

## Manual de instalare pentru electromagnet



Produsul se preteaza pentru a lucra impreuna cu sistemul de interfonie, incendiu sau control acces. Se preteaza pentru toate tipurile de usi (fier, lemn, sticla).

Temperatura de lucru: -40° ~ +55° Celsius

### Specificatii model:

Modul de instalare: ingropat; aplicat

ES-150GS

Tip: A- Montaj ingropat; G- Montaj aplicat; D-led; S- Electromagnet dublu; F- feedback; X- Temporizare deschidere

Model: 180, 230, 260, 300, 380, 500 kg forta

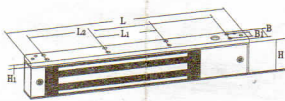
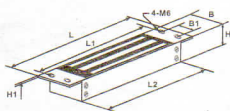
Brand: ES

### Date tehnice:

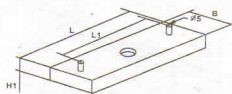
Electromagnet aplicabil						
MODEL	ES180G	ES230G	ES280G	ES300G	ES380G	ES500G
Tensiune de alimentare:	12VDC	12VDC	12VDC	12VDC	12VDC	12VDC
Consum:	350mA	350mA	320mA	500mA	320mA	460mA
Forța de blocare ±20kgf	180kg (300lbs)	280kg (600lbs)	300kg (700lbs)	320kg (800lbs)	380kg (1000lbs)	500kg (1200lbs)
Masa:	1.0kg	2.0kg	2.5kg	2.5kg	3.0kg	5.0kg

Electromagnet ingropat				
MODEL	ES180A	ES230A	ES280A	ES380A
Tensiune de alimentare:	12VDC	12VDC	12VDC	12VDC
Consum:	350mA	350mA	320mA	320mA
Forța de blocare ±20kgf	180kg (300lbs)	280kg (600lbs)	300kg (700lbs)	380kg (1000lbs)
Masa:	1.0kg	2.0kg	2.5kg	3.0kg

### Dimensiuni (mm)



### Contraplaca (mm)



	ES180A	ES230A	ES280A	ES380A	ES180G	ES230G	ES280G	ES300G	ES380G	ES500G
L	190	258	252	265	170	250	240	240	250	266
L1	/	238	232	244	42	70	70	70	/	/
L2	/	202	197	209	126	210	200	200	220	/
B	32	42	50	56	20.5	25.4	27.5	27.5	36	42
B1	/	25	35	35	9	12.5	15	15	20	18
H	21	27	29	35	34	42	50.5	50.5	56	67
H1	/	5	4	5	5	5	6	6	6	6

ITEM	L	L1	B	H
ES180	130	120	33	11
ES230	180	165	38	11
ES280	158	134	43	11
ES300	158	134	43	11
ES380	168	134	48	11.5
ES500	185	165	61	16

### Probleme ce pot aparea in timpul functionarii:

Problema:	Solutia:
Se alimenteaza, ledul de stare se aprinde, nu are forta de retinere	1> Verificati pozitia de inchidere a electromagnetului. Acesta trebuie sa ocupe toata suprafata placii metalice.
Se alimenteaza, ledul de stare se aprinde, nu se blocheaza usa	1> Verificati reglajul de temporizare a electromagnetului.

### Reguli de intretinere

- Curatati periodic suprafata de contact dintre electromagnet si placa metalica.
- Verificati ca prinderile electromagnetului si a placii metalice sa fie fixate de usa respectiv de toc.

Produsele sunt realizate in conformitate cu standardele europene

## Atentie!

Simbolul



indica faptul ca produsul nu trebuie aruncat impreuna cu gunoii menajer. Trebuie predat la punctul de colectare corespunzator pentru reciclarea echipamentelor electrice si electronice. Asigurandu-va ca ati eliminat in mod corect produsul, ajutati la evitarea potentialelor consecinte negative pentru mediul inconjurator si pentru sanatatea persoanelor, consecinte care ar putea deriva din aruncarea necorespunzatoare a acestui produs.



EM lock apply to door phone system, fire control passageway, glass door, aluminum alloy door, etc. It can work together with RFID access controller and door phone system in  $-40^{\circ}$  ~  $+55^{\circ}$  working condition. When power is applied the magnetic lock, it turns on the unit's powerful built-in electromagnet. This electromagnet is attracted to the steel armature plate which is mounted on a door, holding the door fast against unauthorized entry. When power to the magnetic lock is turned off, the electromagnet releases the armature plate, allowing the door to open.

## Type & Model Specification

### ES-180GS

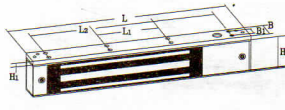
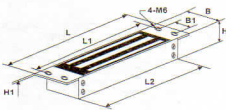
Type: A-mortise mounted, G-surface mounted, D-led, S-double door, F-feedback, X-limer  
 Model: 180, 230, 280, 300, 380, 500KG holding force  
 Brand: ES

## Model & Technical Data

Surface mounted series						
MODEL	ES180G	ES230G	ES280G	ES300G	ES380G	ES500G
Voltage	12VDC	12VDC	12VDC	12VDC	12VDC	12VDC
Current	350mA	350mA	320mA	500mA	320mA	460mA
Holding Force	180kg (300lbs)	280kg (600lbs)	300kg (700lbs)	320kg (800lbs)	380kg (1000lbs)	500kg (1200lbs)
Weight	1.0kg	2.0kg	2.5kg	2.5kg	3.0kg	5.0kg

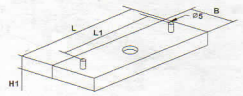
Mortise mounted series				
MODEL	ES180A	ES230A	ES280A	ES380A
Voltage	12VDC	12VDC	12VDC	12VDC
Current	350mA	350mA	320mA	320mA
Holding Force	180kg (300lbs)	280kg (600lbs)	300kg (700lbs)	380kg (1000lbs)
Weight	1.0kg	2.0kg	2.5kg	3.0kg

## Specification (Unit: mm)



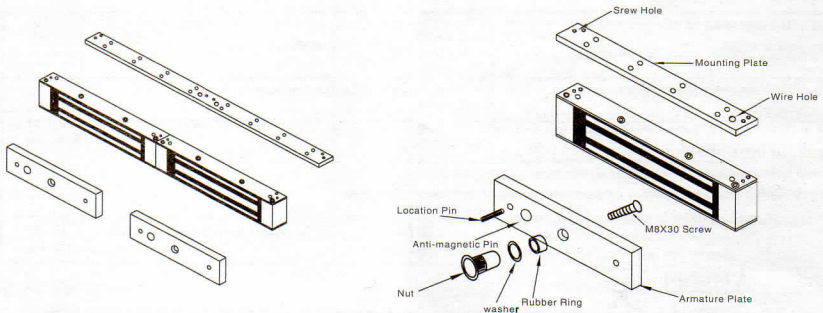
	ES180A	ES230A	ES280A	ES380A	ES180G	ES230G	ES280G	ES300G	ES380G	ES500G
L	190	258	252	265	170	250	240	240	250	266
L1	/	238	232	244	42	70	70	70	/	/
L2	/	202	197	209	126	210	200	200	220	/
B	32	42	50	56	20.5	25.4	27.5	27.5	36	42
B1	/	25	35	35	9	12.5	15	15	20	18
H	21	27	29	35	34	42	50.5	50.5	56	67
H1	/	5	4	6	5	5	6	6	6	6

## Iron plate size (unit: mm)



ITEM	L	L1	B	H
ES180	130	120	33	11
ES230	180	165	38	11
ES280	158	134	43	11
ES300	158	134	43	11
ES380	168	134	48	11.5
ES500	185	165	61	16

## Lock Diagram



## Remark:

Please don't fix the screw of armature plate tightly, let the rubber ring maintain proper elasticity





## Installation

Steps →

**1** Template

Flod the template to 90°

**2** Door Frame

Close the door, place the template on door frame, close to door leaf.

**3** Door Frame

Mark screw positions on door leaf and door frame.

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**4** Door leaf

Drill holes on the marked positions

**5**

Install the Armature Plate on door leaf

Hollow Metal Door

Drill a hole  
Inside: Diameter is 8mm  
Outside: Diameter is 16mm

Wooden Door

Drill a hole  
Inside: Diameter is 8mm  
Outside: Diameter is 12.7mm

Metel Surface Door

Inside: Drill a hole diameter is 8mm folding the plastic straight pin

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**6** Setpin

Put the pin into the Armature Plate

**7**

According to the picture add the washers on the Armature Plate.

**8** Washers

Place washers between Armature plate and door leaf

**9** Allen Key

Use Allen Key to remove the Mounting plate from lock body

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**10** Wire

Wire go through the wire hole, then screw the mounting plate on top of the door frame.

**11** Allen Key

Use Allen Key to screw the lock body on the mounting plate.

**12** Wire

Close and pull the door to test holding force, extra washers can be added to adjust anfile between door leaf and armature plate.

**13** Screw door

Confirm the holding force and tighten the proof screws

## Bracket Installation

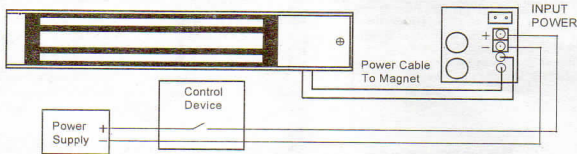
Standard Installation

LS Bracket Installation

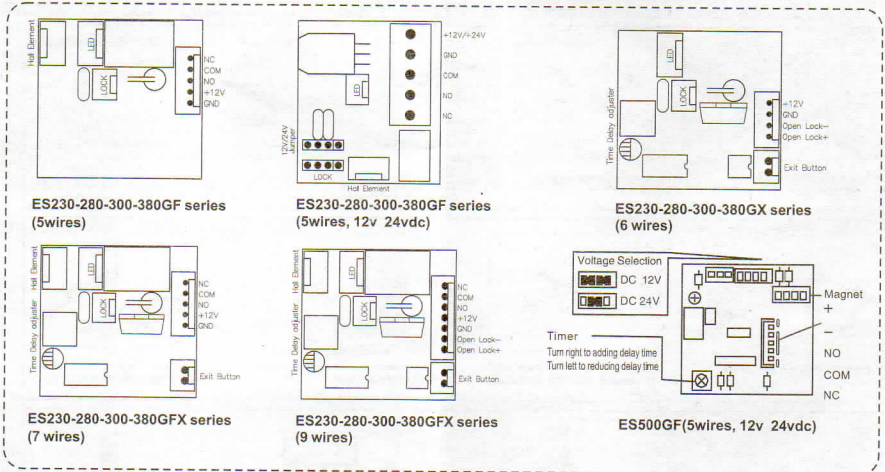
ZL Bracket Installation

U Bracket Installation

## Wiring Diagram



## PCB Diagram



## Trouble Shooting

Problem:	Solution
Power on, the LED no active	<ol style="list-style-type: none"> <li>1&gt; If the voltage selection of the printed circuit board was set DC24V, please check your power supply at least DC24V.</li> <li>2&gt; DC jumper position—please make sure your jumper pin correct or not.</li> </ol>
Power on, the LED no active but electromagnet lock no active	<ol style="list-style-type: none"> <li>1&gt; If the voltage selection was set 24V, please check your power supply at least DC24V.</li> <li>2&gt; Electromagnetic lock not close with iron plate—please adjust the position between lock and plate.</li> <li>3&gt; Transformers quality cause interference—please change the transformers.</li> </ol>
Power on, the LED no active magnetism deficient	<ol style="list-style-type: none"> <li>1&gt; Electromagnetic lock not close with iron plate- please checks it clean or not.</li> <li>2&gt; Electromagnetic lock with iron plate not measured—please adjust the position between lock and plate .</li> <li>3&gt; Paucity of direct current or wrong jumper position—please make sure it correct.</li> </ol>
Power on, electromagnet lock couldn't active in time.	<ol style="list-style-type: none"> <li>1&gt; Timer adjustment—please check the timer tuner.</li> <li>2&gt; Timer controller plus—please check the timer turner.</li> </ol>

## Regular Maintenance

1. Clean the contact surfaces of the electromagnet or armature plate with a soft cloth and non-abrasive, non-corrosive cleaner.
2. Apply a light coat of a silicon lubricant to prevent rust. Wipe away the excess.
3. Check that the armature plate is securely attached to the door, but can pivot slightly around the armature screw.
4. Check that the electromagnet is securely attached to the door frame.