Mounting Instruction

Bar Magnet

Surface Mounting (aP)

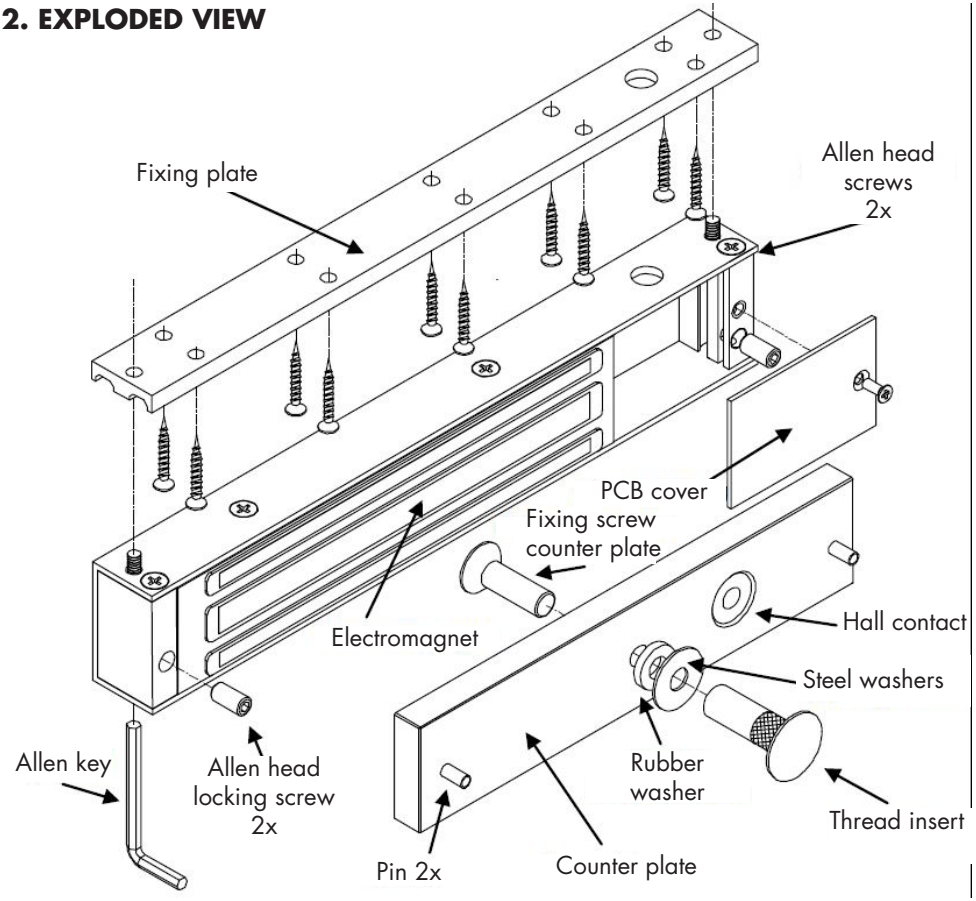
FH550K, part no. 040285SET

DICTATOR

1. TECHNICAL DATA

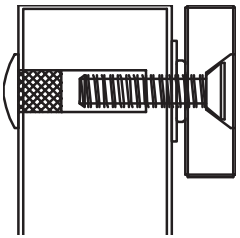
	FH550K (Surface mounting)
Holding force	3700 N
Operation mode	quiescent current (locked with current)
Supply voltage (+/-10 %)	12 / 24 V DC
Power consumption	420 / 210 mA
Hall contact	changeover contact(s) (changeover/NO/NC)
Switching voltage	30 V DC / 1 A respectively 125 V AC / 0.5 A
Remanence	0 N
LED light signal two-colour	red (counter plate adheres) / green (open)
IP rating	IP 42
Operating temperature	-15 to +55 °C
Dimensions (w x h x d)	magnet (with mounting plate): 272x76x41 mm counter plate: 185×61×16.5 mm
Gross weight	4.2 kg

2. EXPLODED VIEW



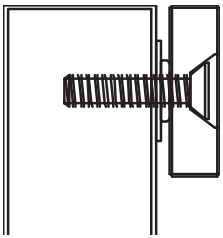
3. FIXING THE COUNTER PLATE

Timber, PVC or aluminium doors



Drill an 8 mm hole through the door. Drill this on the side of the thread insert up to a depth of 35 mm to 12 mm.

Safety door



Drill a 6.8 mm hole on the side of the counter plate. Cut a M8 x 1.25 female thread.

It is imperative to use the rubber washer, the metal washers and the two pins on the back of the counter plate.

For optimum alignment it should still be possible to easily move the counter plate.

DICTATOR

4. MOUNTING POSSIBILITIES

The opening direction pushing or pulling is always defined when looking at the door on the mounting side of the bar magnet.

A. PUSHING LINTEL MOUNTING

No additional mounting accessories are required. The bar magnet is mounted directly on the fixing plate under the lintel. The counter plate is mounted on the door leaf.

1. Fold the drilling template at right angles. Align the template on the closed door. Mark the drill holes and drill the holes (do not forget the drill hole for the power supply!).
2. Fasten the counter plate to the door leaf, depending on the type of door (see next page).
3. Attach the mounting plate and fix the bar magnet to it.
4. Check that the bar magnet and the counter plate as a whole are in good contact over the entire contact surface. Otherwise, the assembly must be corrected.
5. Connect the power supply (voltage-free) to the bar magnet and apply voltage.

B. PUSHING ON FLUSH DOOR

Requires the use of an L-angle on which the bar magnet is mounted. The bracket with the bar magnet mounted on it is fastened to the lintel. The counter plate is mounted on the door leaf.

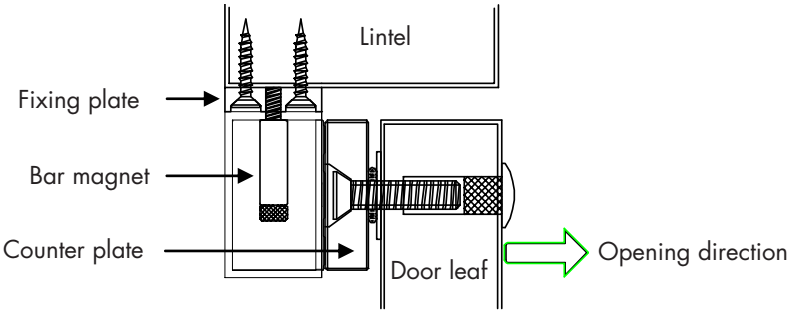
1. Determine the position of the angle taking into account that the bar magnet to be fixed to it must be positioned exactly opposite the counter plate. Mark the drill holes and drill the holes (do not forget the drill hole for the power supply!). Fix the bracket and the bar magnet under the bracket (without fixing plate).
2. Attach the counter plate to the bar magnet and apply tension. Close the door and mark the position of the counter plate. Mark the holes for the counter plate, drill the holes and fasten the counter plate to the door leaf, depending on the type of door (see next page).
3. Check that the bar magnet and the counter plate as a whole are in good contact over the entire contact surface. Otherwise, the assembly must be corrected.
4. **Connect the power supply (de-energiszd) using the watertight IP42 cable bushing and energize. The part of the cable that is exposed outside the bar magnet must be mechanically protected (cable trough, cable sheath, cable protection, ...).**

C. PULLING ON FLUSH DOOR

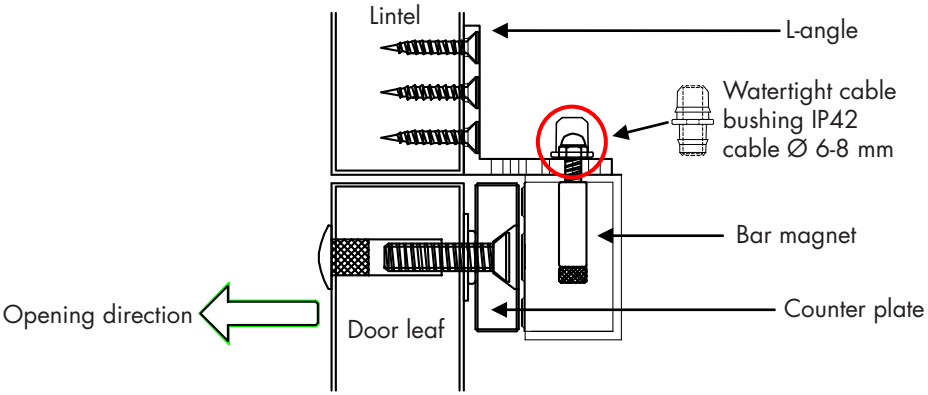
Requires the use of a ZL mounting kit. The bar magnet is mounted with the L on the door lintel. The counter plate is mounted with the Z on the door leaf.

1. Determine the position of the L-angle. Mark the holes and drill the holes (do not forget the hole for the power cables!). Fix the bracket and the bar magnet under the bracket (without fixing plate).
2. Fasten the counter plate to the Z-angle. Attach the counter plate with the Z-angle to the bar magnet and apply tension. Close the door and mark the position of the Z-angle. Mark the drill holes for the Z-angle, drill the holes and fasten the whole to the door leaf.
3. Check that the bar magnet and the counter plate as a whole are in good contact over the entire contact surface. Otherwise, the assembly must be corrected.
4. **Connect the power supply (de-energized) using the watertight IP42 cable bushing and energize. The part of the cable that is exposed outside the bar magnet must be mechanically protected (cable trough, cable sheath, cable protection, ...).**

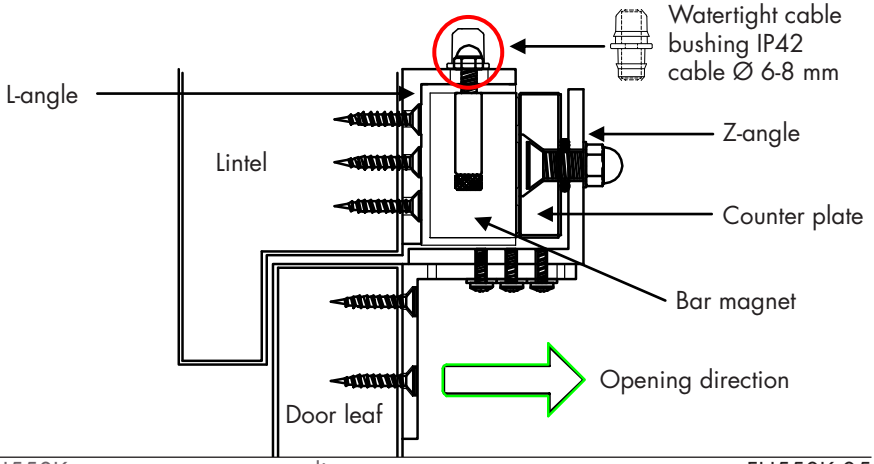
A.


Lintel
Fixing plate
Bar magnet
Counter plate
Door leaf
Opening direction

B.


Lintel
L-angle
Watertight cable
bushing IP42
cable Ø 6-8 mm
Bar magnet
Counter plate
Opening direction
Door leaf

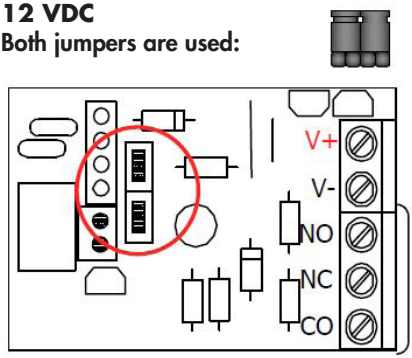
C.


Watertight cable
bushing IP42
cable Ø 6-8 mm
L-angle
Lintel
Z-angle
Counter plate
Bar magnet
Opening direction
Door leaf

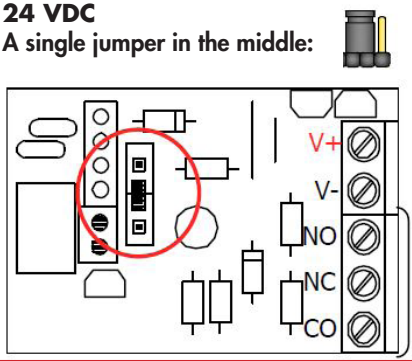
5. ELECTRICAL CONNECTION

IMPORTANT: When using the magnets with the DICTATOR interlock control system, the supply voltage must always be set to 24 VDC - see illustration on the right!!!

12 VDC
Both jumpers are used:



24 VDC
A single jumper in the middle:



6. DIMENSIONS