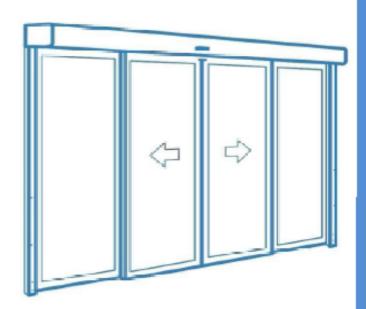


DC Brushless Motor Technology Automatic Door System

INSTALLATION GUIDE





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1. AUTOMATIC DOOR SYSTEMS SPECIFICATION:

1.1 Mechanism And Engine Group

- 1. The motor must be of the magnetic field-free and maintenance-free type.
- <u>2.</u> The engine should have a noiseless type reducer that saves energy and increases its power.
- <u>3.</u> The mechanism must be suitable for operation at an ambient temperature of -20° C to 65°C.
- <u>4.</u> The energy of the mechanism should be 150 W. The blade closing force should be 150 N. Capacity should be more than 1500 openings per day.
- <u>5.</u> It is ensured that the doors remain closed and electronically locked by means of a digital selector. It should include functions such as outdoor), automatic (whole system is activated), open (door is open), one-way (motion unit one-way activated), night (locked from outside, can be opened with a button from inside).
- <u>6.</u> In case of microprocessor unit failure, radar and photocell failure, belt loosening and breakage, overload and any obstacle while opening and closing the blades, the digital selector indicator on the mechanism will indicate the malfunction and its location. Since the mechanism is activated, it will automatically determine the opening and closing distances.
- <u>7.</u> Door open time, wing opening and closing speed should be adjustable by means of digital selector. The set open time is 0-30 sec. should be between.
- <u>8.</u> There should be a minimum of five different opening ranges that can be adjusted in the mechanism sand the desired range should be selected according to the entrance traffic frequency.
- <u>9.</u> The opening speed of the door should be 1400 mm/sec for double wing doors and 700 mm/sec for single wing doors.
- **10.** For security purposes, the opening speed of the doors should be faster than the closing speed.
- **11.** After closing, the mechanism should push the blades with a minimum force of 4 kg, ensuring full closing and absolute sealing of the blades.
- 12. The mechanism must be operable with minimum 2x100 kg wings. (For a single wing, it will have a carrying capacity of 140 Kg.)
- **13.** Mechanism brake and slow motion are as should be adjustable. (between 5 and 50 cm.)
- **14.** The closing and opening forces of the door and the opening and closing speeds should be able to be adjusted in dependently of each other. In this way, if the door encounters an obstacle while closing, it should be able to be opened automatically without damaging it.
- <u>15.</u> 4 of them will pres the down railand 2 will press the uprail.) The rail on which the Wheel moves should be replaceable (modular) when worn.
- **16.** There should be a battery system in the mechanism that will open the door in case of power cuts.
- 17. Moving wings should be able to be opened manually in case of power cuts.
- **18.** The mechanism will be 32 bit micro processor controlled. If desired, all doors will have the ability to be connected to the central computer system. All functions and settings of the doors should be made from the central computer, the position of the doors (open or closed) and the location of the malfunction in case of malfunction should be seen.
- <u>19.</u> If it is specified in the project, it should have the function of not closing or opening (Air-Lock) without closing the other door by communicating with another door.



1.2 Photocell

- <u>20.</u> On the door wings, 110 cm from the floor. 1 photocell will be used at the height and the door will be If an obstacle enters while closing, the door will automatically open back and should not be closed until the obstacle is removed. If desired, the 2nd safety photocell can also be connected.
- <u>21.</u> In the safety photocell, the last 10 cm cable will be socketed. In the event of a malfunction, service can be performed without removing the entire wiring.

1.3 Radar and Other Opening Options

- <u>22.</u> The opening of the door should be with radar from both directions. If desired, opening the door should be possible with the combination key, hand proximity sensor or knee-elbow button.
- <u>23.</u> The radar will work with the microwave system, which can be affected by living and inanimate objects at the same rate.
- <u>24.</u> If necessary, the mechanism will be equipped with an FM receiver and transmitter system and will provide wireless remote control. All functions of the door must be controlled via this remote control.
- <u>25.</u> In the event of an emergency exit, all doors should be able to be controlled and opened from a single center.
- **<u>26.</u>** Air-lock boot tracking system should be included in the processor as standard.

1.4 Aluminum Profiles and Glass

- **27.** The aluminum to be used will be made with electrostatic powder paint in the appropriate color.
- <u>28.</u> The profiles to be used in the wings must be at least 1.5 mm thick and 40 mm wide, and the profile to be used in the mechanism case must be 100 mm high with a minimum 5 mm wall thickness.
- **29.** At the corners of the wing, aluminum profiles should be connected to each other with black wedges.
- <u>30.</u> Sealing will be provided with the help of the wicks to be used in the wing composition and the brush to be used under the wing.
- <u>31.</u> 8 mm thick transparent or milk laminated glass should be used in all moving and fixed wings according to the request of the administration.
- 32. Glasses should be mounted by providing sealing with special EPDM wicks for joinery.

1.5 General

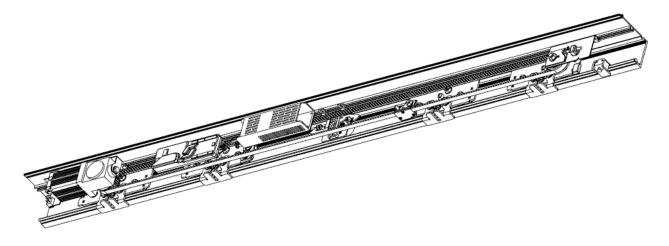
- <u>33.</u> 2 years free maintenance and repair service for all kinds of manufacturing and assembly faults of the companies and all kinds of services for the system, against a fee, for items that will be out of warranty. They must have the infrastructure to supply spare parts for 10 years and to perform field applications.
- **34.** Engines should be guaranteed for 5 years.
- <u>35.</u> Firms have to document their previous work experience related to automatic photocell door manufacturing with a work completion certificate and/or reference letter at least as much as the cost of the work they received from the relevant institutions.
- <u>36.</u> The manufacturer and the door will have TS EN 16005, ISO 9001:2008, CE, Manufacturing Competence Certificate, Domestic Goods Certificate.
- 37. Must have 3.200.000 Opening test certificate.



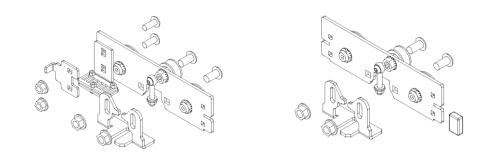
2. ASSEMBLY INSTRUCTIONS:

2.1 Mechanism and Accessories

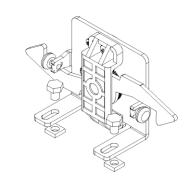
Supra Mechanism



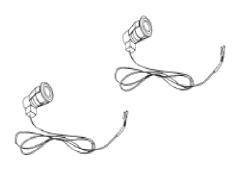
Wheel Set



Electronic Lock



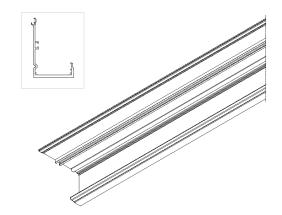
Safety Photocell



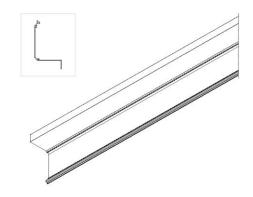


2.2 Mechanism and Frame

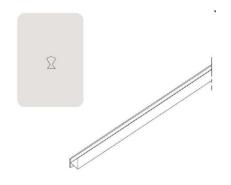
Case Profile



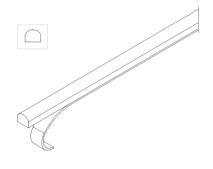
Top Cover Profile



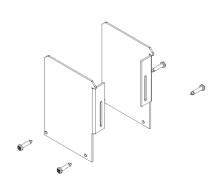
Profile Wick System



Wheel Rail Profile

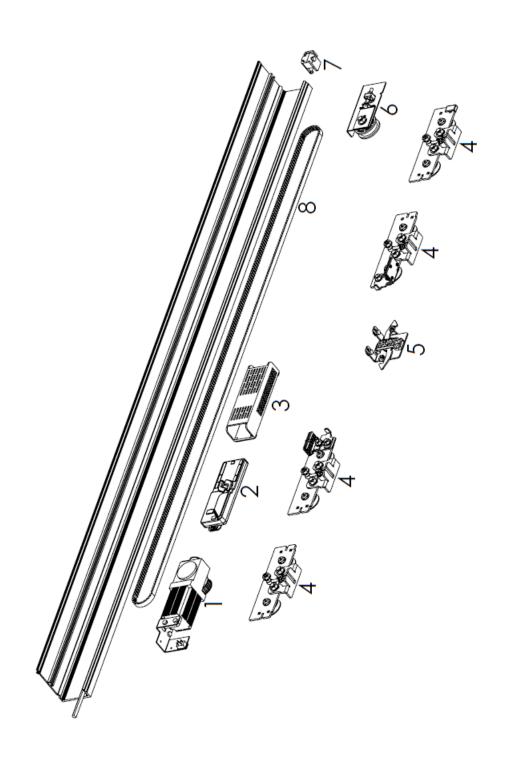


Side Cover





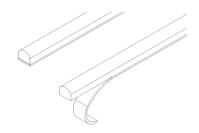
1-Supra Motor 2-Control Unit 3-Transformer 4-Wheel Set 5-Electronic Lock6-Belt Tensioning Set7-Stopper8-Strap



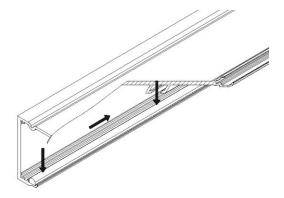


2.3 Assembly Steps

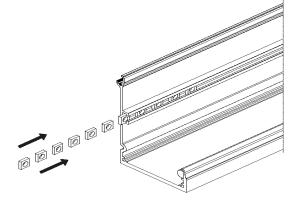
1. Stick the double sided wheel rail profile adhesive to the wheel rail.



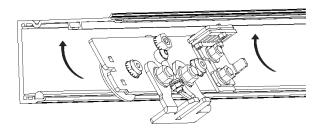
2. Stick the wheel rail to the chassis.



3. Place the fasteners in the case as shown in the figure.

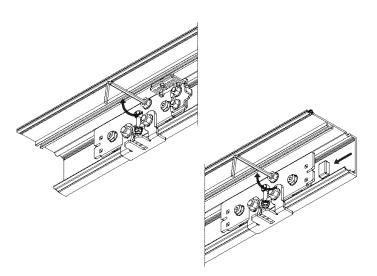


4. Place the carrier mechanisms in the case as shown in the figure.

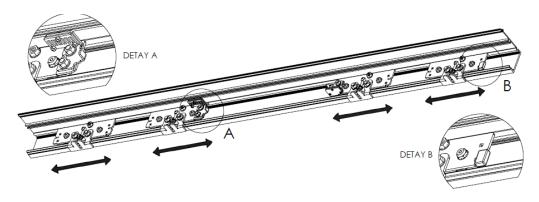




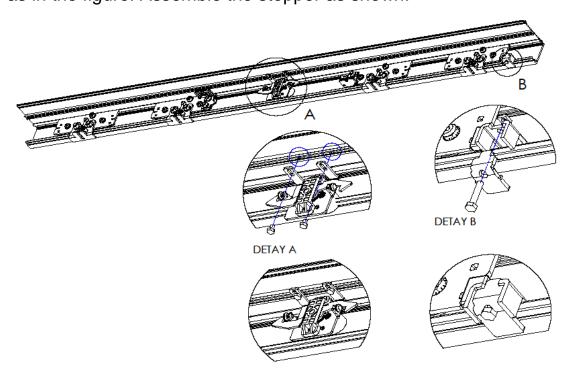
5. Setting using Allen Adjust the wheel and tighten the nuts of the fixed wheels with the wrench.



The wheel sets must be able to move freely in the chassis after they are assembled and must be tight enough that the wheel does not come off the rail.

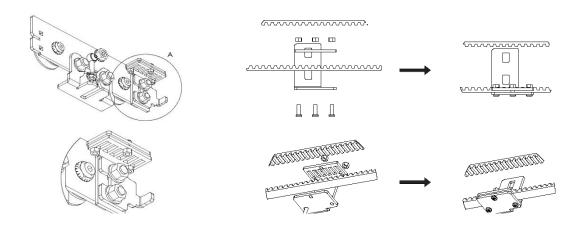


6. Assemble the electronic lock using the fasteners specified in step 3 as in the figure. Assemble the stopper as shown.

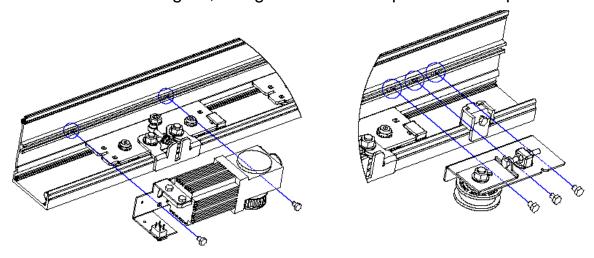


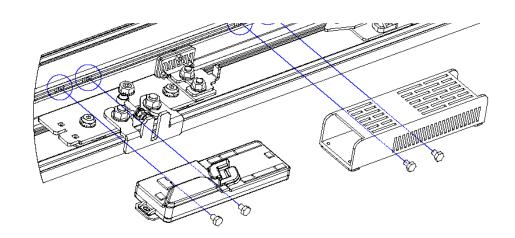


7. Located on the wheel set; Assemble the belt attachment set to the belt as shown in the figure.



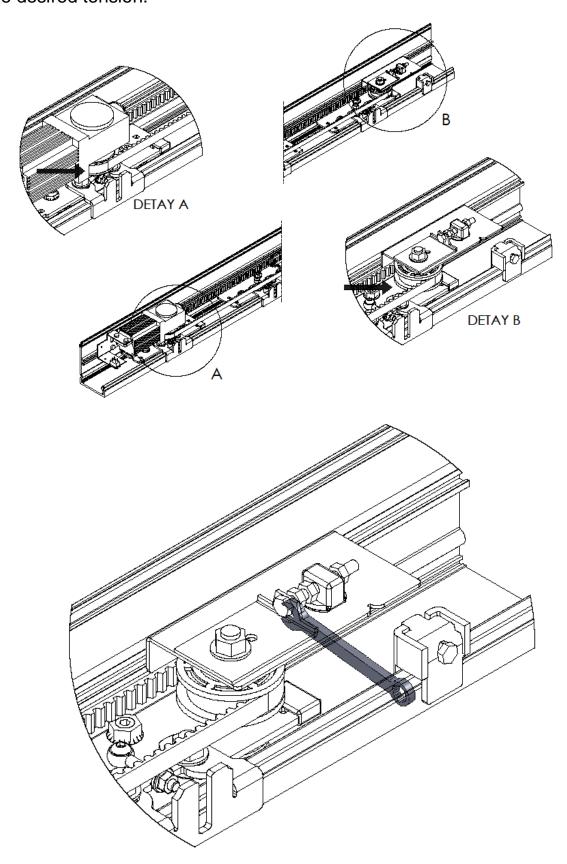
8. Assemble the motor, control unit, transformer and belt tensioning kit as shown in the figure, using the fasteners specified in step 3.





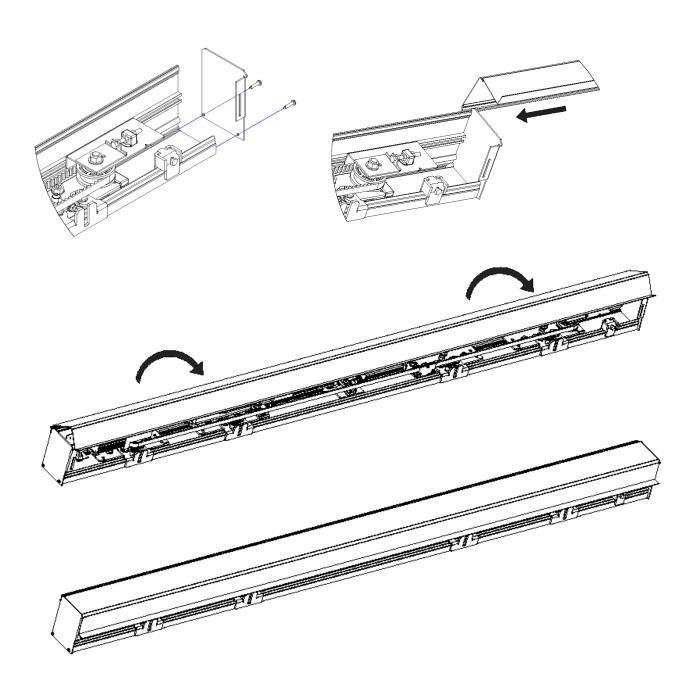


9. Strap; thread it onto the motor gear and tension wheel. Then the key Adjust the adjusting bolt using Tighten the nuts when the belt reaches the desired tension.





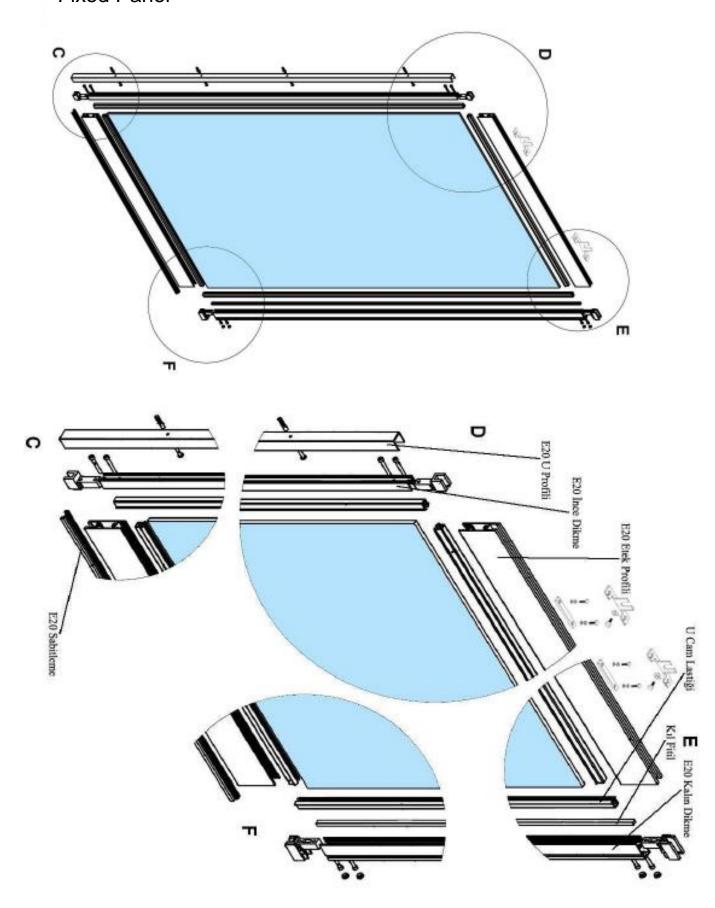
10. Assemble the side covers and the top cover as in the figure.





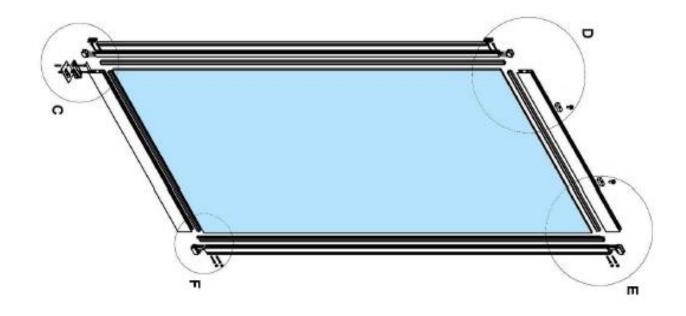
2.4 E20 Panel Assembly

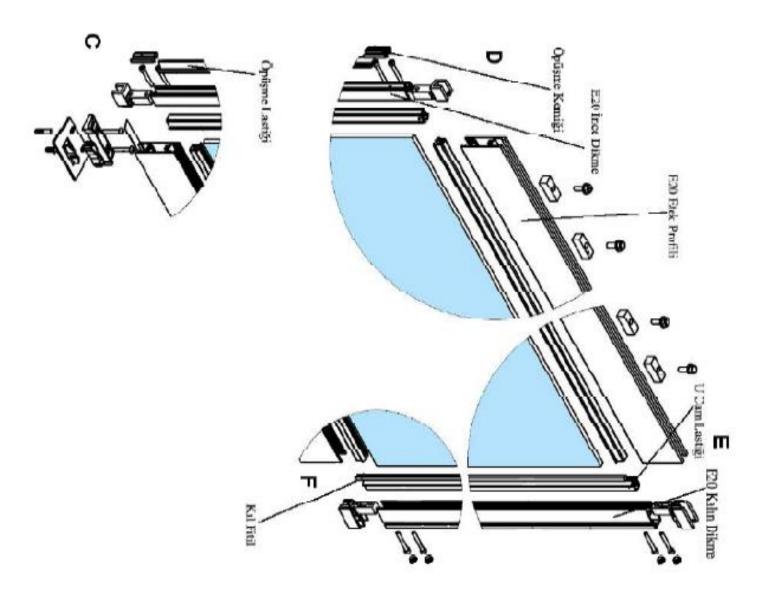
Fixed Panel





Movable Panel

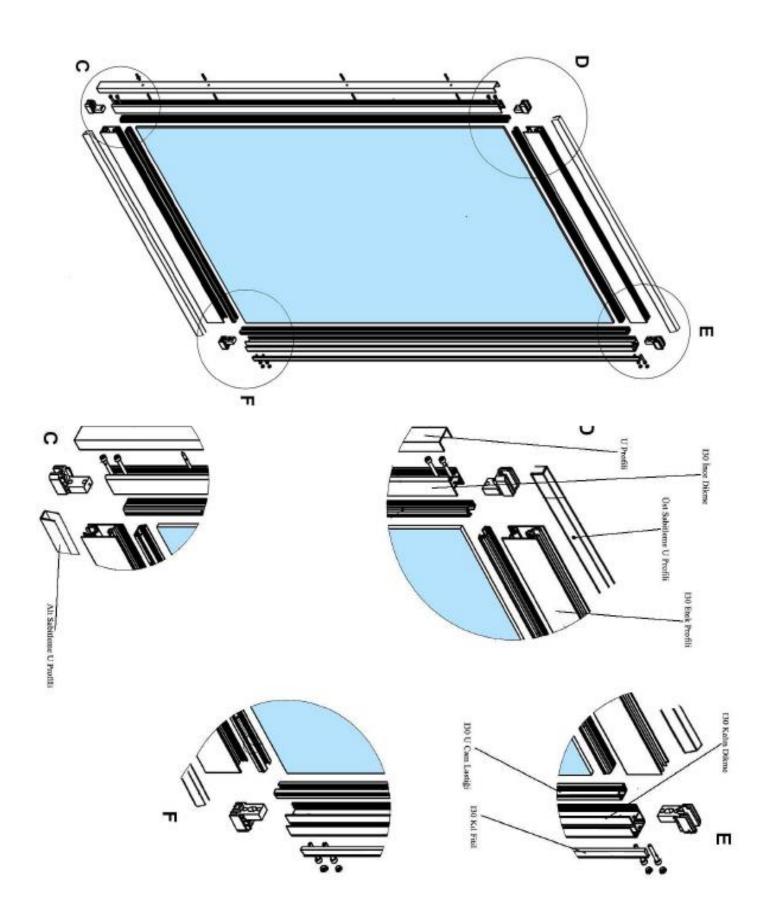






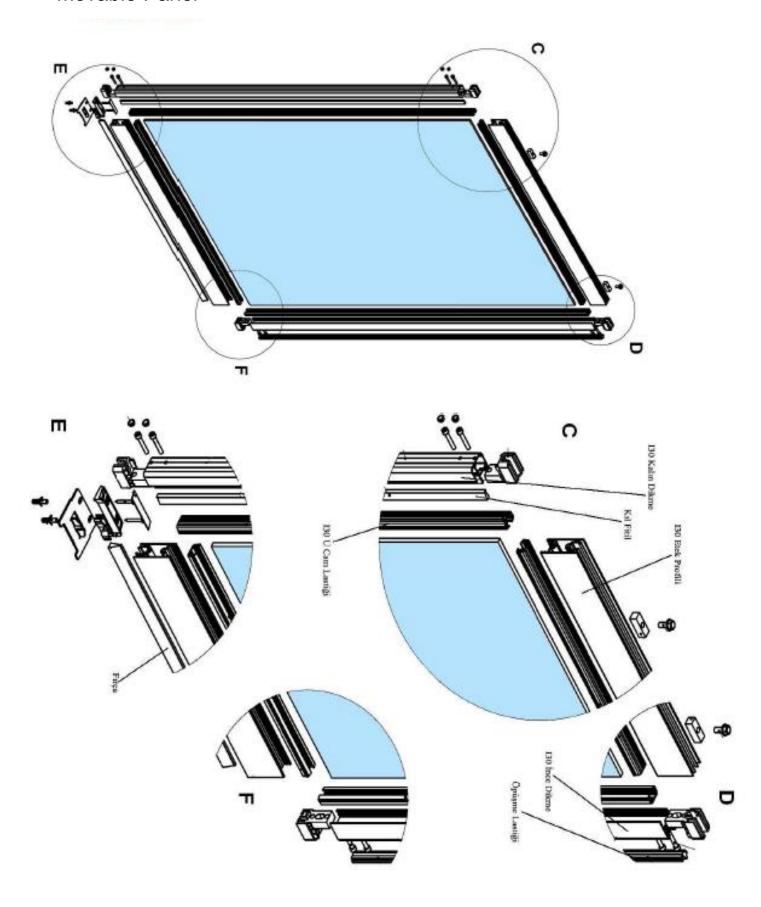
2.4 I30 Panel Assembly

Fixed Panel

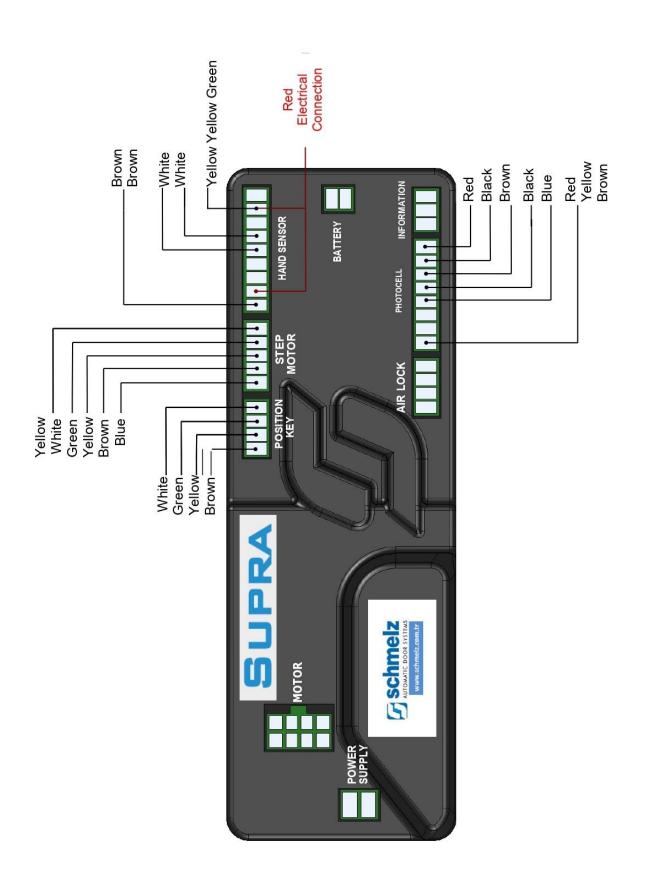




Movable Panel





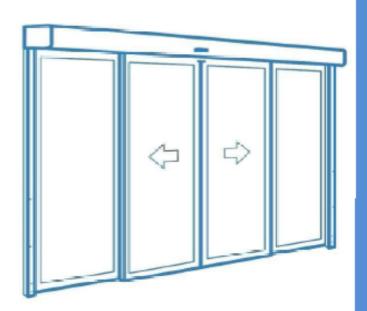






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POSITION KEY USER GUIDE





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4. USING THE POSITION KEY

4.1 Using The Home Screen



1- When the red button

on the position switch is pressed and single arrow

image appears on the screen, the external radar becomes disabled. When the red button is pressed again, the double arrow image appears on the screen and becomes operational on 2 radars.

- 2- Picture of snowflake when pressing the blue plus button on the location switch visible. It means the door is in winter mode. When the door is opened, it will now open halfway at the rate specified by the user. When the blue plus button is pressed again the sun image will appear and the door will return to its normal operating mode.
- 3- When the door is in normal operating mode, the door closed sign



appears

on the screen. When the blue minus button on the switch is pressed, the door open sign appears the screen and the door switches to the open position.

4- When the door is in normal operating mode, the unlock mark on the screen



When the green button is pressed, the door is locked. Electromechanical lock, if available; goes into locked state.



4.2 Using The Setup Menu

Press the red button and the green button on the position switch. When pressed, the setting menu is entered. While in the setting menu, you can switch between the setting options with the blue plus and blue minus keys.



<u>1- Language Selection</u>: When you want to change the language option on the screen; green button is pressed once and the text on the screen flashes.

Blinking text blue plus key and we change it with the blue minus key.

When the desired option is reached, the green button is pressed again and the selection is made.

2- Opening Speed: When you want to change the opening speed displayed on the screen; green button is pressed once and the text on the screen flashes.

Blinking text blue plus key and we change it with the blue minus key.

When the desired option is reached, the green button is pressed again and the selection is made.

3- Closed Speed: When you want to change the closing speed displayed on the screen; green button is pressed once and the text on the screen flashes.

Blinking text blue plus key and we change it with the blue minus key.

When the desired option is reached, the green button is pressed again and the selection is made.

4- Starting Speed: When you want to change the starting speed displayed on the screen; green button is pressed once and the text on the screen flashes.

Blinking text blue plus key and we change it with the blue minus key.

When the desired option is reached, the green button is pressed again and the selection is made.



5- Recognition Speed: When you want to change the recognition speed displayed on the screen; green button is pressed once and the text on the screen flashes. Blinking text blue plus key and we change it with the blue minus key. When the desired option is reached, the green button is pressed again and the selection is made. 6- Winter Mode Rate: When you want to change the winter mode rate displayed on is pressed once and the text on the screen the screen; green button flashes. Blinking text blue plus key and we change it with the blue minus key. When the desired option is reached, the green button is pressed again and the selection is made. **7-Ramp Speed**: When you want to change the ramp speed displayed on the screen; is pressed once and the text on the screen flashes. Blinking green button and we change it with the blue minus key. desired option is reached, the green button is pressed again and the selection is made. **8-Delay Time**: When you want to change the delay time displayed on the screen; is pressed once and the text on the screen flashes. Blinking green button text blue plus key I and we change it with the blue minus key. desired option is reached, the green button is pressed again and the selection is made. **9-Back Open**: When you want to change the back opening displayed on the is pressed once and the text on the screen flashes. screen: green button Blinking text blue plus key and we change it with the blue minus key.



is pressed again and

When the desired option is reached, the green button

the selection is made.

10-Return to Factory Settings: While on this option, press the green button restores factory settings when held.

11-Entering Administrator Settings: While on this option, press the green button
2 sec. pressing and holding gives access to the administrator settings.

<u>12-Power Coefficient</u>: When you want to change the power factor displayed on the

screen; green button is pressed once and the text on the screen flashes.

Blinking text blue plus key and we change it with the blue minus key.

When the desired option is reached, the green button is pressed again and the selection is made.

13-IR On/Off : When you want to change the photocell's activity status; green button is pressed once and the text on the screen flashes. Blinking text blue plus

key and we change it with the blue minus key. When the desired

option is reached, the green button is pressed again and the selection is made.

14-Holding Power: When you want to change the holding power displayed on the screen; green button is pressed once and the text on the screen flashes.

Blinking text blue plus key and we change it with the blue minus key.

Blinking text blue plus key

When the desired option is reached, the green button is pressed again and the selection is made.

15-Closing Method: When you want to change the closing method displayed on the screen; green button is pressed once and the text on the screen flashes.

and we change it with the blue minus key.

When the desired option is reached, the green button is pressed again and the selection is made.

SUPRA





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