

Type AMX5 CK

FEATURES

- Category 3
- Category 4 when used with appropriate Safety Relay
- Monitored output contacts 2 N/O
- Auxiliary contact 1N/C
- 8mm misalignment /operating tolerance
- Actuator can approach from any direction and sense through non ferrous materials
- Unaffected by adjacent ferrous materials or other magnetic switches
- AC/DC 24V Auxiliary Supply
- Up to 50 million operations
- Encapsulated in IP65 polycarbonate enclosure with M12 connector
- Automatic detection of contact failure
- Key operated



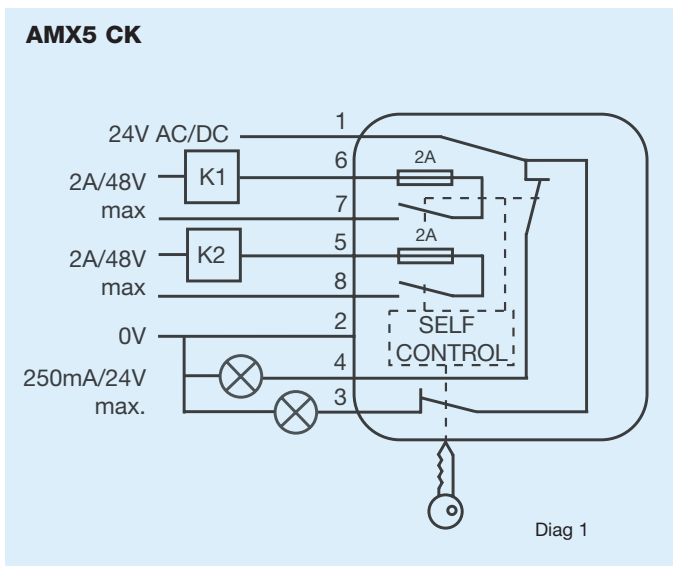
Model AMX5 CK



DESCRIPTION

Coded safety switch AMX5-CK complies fully with the requirements of EN954-1 and EN60947-5-1. The unit may be used as a stand alone device for category 3 applications. For category 4 applications this unit must be correctly interfaced with an appropriate Safety Relay. Model AMX5-CK incorporates coded magnetic technology with monitored relay outputs, so overcoming many of the problems encountered with reed relay Magnetic Switches. i.e. Current capacity, resistance to vibration, sensing distance, operating life and poor performance when in close proximity to ferrous metals. The sensor has a patented electronic process that enables it to detect contact failure and open the safety contact.

TYPICAL SCHEMATIC DIAGRAM



OPERATION

The AMX5-CK is equipped with a key mounted on the receiver. Depending on the key operation, the AMX5-CK will operate as follows (with 24V applied).

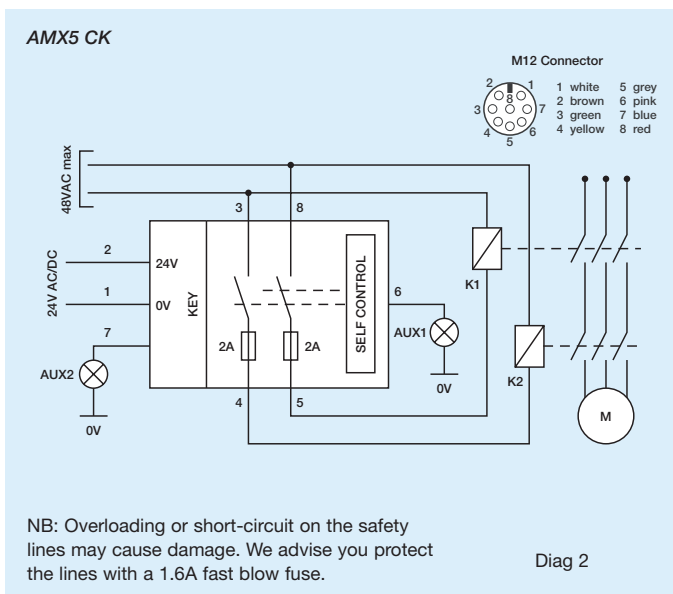
Held Key : Aux 2 line will be constantly open. With the actuator absent the dual colour LED will be green. When the actuator is applied, the safety lines will close and Aux 1 will open. The yellow LED will be illuminated and the machine may switch on.

No Key : Regardless of the position of the actuator/receiver, the safety lines and Aux 1 will remain open, and the yellow LED will be off. Aux 2 line will be constantly closed.

With no supply connected, safety lines Aux 1 and Aux 2 will be open.

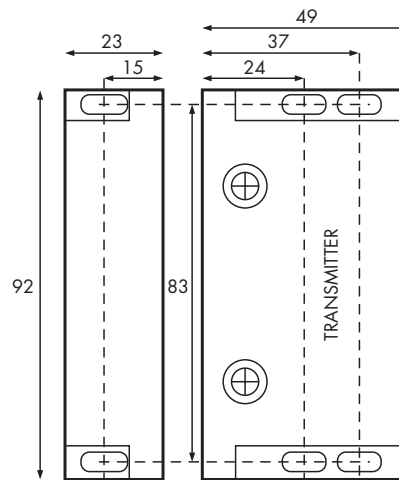
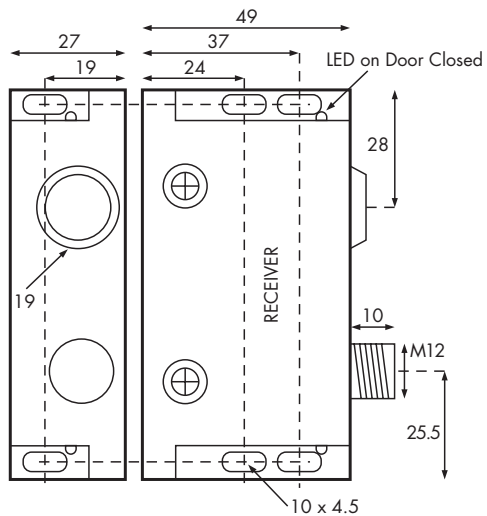
INDICATION

The receiver body incorporates a dual coloured red/green LED to indicate the key presence and a yellow LED, which is illuminated when the actuator and key are present.



Type AMX5 CK - continued

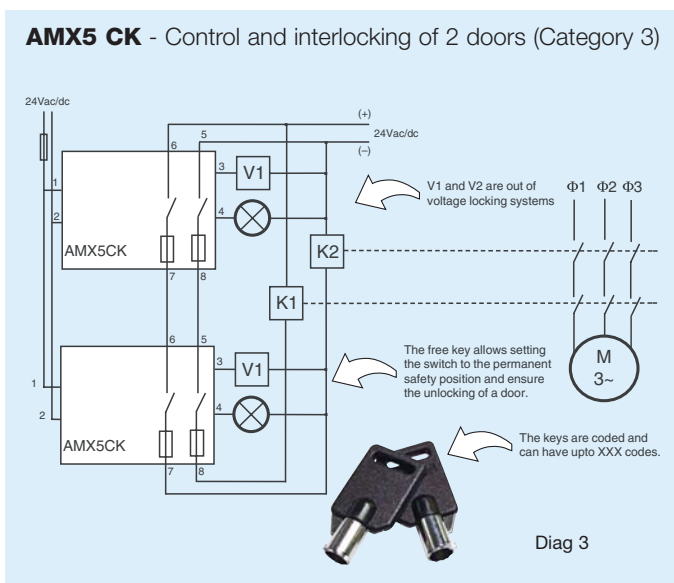
DIMENSIONS



Dimensions in mm

Weight: Receiver 209g Transmitter 144g

TYPICAL SCHEMATIC DIAGRAM



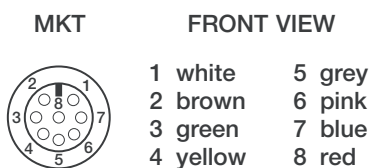
SPECIFICATIONS

Nominal Voltage	24V ac/dc
Consumption	35mA (dc), 90mA (ac)
Voltage tolerance	0.85...1.1Vn
Contacts	Safety 2N/O
	Auxiliary 2PNP
Max Switching Capacity	2A
Continuous Current Rating	2A
Contact Life Mechanical	50 x 10 ⁶ operations
Max Switching Voltage	Safety line 48Vac
	Auxiliary line 24Vac/dc
Max Switching Frequency	1800 operations/hour
Reaction Times	<15ms
Operating Temperature	-25°C...+60°C
Protection Class	IP65
Enclosure material	Polycarbonate
Recommended tightening torque for fixing screws	0.3 Nmtr

ADDITIONAL INFORMATION

AMX5-CK has an operating distance of 8mm and a hysteresis of +2mm. It is recommended that the safety contacts of AMX5-CK are protected by a 1.6A fast blow fuse (F) or 2A superfast (FF) semiconductor fuse. However this is not necessary if the unit is connected to a Safety Relay.

M12 CONNECTOR



Information Required With Order

• Model type • Auxiliary supply
Example: Coded Magnetic Switch type AMX5 CK 24Vuc