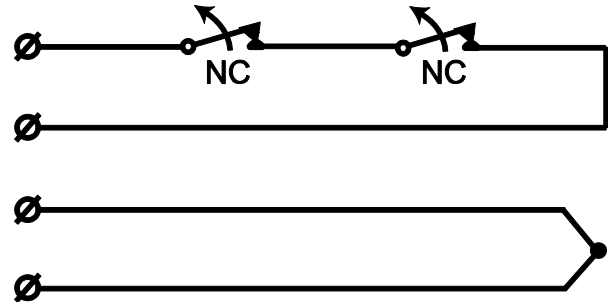


Instruction Manual **MC 270-S78**



CIRCUIT DIAGRAM



DISTANCE TABLE

Contact	Distance on wood	Distance on iron	Tolerans
Make	34 mm	25 mm	20 %
Break	42 mm	31 mm	20 %
Sabotage	20 mm	15 mm	20 %

DESCRIPTION

MC 270-S78 is a heavy duty high security magnetic contact used in both alarm and security access control systems for protection of garage doors, industrial gates etc. against unauthorized opening. It is protected against false magnets with an extra reed contact that could signal sabotage. The housing is made of pure aluminum and the magnet and contact is potted to withstand mounting outdoors in hostile environment.

TECHNICAL DATA

Working environment	Wood	Steel
Sabotage distance	max. 20 mm	max. 17 mm
Make distance	typ. 34mm +/- 20 %	typ. 25mm +/- 20 %
Break distance	typ. 42mm +/- 20 %	typ. 31mm +/- 20 %
Contact type	form A, SPST	
Switching voltage max.	48 V DC/AC	
Switching current max.	400 mA DC/peak AC	
Contact rating max.	10 W	
Estimated life expectancy	>20 million switching operations at 10 V/4 mA	
Cable data	6 m, ϕ 3,2 mm, 4x0,14 mm ²	
Stainless steel hose	1 m, ϕ 8,2 mm	
Operational temperature	-40°C bis +70°C	
Humidity	max. 95% RH	
Material	Aluminium	
Protection class	IP 67	
Contact size LxHxB	74 x 30 x 30 mm	
Magnet size LxHxB	74 x 30 x 30 mm	
Environmental class EN 500130-5:2011	Class IIIA	
Security EN50131-2-6:2008;	Grade 3	
VdS approval	Without resistors G116032 Class C, Environmental Class III With build in resistors G116033 Class C, Environmental Class III	
Certifierad	VdS, SBSC, F&P, FG, INCERT	

OPERATING PRINCIPLE

MC 270-S78 magnetic contact has two parts: the contact part with alarm and sabotage reed switches and the magnet part. In its neutral position the alarm reed switch remains closed under the force of the magnetic field. Opening the monitored object increases the distance between the reed switch and the magnet. This reduces the influence of the magnetic field on the reed switch until it opens and activates an alarm.

MC 270-S78 has an extra sabotage reed switch to protect the contact from sabotage with an external magnet. When an external magnet is applied to the contact, the sabotage reed switch opens and activates an alarm. The sabotage reed switch can be also opened by the corresponding (friendly) magnet. The distance between the contact and the corresponding magnet, at which the sabotage reed switch opens is called sabotage distance.

Magnetic contacts should not be installed in the vicinity of strong magnetic fields.

INSTALLATION

Depending on the application, contact and magnet should be installed in one of the possible configurations. Installation drawings show the correct positioning of the contact parts. Contact and magnet should be installed in parallel, with plastic plugs corresponding to each other. Offset will reduce the working distances and may result in faulty operation or lower security. The contact should be mounted on the stationary part of the monitored object (ex. door frame) and the magnet on the movable part (ex. door leaf).

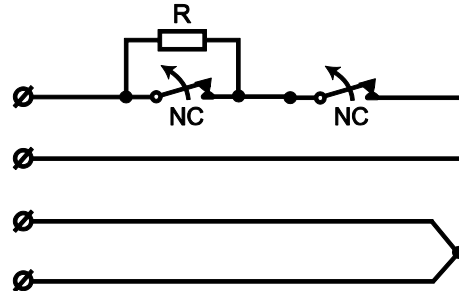
For sites where it is impossible to mount the contact directly, aluminum brackets and additional magnet parts are available. Brackets can be used to solve problems with aligning the contact with the magnet. Contact and/or magnet should be screwed to the oval slots in the brackets and adjusted to a suitable position.

Only non-ferromagnetic screws may be used for mounting the contact.

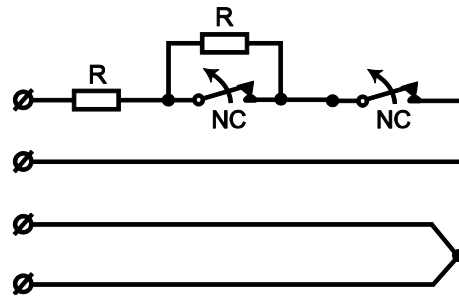
After the installation, use an ohmmeter to check the electrical connections and test the operation of the magnetic contact.

RESISTORS (OPTIONAL)

MC 270-S78 is available in two additional options with resistors of the chosen value: MC 270-R-S78 with one resistor parallel to the alarm switch and MC 270-2xR-S78 with two resistors in 2EOL configuration.



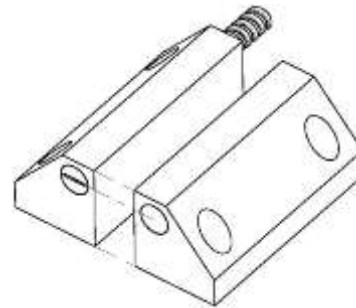
MC 270-R-S78



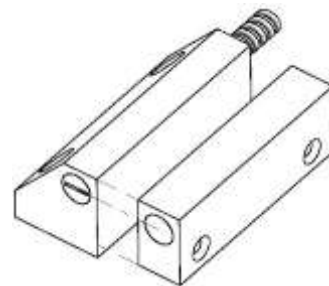
MC 270-2XR-S78

INSTALLATION DRAWINGS

MC 270-S78 configuration:



MC 200-41 accessory:



We reserve the right to changes without notice.