

ZAVAG Full range of EM Locks



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 $-40^{\circ}\sim +55^{\circ}$ 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.

1. Type & Model Specifications :
















ES-180GS

Type: **A**-mortise mounted, **G**-surface mounted, **D**-led, **S**-double door, **F**-feedback.

Holding Force : 180,230 280, 500, 60

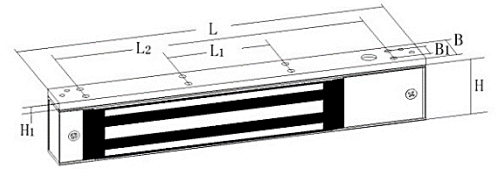
PreFix: Elock SECURITY.

2. Model & Technical Data :

SERIES	<u>ES60</u>	<u>ES180</u>			<u>ES280</u>			<u>ES500</u>	<u>ES230</u>	
	ES60B	ES180G	ES180GF	ES180GS	ES280GD	ES280GF	ES280GSD	ES500GD	ES230AA	
Photos										
Holding force	60Kg/120lbs	180KG/350lbs		280KG/600lbs X2	280KG/600lbs		280KG/600lbs X2	500KG/1200lbs	280KG/600lbs	
Mount	SURFACE								MORTISE	
Lock size (LxHxW) mm	80x19x33	170x22x39		340x22x39	250x27x48		500x27x48	266x73x42	258x42x32	
Armature size (LxHxW)	75x11x33	130x30x9			180x38x11			185x61x16		
Bi-color LED					Yes		Yes	Yes		
Sensor Feedback			YES			YES				
Voltage Input	12VDC					12VDC/24VDC		12V/400mA	12VDC	
Double				Yes			Yes			
Function			With door sensor			With door sensor				
Brackets		U180 	ZL180 	U280 	ZL280 	U500 	ZL500 			

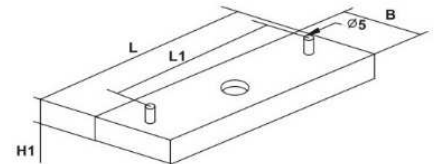
3. Lock size (unit : mm) :

Code Model	L	L1	L2	B	B1	H	H1
ES180G	170	42	126	20.5	9	34	5
ES230A	258	238	202	42	25	27	5
ES280G	240	70	200	27.5	15	50.5	6
ES500G	266			42	18	67	6

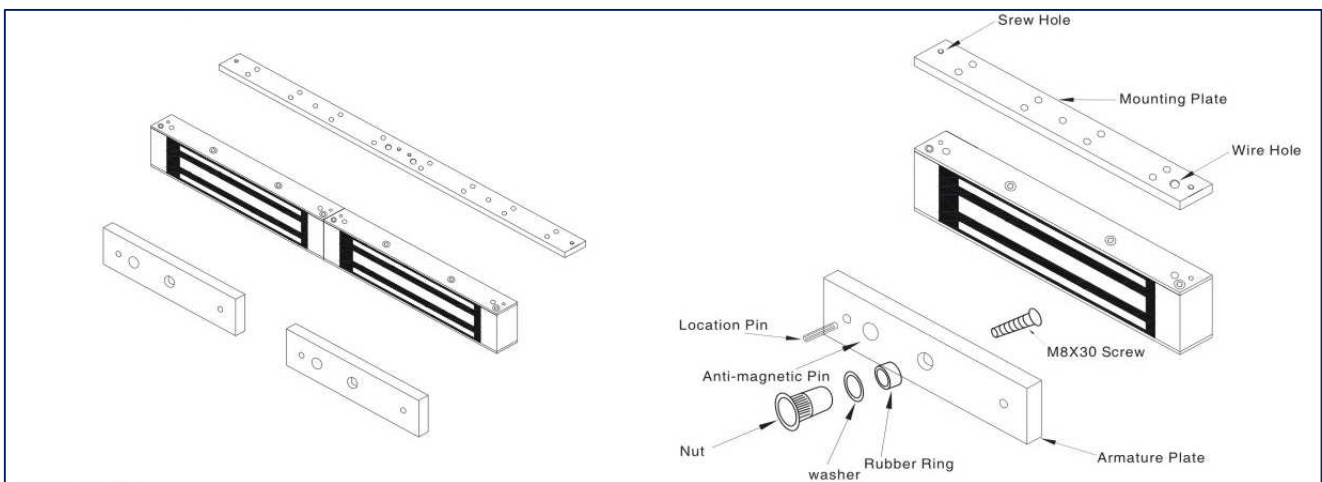


4. Iron plate size : (unit : mm)

Code Model	L	L1	B	H
ES180G	130	120	33	11
ES230A	180	165	38	11
ES280G	158	134	43	11
ES500G	185	165	61	16



5. Lock Diagram:



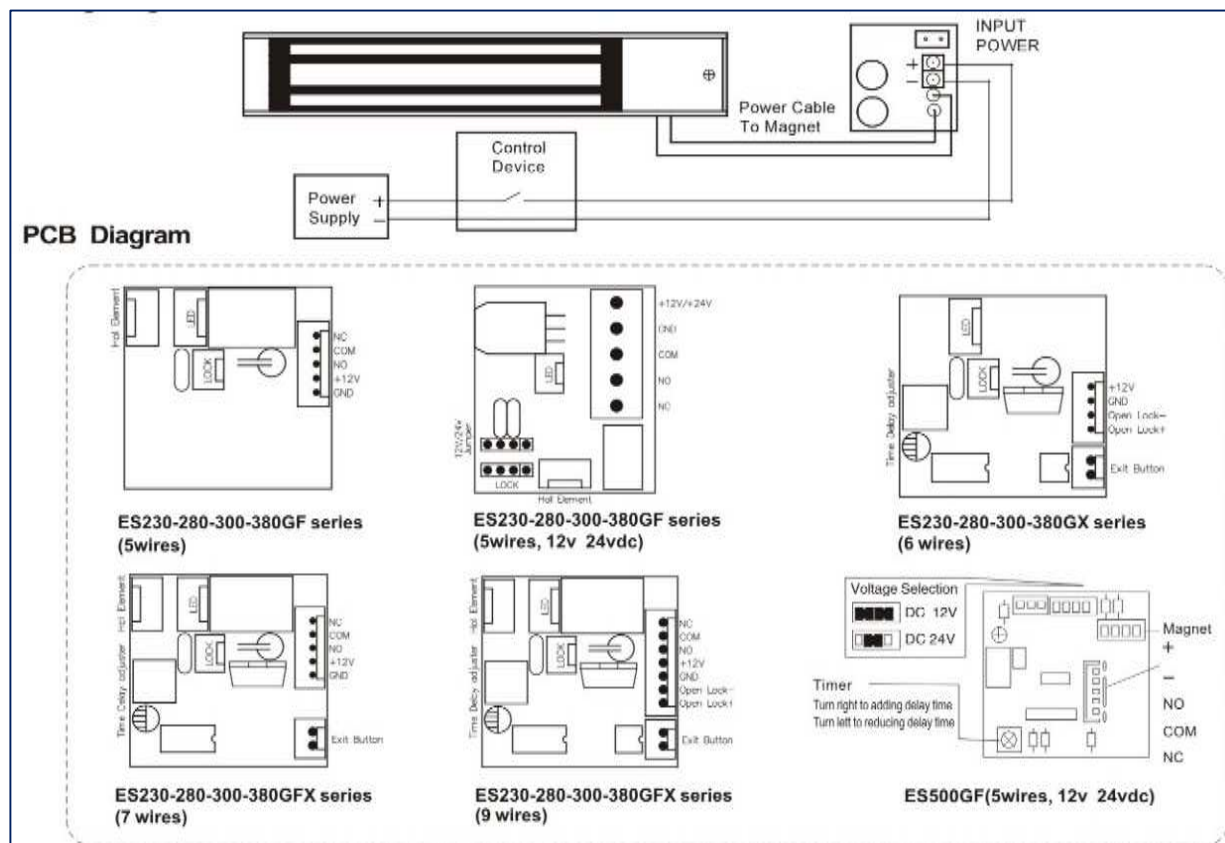
6. Installation Guide :

<p>Steps</p>	<p>1 Template</p> <p>Flod the template to 90°</p>	<p>2 Door Frame</p> <p>Template</p> <p>Door leaf</p> <p>Close the door, place the template on door frame, close to door leaf.</p>	<p>3 Door Frame</p> <p>Template</p> <p>Door leaf</p> <p>Mark screw positions on door leaf and door frame.</p>	
<p>4</p> <p>Door leaf</p> <p>Drill holes on the marked positions</p>	<p>5</p> <p>Install the Armature Plate on door leaf</p>	<p>Hollow Matel Door</p> <p>16mm 8mm</p> <p>Drill a hole Inside: Diameter is 8mm Outside: Diameter is 16mm</p>	<p>Wooden Door</p> <p>36mm 12.7mm 8mm</p> <p>Drill a hole Inside: Diameter is 8mm Outside: Diameter is 12.7mm</p>	<p>Matel Surface Door</p> <p>6.8mm for M8-1.25 thread</p> <p>Inside: Drill a hole diameter is 8mm folding the plastic straight pin</p>
<p>6</p> <p>Setpin</p> <p>Put the pin into the Armature Plate</p>	<p>7</p> <p>According to the picture add the washers on the Armature Plate.</p>	<p>8</p> <p>Washers</p> <p>Plase washers between Armature plate and door leaf</p>	<p>9</p> <p>Allen Key</p> <p>Use Allen Key to remove the Mounting plate from lock body</p>	
<p>10</p> <p>Wire</p> <p>Wire go through the wire hole, then screw the mounting plate on top of the door frame.</p>	<p>11</p> <p>Allen Key</p> <p>Use Allen Key to screw the lock body on the mounting plate.</p>	<p>12</p> <p>Wire</p> <p>Close and pull the door to test holding force, extra washers can be added to adjust anfle between door leaf and armature plate.</p>	<p>13</p> <p>Screw door</p> <p>Confirm the holding force and tighten the proof screws</p>	

7. Optional Brackets :

<p>Standard Installation</p>	<p>LS Bracket Installation</p>	<p>ZL Bracket Installation</p>	<p>U Bracket Installation</p>
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8. Mounting Diagram :



9. Trouble shooting:

Problem:	Solution
Power on, the pilot light no active	<ol style="list-style-type: none"> 1> If the voltage selection of the printed circuit board was set DC24V, please check your power supply at least DC24V, 250mA. 2> DC wireless bipolar—please exchange the wireless. 3> DC jumper position—please make sure your jumper pin correct or not.
Power on, the pilot light active, but electromagnetic lock no active	<ol style="list-style-type: none"> 1> If the voltage selection was set 24V, please check your power supply at least DC24V, 250mA. 2> Electromagnetic lock not close with iron plate—please adjust the position between lock and plate. 3> Transformers quality cause interference—please change the transformers.
Power on, the pilot light active, magnetism deficient:	<ol style="list-style-type: none"> 1> Electromagnetic lock not close with iron plate—please check it clean or not. 2> Electromagnetic lock with iron plate not measured—please adjust the position between lock and plate. 3> DC paucity of electric or wrong jumper position—please make sure it correct.
Power on, electromagnetic lock couldn't active in time	<ol style="list-style-type: none"> 1> Timer adjustment—please check the timer tuner. 2> Timer controller plus—please check the timer tuner.

10. 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.