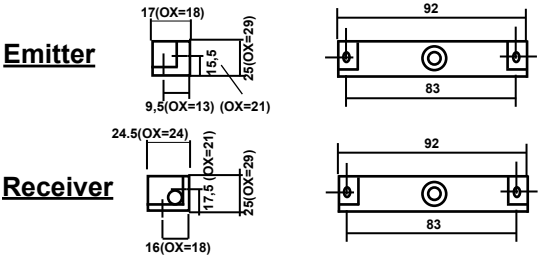
4. IP69K

It represents the resistance of the electrical equipment to the cleaning with high pressure water. It involves extreme requirements in terms of pressure, high temperature (hot water), using of detergents and aggressive desinfectant. In the food industry, the cleaning is often combined with a disinfection using other aggressive additives. The electrical equipment of installations working on food products is particularly affected, almost the most exposed switches. In consequence the norm DIN 40050 part.9 prescribes a degree of protection IP69K : the water jet comes from a buzzard with flat nozzle at a distance from 100 to 150 mm, at a temperature of 80° ± 5°C, at a debit from 14 to 16 l / min under a pressure of 8 000 - 10 000 kPa.
Attention: IP69K does not mean « Perfect waterproofness to the water » and the exposure time is 30s.

5. Technical characteristics

Supply Voltage	20 VDC to 30 VDC
Current	50mA
Lines Protection	By AWAX on T11/T21
Auxiliary Line	PNP NF 250 mA
Ambiant Temperatur	-40°C / +125 °C (maximum value)
Protection Class	IP69K
Switching Distance Hystérésis	2 mm 1 mm
Size L x W x h	Transmitter : 92 x 18 x 29 mm Receiver : 92 x 24 x 29 mm
Weight	Transmitter : 170g Receiver : 270g

6. Wiring



7. Dimension (mm)