

DECLARATION OF CONFORMITY

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

SAFETY SWITCHES

Name of products :

Range	Safety Standards	Conformity
AMXR-S	EN 60947-5-2 EN 60947-5-3 EN 954-1	CE EIRP=120mW ERP=73mW
AMXR	EN 60947-5-3	CE EIRP=120mW ERP=73mW

EN 954-1 : Cat. 3
ISO 13849-1 : PLd, DC90%
B10d = 100 000
(hop=24h, dop=360d/y, tcy=300s)
PELV/SELV=24VDC
In=100mA/24VDC
Temperature=+25°C
TM = 20 years
Checking period=1/day

* uncontractual picture



Description :

Coded safety switch for detects the position of the doors.

Person authorized for the compilation of the technical documentation :

Christophe PAYS

Place and date of issue : Noisy, december 15, 2011

Authorised signature
Michel Conte
Managing Director

Datasheet of AMXR-S

Thank you for your trust in the BTi products.

In order to provide you a high reliability, this high technology product was designed and produced with the biggest care.

1. Scope of application

AMXR-S is non-cheatable thanks to its digital key coding. It can be used for access control or position. It is insensitive to metallic dust. Its waterproof ability allows occasional immersion to 1m. Its PA6 housing with Glassfiber, and special cable are resistant to the ingress of machine oil and washing detergents. The AMXR-S can be used in the food processing industries and outdoor environments. It has an auto-control circuit which analyses a dangerous failure. The RFid allows 16 million codes. The large switching range allows it to compensate for misalignment. There is no hysteresis, which permits a mounting close to the door hinge.

2. Fixing and wiring

The two parts of AMXR-S can be easily mounted with the mounting brackets, and using M4 screws (ZU4 washers provided). Anti-tamper screws and driver are available as an option (OBH4). The receiver is equipped with a multi-conductor cable (5mm diameter and standard length of 3, 6 or 12m). The cable of the switch must be protected from external damage, using a steel cover for example.

3. Functioning

The user is to install external fuse acc. the wiring example.

Transmitter and receiver are working in pairs with the drawn target face to face.

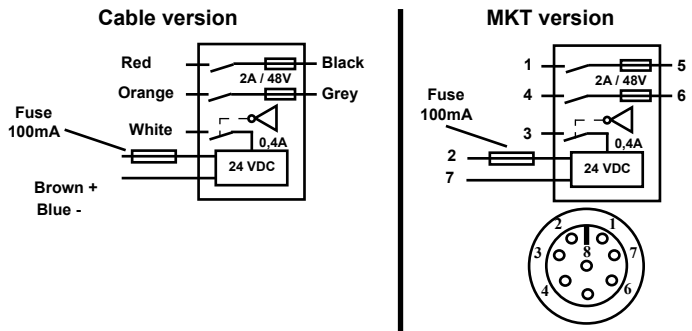
When the receiver and transmitter are within the defined switching range, the output lines switch: the 2 x NO contacts close and NC contact opens.

The receiver keeps the code in memory through self-learning. The system is so designed that it is impossible to have the same code twice.

4. Technical characteristics

Supply voltage	24 Vdc +10%/-15%
Consumption	< 50mA
Safety contacts at 25°C / Rdc	2NO 2A/48V-30mΩ 1NF/400mA-1Ω
Minimum voltage	NO=10mA/5V NF=10 μA
Distance/misalignment	Metal bracket : 17-24mm/12-15mm
Shock / vibration	10 G / 10 à 55Hz et 1,5mm double amplitude
Temperature operation	-20 °C / +60 °C
Class protection	IP67
Dimensions Lgt x hgt x Wdt	Transmitter: 92,5 x 17 x 25mm Receiver : 92,5 x 25 x 25mm
Weight	Transmitter: 77g / Receiver : 210g
Minimum bending radius	Radius : 43 mm

5. Wiring



6. Maintenance

AMXR-S has a 16 million codes available. To avoid keeping a directory by the user, COMITRONIC-BTI developed an automatic system through auto learning.

Case #1: The receiver must be replaced: The user orders a new receiver already configured in self learning mode. Once installed, the new receiver will automatically register the code of the existing transmitter.

Case #2: The transmitter must be replaced : you must return the defective item along with the receiver to BTI.

Note: once programmed, the registered code is timeless. If after an inspection, COMITRONIC- BTI finds out the code is not recognized, it will be considered as a tamper and warranty will be void in this case.

In case of failure detection, the system is blocked and at least one NO contact is opening. If after de-energizing and re-energizing the power supply, the failure still occurs, the switch will need to be replaced.

7. Sizes (mm)

