

Instruction Manual MC 250



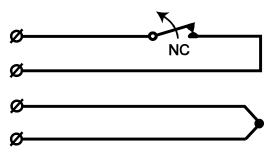
DESCRIPTION

MC 250 is a versatile magnetic contact used in both alarm and security access control systems for protection of doors, gates and windows against unauthorized opening. The magnetic contact is designed to be mounted in places with limited space. A wide range of accessories enables the contact to be recessed- or surface-mounted on a variety of surfaces, including ferromagnetic materials.

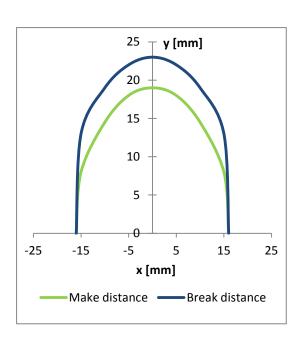
MOUNTING INSTRUCTIONS

- Contact and magnet should be installed axially, corresponding to each other.
- Self-cutting and self-locking thread enables direct installation in φ 10 mm holes in wood and plastic.
- Appropriate accessory must be used for installation in ferromagnetic environment.

CIRCUIT DIAGRAM



DISTANCE DIAGRAM - WOOD



TECHNICAL DATA

Working environment	Wood	Steel			
Make distance	typ. 19 mm see distance table				
Break distance	typ. 23 mm see distance table				
Contact type	form A, SPST				
Switching voltage max.	48 V DC/AC				
Switching current max.	500 mA DC/peak AC				
Contact rating max.	10 W				
Cable	φ 3,4 mm, 4x0,182 mm ²				
Environmental class (EN50130-5:2011)	IIIA				
Operating temperature range	-40°C to +70°C				
Operating humidity range	max. 95% r. h.				
Housing material	aluminum alloy				
Dimensions:					
Contact part	ф 11 x 22 mm				
Magnet part	φ 11 x 14 mm				
Security grade (EN50131-2-6:2008)	2				
Approvals	VdS class B-G193514				

MC 250 Instruction Manual 4-MC250-01

OPERATING PRINCIPLE

MC 250 magnetic contact has two parts: the contact part with a reed switch and the magnet part. In its neutral position the 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.

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

INSTALLATION

Detailed installation instructions can be found in MC 250 Installer Manual.

Contact and magnet should be aligned axially in the frames and leaves of the monitored objects (windows, doors etc.). Offset will reduce the working distances. The contact should be mounted in the stationary part of the monitored object (ex. door frame) and the magnet in the movable part (ex. door leaf). Before mounting, holes must be drilled. The self-cutting and self-locking thread of the housing enables easy and reliable installation in φ 10 mm holes in wood and plastic.

Twisting the contact housing counterclockwise 2-3 times before mounting will protect the cable from mechanical stress.

For sites where it is impossible to mount the contact directly, a variety of accessories is available.

Accessories with a strong magnet provide a bigger working distance for more demanding applications and maintain the parameters of the magnetic contact when mounted in ferromagnetic environment.

Accessories for surface mounted applications provide installation solutions for sites where recessed mounting is not suitable.

Only non-ferromagnetic screws may be used when mounting the contact using accessories.

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

Warning: applying excessive force to the housing of the contact may damage the glass body of the reed switches inside.

Warning: appropriate accessories must be used for installation in ferromagnetic environment.

RESISTORS (OPTIONAL)

MC 250 is available in two additional options with resistors of the chosen value: MC 250-R with one resistor parallel to the alarm switch and MC 250-2R with two resistors in 2EOL configuration

DISTANCE TABLE

Contact	Accessory	Distance on wood [mm]		Distance on steel [mm]	
		Make	Break	Make	Break
MC 250	-	19	23	Χ	Х
	MC 200-S3	10	12	Χ	Х
	MC 200-S11	19	23	Χ	Х
	MC 200-S12	33	38	19	21
	MC 200-S21	19	23	Χ	Х
	MC 200-S22	33	38	23	27
	MC 200-S31	19	23	Χ	Х
	MC 200-S32	33	38	19	21

X – not recommended