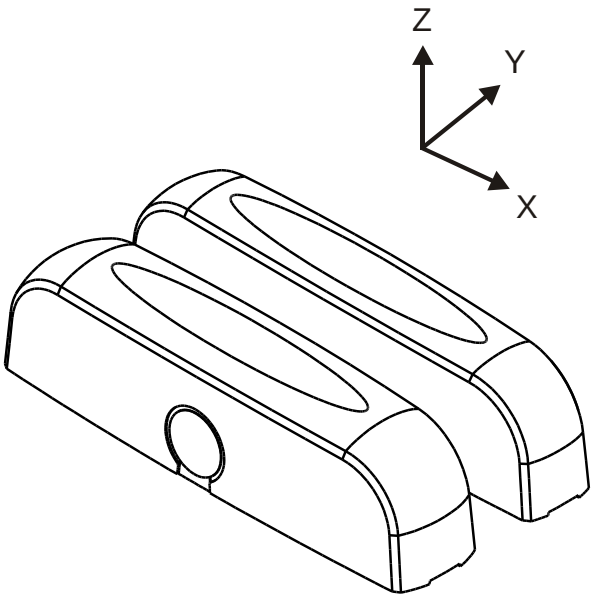
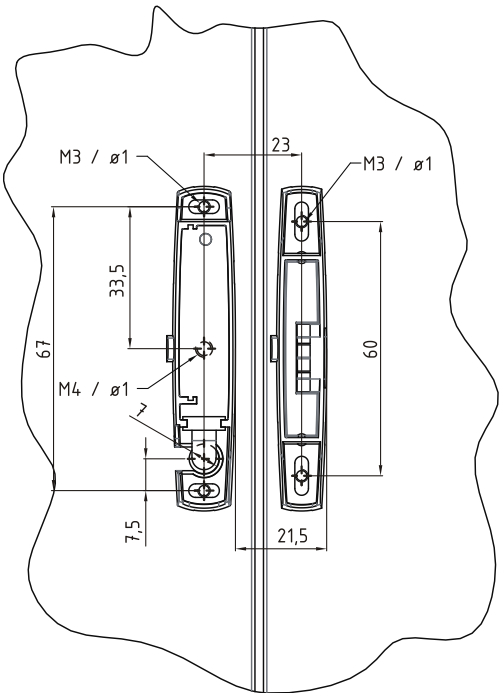
DC4x8 Magnetic Contact Installation Sheet

EN

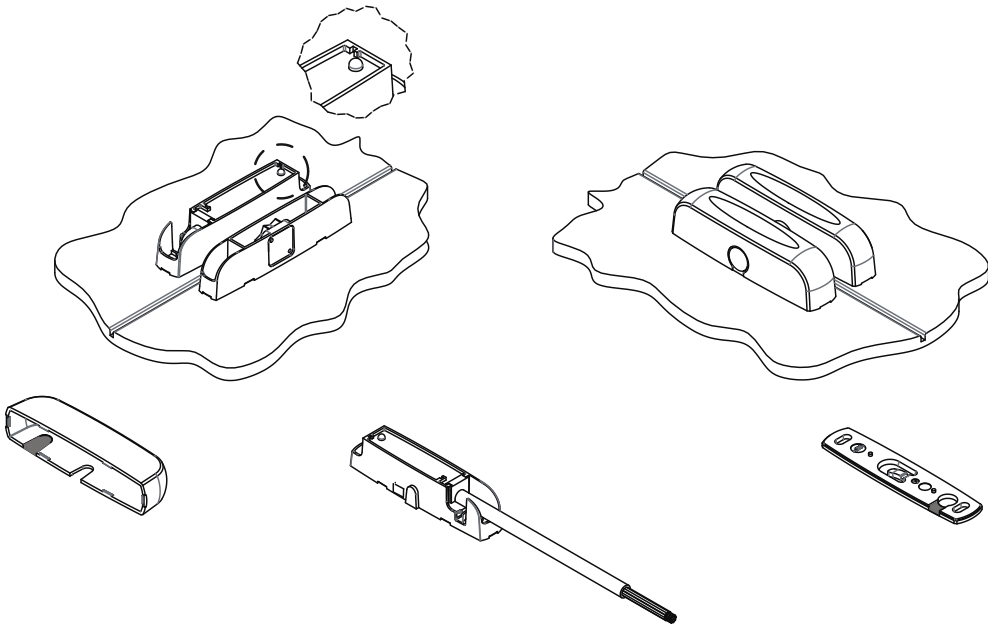
1. DC418



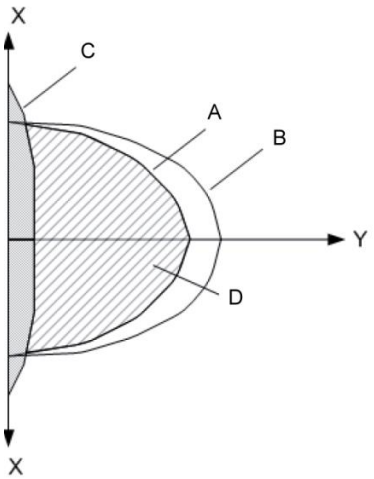
2. DC418



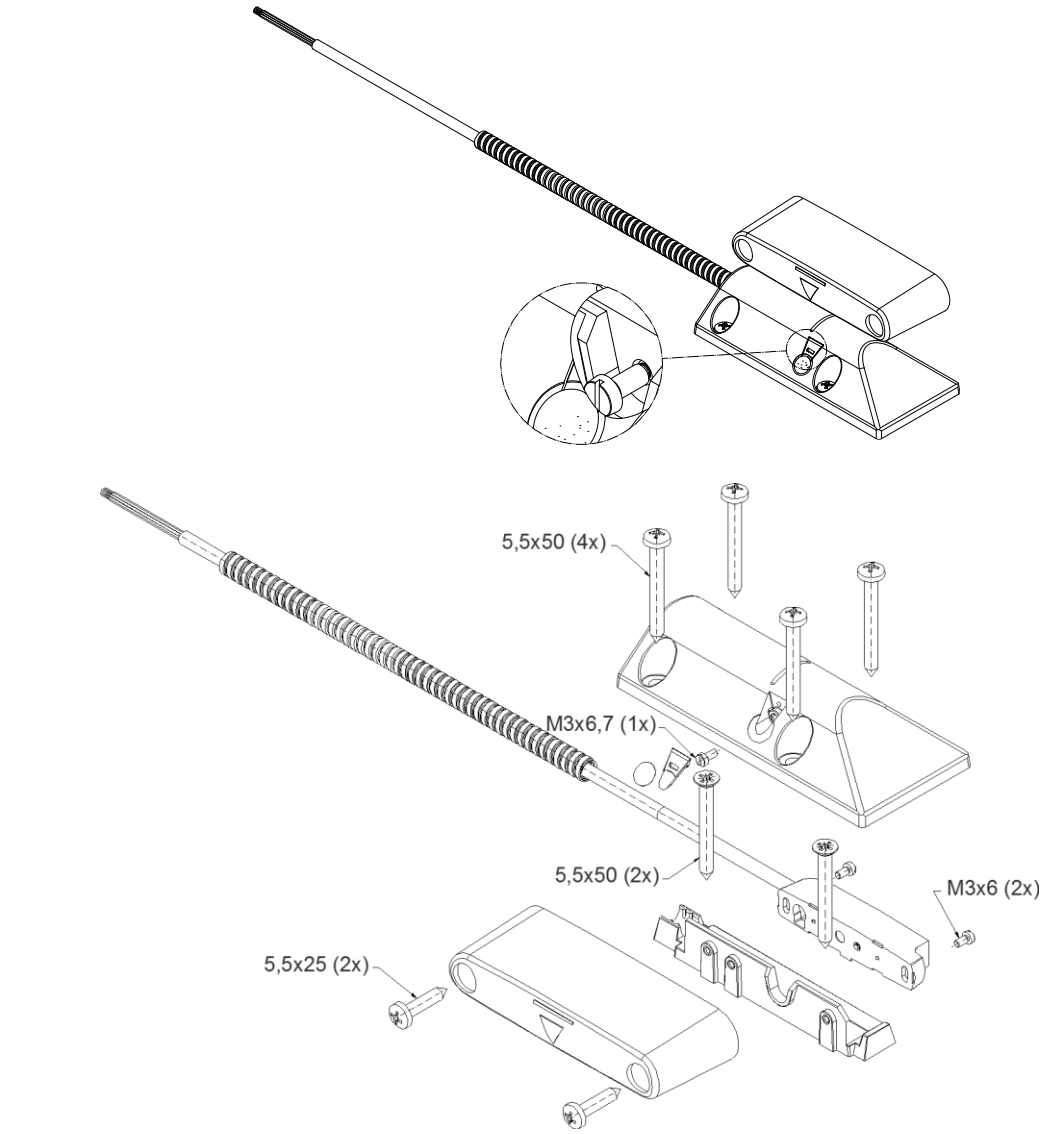
3. DC418

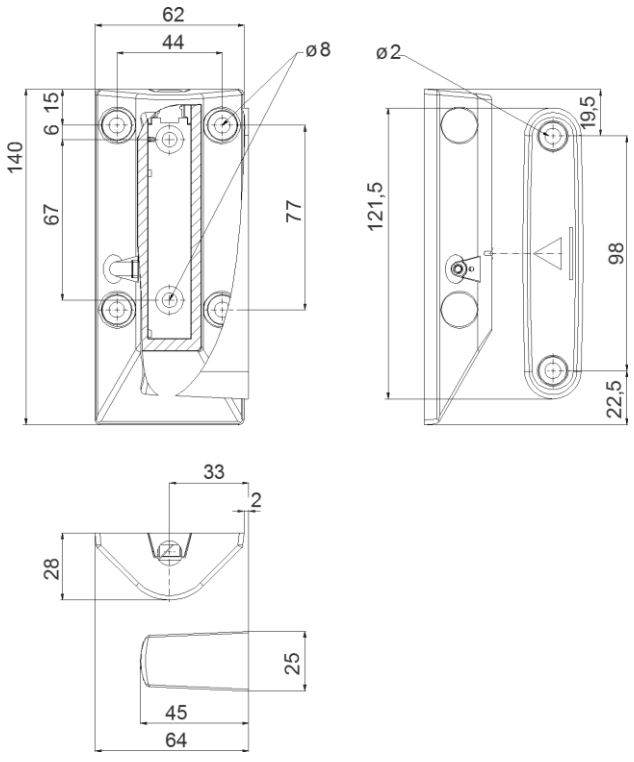


4.



5. DC428


5,5x50 (4x)
M3x6,7 (1x)
5,5x50 (2x)
M3x6 (2x)
5,5x25 (2x)


62
44
ø8
ø2
140
6,15
67
77
19,5
121,5
98
22,5
33
2
28
25
45
64

EN: Installation Sheet

Description

The DC418 (see Fig. 1,2 and 3) and DC428 (see Fig. 5, 6 and 7) detectors are designed for use in intruder alarm systems, which need to comply with the strictest security standards.

Positioning

For positioning, take note of Figure 2 and the following instructions. The orientation from the magnetic housing to the detector housing is predefined and must conform to the illustration.

When mounting on ferromagnetic materials, the detector and magnet must be mounted on the side of the frame towards which it is opened.

Figure 3 provides a detailed view of which elements of the device are relevant for finishing installation.

Do not place the housing cover on the detector until you have finished the learn-in procedure (see "Configuration" section); otherwise, the LED that is needed for the learn-in will no longer be visible.

When connecting the wires, make sure that the command wire is either insulated or connected to a fixed potential, to prevent undesired execution of commands.

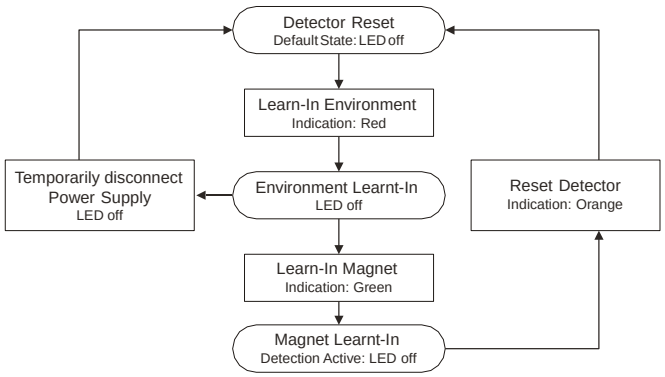
Also make sure that solely the installation contractor has access to the command wire. Thus it must not be laid out to the alarm control unit.

Configuration

The figure below shows a list of all available commands.

All commands are triggered by a brief connection of the command wire to the zero potential (“contact ground”).

Figure 5: Overview of learning phases



This section briefly describes the learn-in procedure.

For more detailed instructions see "DC418 Magnetic Contact Operation and Installation Manual".

The learn-in procedure requires the following steps:

1. Connect the detector to a power supply.
2. Learn-in the environment (magnet remote to the detector) by contacting the command wire to ground. The LED will indicate as follows: off > red (continuous) > red (flashing). Confirm the command by contacting the command wire to ground again. The LED turns off.
3. Learn-in the magnet by contacting the command wire to ground. The LED will indicate as follows: off > green (continuous) > green (flashing). Confirm the command by contacting the command wire to ground again. The LED flashes faster. Move the magnet to its final position. The LED turns off or changes to red if the magnetic field was too weak.
4. If you need to correct the learnt-in values, the detector may be reset by contacting the command wire to ground. The LED will indicate as follows: off > orange (continuous) > orange (flashing). Confirm the command by contacting the command wire to ground again. The LED turns off.

Wiring configuration for EN version

Wire(s)	Type	Assignment
Red	Supply	Supply voltage (+)
Blue	Supply	Ground (-)
Pink	Input	Command input
Black, brown	Output	Intrusion
Yellow, green	Output	Tampering (removal protection)
White, grey	Output	Fault (external field)

Distances

	DC418	DC428 (*)
Mounted on non ferromagnetic material		
Approach distance A	15 mm ± 3 mm	30 mm ± 10 mm
Break distance B	18 mm ± 3 mm	50 mm ± 10 mm
Fault trigger distance C	−3 mm ± 1 mm	−4 mm ± 2 mm
Mounted on ferromagnetic material		
Approach distance A	17 mm ± 4 mm	28 mm ± 7 mm
Break distance B	21 mm ± 4 mm	38 mm ± 5 mm
Fault trigger distance C	−3 mm ± 1 mm	−4 mm ± 2 mm

See Figure 4. The values refer to the Y-distance relative to the learning position. Values along the Z-axis may differ. If required they are to be determined separately. The distances may vary depending on the installation situation, the magnetic code and the learning distance. Before the device is brought into service, they are to be verified.

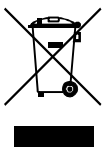
(*)These operating distances are reached with a learning distance of 15 mm (y axis) with a tolerance of ± 5 mm (x axis) between the detector and the magnet housing.

Specifications

Operating voltage	12 to 24 V DC
Power consumption (monitoring mode)	Approx. 5 mA (typical)
Power consumption (learn-in mode, LED)	max. 13 mA
Permitted installation gap between magnet and detector	**DC418:** 5 to 12 mm **DC428:** 10 to 20 mm
Installation offset on the sides (revolving)	max. 1.5 mm
Clearance from metal components	min. 2 mm
Permitted tolerance after learn-in (radial)	max. 1.5 mm

Signal output	Electronic switch
Transfer resistance (closed)	approx. 7Ω (typical)
Transfer resistance (open)	≥10MΩ
Electrical isolation between input and output	min. 30 V
Permitted output current	max. 50 mA
Permitted output voltage	max. 30 V
Measurement speed	approx. 100 ms
Connection cable	LIYY 9 x 0.14 mm² copper tin−plated
Cable conductors	See Table 1
Cable diameter	Ø 5.8 mm
Cable length	Up to 10 m
Contact dimensions	**DC418:** 80 x 18 x 20 mm **DC428:** 140 x 62 x 28 mm
Magnet dimensions	**DC418:** 80 x 15 x 20 mm **DC428:** 121.5 x 45 x 25 mm
Temperature range	−40°C to +70°C

Regulatory information

Manufacturer	PLACED ON THE MARKET BY: UTC Fire & Security Americas Corporation, Inc. 3211 Progress Drive, Lincolnton, NC, 28092, USA AUTHORIZED EU REPRESENTATIVE: UTC Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, Netherlands
Product warnings and disclaimers	THESE PRODUCTS ARE INTENDED FOR SALE TO AND INSTALLATION BY QUALIFIED PROFESSIONALS. UTC FIRE & SECURITY CANNOT PROVIDE ANY ASSURANCE THAT ANY PERSON OR ENTITY BUYING ITS PRODUCTS, INCLUDING ANY “AUTHORIZED DEALER” OR “AUTHORIZED RESELLER”, IS PROPERLY TRAINED OR EXPERIENCED TO CORRECTLY INSTALL FIRE AND SECURITY RELATED PRODUCTS. For more information on warranty disclaimers and product safety information, please check https://firesecurityproducts.com/policy/product-warning/ or scan the QR code.
Protection class	IP67 EN III/A
Certification	CE
EN	Grade 4, EN-ST-000222
European Union directives	UTC Fire & Security hereby declares that this device is in compliance with the applicable requirements and provisions of the Directive 2014/30/EU and/or 2014/35/EU. For more information see www.utcfireandsecurity.com or www.interlogix.com.
	2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

Contact information

www.utcfireandsecurity.com or www.interlogix.com.

For customer support, see www.utcfssecurityproducts.eu

P/N MA0002045 • REV B • ISS 26JAN17