CSD 150 AUTOMATIC SLIDING





USER'S MANUAL



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TERMS OF THE WARRANTY

Prior to starting assembly or installation, please read all assembly and installation instructions and watch carefully the assembly video delivered together with our product. Any faults during the assembly may cause damage ti the people or goods. This product has been produced in accordance with well-known technical standards and safety regulations. Prior to assembly of the product, please be sure that all architectural components and structures (e.g. assembly surface of beams, frame guides of doors, etc.) in the door openings are suitable for supporting the automation and durable enough. Automatic doors for pedestrians shall be earthed in accordance with current regulations.

An earthing system should be provided in the building during the assembly of the processor. If there is no earthing system, then connections should be secured according to the national regulations. The assembly should be performed only by qualified staff. Please cut off the power prior to perform any work on the system.

Please pay special attention to warning symbols or notes which can be seen within the guide. These symbols and notes are the warnings intended for preventing damage to the operators and safety of other people. The manufacturer may not be held responsible for the workman-ship or application, or abiding special regulations, or from any possible results.

TERMS OF THE WARRANTY

1) The warranty period commences on the date of delivery, and continues for 2 years.

2) All parts of the product are under warranty of our company.

3) If the product breaks down within warranty period, the period elapsed during repair will be added to the warranty period. Repair time of the product can be 30 business days at maximum. This period will commence when the fault is informed to the service department, and if there is no service department then it will commence when informed to the seller, dealer, agency, importer, or exporter of the product.

4) If the product breaks down due to material and workmanship faults within warranty period, it will be repaired without any charge for any reason such as workmanship, replaced parts, or etc.

5) Any faults which arise as a result of using the product contrary to the assembly or user's guide are not covered by warranty.

6) The manufacturer may not be held responsible for damages or faults created by using the product together with devices of other manufacturers. Any damage or fault created by using the product together with devices of other manufacturers mean that the product is excluded from warranty. Please only original equipment and spare parts in order to prevent void of the warranty of the product.



PARTS

The parts and the equipment constituting the product have been shown in the below.



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Side covers (Right-Left)

Idle Roller



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SOCKET CONNECTIONS

WARNING: Materials used during assembly should be in accordance with applicable standards, and connections should be performed by an authorized personnel.











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Motor with Encoder

Curtain Radar (Option)



GENERAL CONNECTION DIAGRAM





CONNECTIONS

NO	ELECTRIC TERMINAL	DESCRIPTION
CN1	MOTOR OUT	MOTOR OUTPUT
CN2	ENCODER	MOTOR ENCODER OUT
CN3	POWER	25V AC SUPPLY
CN4	FUSE PHOTOCELL TRANSMITTER PHOTOCELL RECEIVER	FUSE - 10A COM : COMMON DATA: TRANSMITTER DATA COM : COMMON DATA: RECEIVER DATA
CN5	RADAR 1	INTERNAL RADAR PLUS +12V DC MINUS -12V DC COM : COMMON INP: INPUT
CN6	RADAR 2	EXTERNAL RADAR PLUS +12V DC MINUS -12V DC COM : COMMON INP: INPUT
CN7	POSITION (POSITION SWITCH)	1: POSITION 1 2: POSITION 2 COM : COMMON
CN8	UART	PC CONNECTION
CN9	OPEN-CLOSE (OPEN-CLOSE)	COM : COMMON CLOSE: CLOSE DATA
CN10	12V DC	12V DC -MAXIMUM 100mA OUTPUT
DP1	SETUP (DIP SWITCH)	INSTALLATION SETTINGS
PT1	OPEN SPEED	OPENING SPEED
PT2	CLOSE SPEED	CLOSING SPEED
SW1	RESET	INSTALLATION REMOVAL

OPERATING FUNCTIONS

Photocell Receiver / Photocell Transmitter

Safety photocell is a system which detects an obstacle found between doors through infrared signals for safety and control.

In order to ensure an optimum operating efficiency, the Receiver and the transmitter should be level. The highest distance between the photocell transmitter (white) and photocell receiver (red) should be 5 meters at maximum. Sensors should be vertical, and on the same line. When transmitter and receiver sensors of the photocell detect each other, the Photocell Led light on the microprocessor unit illuminates, and when not then the Photocell Led light turns off. In cases when Photocell Led turns off, please make sure sensors detect each other by checking the position of sensors.

PHOTOCELL TRANS	5M MITTER		рно	5M DTOCELL RECEIVE
	COM	'TX (TRANSMITTER) COM	RX (RECEIVER)	
RADAR 1 + COM INP				REM FOR SET I
	2		CN7	
12V-100mA OPEN-0				
RESET SETUP	OPEN SPEED			

Photocell Transmitter (TX) and Photocell Receiver (RX) cables are 5 meters. In order to distinguish cables and sensors of receiver / transmitter, the Receiver (RX) socket is red, and Transmitter (TX) socket is white.

EMARK:

FOR ACTIVATING THE PHOTOCELL, SET DIP SWITCH 1 TO "ON".



RADAR 1 (Internal Radar)

This is the radar for detecting any movement around the interior of the door mechanism. When the internal radar detects the object and becomes active, the "Internal Radar" Led on microprocessor unit illuminates, the door becomes active, and moves to the opening direction.





OPERATING FUNCTIONS

RADAR 2 (External Radar)

This is the radar for detecting movement around the exterior of the door mechanism. When the exterior radar detects the object and becomes active, the "Internal Radar" Led on microprocessor unit illuminates, the door becomes active, and moves to the opening direction.







CURTAIN PHOTOCELL MICROWAVE RADAR:

For safety purposes, this system triggers the door by detecting any obstacle found between the doors and any movement which may be seen during passage on the door mechanism.



OPERATING FUNCTIONS

Open / Close

Door opening or door closing movements can be performed by Open/Close Inputs with normally open button (no contact). When "Open" input is triggered, the door moves to the opening direction; when the waiting time elapsed, the door closes to the closing direction. When "Close1 input is triggered, if the door is open, then the door closes without any waiting time.



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COM

RADAR 2

12V-100mA

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CN10

RESET

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SW1

.

- COM INF

SETUP

1 2 3

DP1

DIP SWITCH SETTINGS

OPEN-CLOSE

OM CLOSE-OPE

CN9

OPEN

SPEED

PHOTOCELL

OM DAT COM DAT

POSITION

2 COM 1

UART

000

CN8

CLOSE

SPEED



1- SAFETY PHOTOCELL

OFF: Safety photocell closed ON : Safety photocell open

2-CLOSING TIME

OFF: It waits 3sec after door opens, and then closes ON : It waits 5sec after door opens, and then closes

3-CRUSHING

OFF: It performs continuous crushing test during crushing ON : It performs crushing test once during crushing

4-MOTOR

OFF: Motor lock closed ON: Motor lock opened

INSTALLATION SETTINGS



INSTALLATION : After making socket connections of CSD-150 card, when it is first energized, LD9 led flashes. If the led flashes, this means that the card isn't installed. In order to start installation, please hold down RESET button for 3sec. LD9 will illuminate continuously during installation. When the installation is successfully completed, the led goes off.

RESETTING: When there is no energy, the system will reset if RESET button is kept pressed, and the system energized. When reset is successfully completed, the LD9 led flashes.

OPENING SPEED: The opening speed of the door can be set.

CLOSING SPEED: The closing speed of the door can be set.



External Equipment

SNRF Numbering Machine & RF Card Reader. SDA Touch Screen Switch. External equipment such as SELS El Sensor can be connected to the system with Open - Close input.



SDA Touch Screen Switch

SNRF Numbering Machine &

RF Card Reader

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1 2

3 4

5 6

7 8

9 0



CSD 150

SELS Manual Sensor



PHOTOCELL TRANSMITTER RADAR 1 **AUTOMATIC SLIDING** COM INP OM DAT COM DAT CN RADAR 2 POSITION SWITCH COM 1 COM INP 2 -3150 CN 12V DC OPEN- CLOSE UART COM CLOSE-OPEN 000 0 4 CN8 CN10 CN9 RESET LD9 CLOSE SETUP SPEED 1234 0 Ş DP1 SW1 PT1 PT2 SDA Touch Screen Switch Dry Contact Ρ Normally Open (No) R Ε S S **SELS Manual Sensor** Orange NC Relay N.C. Contact Yellow COM Relay N.O. Contact NO Blue - (Minus) AC/DC Voltage Input 12~ · · · · V Red + (Plus)



POSITION SWITCH

With the position switch, different functions of the door can be chosen such as Installation, positioning, Always open, Always close.

Position Switch functions:

I (Automatic Mode): This is the position where Installation and Automatic on-off is done.
0 (Always Close): This is the position with the door is always closed.
II (Always Open): This is the position with the door is always opened.
Note: Installation and positioning cannot be performed at 0 and II positions.







Position Switch Cable: Triple with 2,5m length WHITE : I - AUTOMATIC MODE RED : 0-ALWAYS CLOSE BLACK : II-ALWAYS OPEN

OPERATING FUNCTIONS

DOOR CONTROL WITH RF

In order to control the door with remote control, Indefinite SN-12 plus receiver is connected to the "Position Switch". There are available two methods.

A- Opening the door with remote control, and after a certain time, automatically closing the door: Com and No ends of receiver is connected to the Com and End No 1 of position switch.

B- Opening the door, and keeping the door open until a second command: Com and No ends of receiver is connected to the Com and End No 2 of position switch.





MECHANICAL INSTALLATION

Our product is designed in a manner operating with different hardware and peripheral devices. Prior to start with mechanical installation procedure, please read all assembly instructions, and abide relevant instructions.

Before starting the assembly work, please ensure that:

• it is within the required operating limits by checking the weights of leaves (considering the doors which exceed 100kg, please assemble 2 wheeled carrier for each leaf.)

- the wall or structure where the product is mounted conformable with regulations,
- the wall which supports the product is flat, smooth, and vertical to the ground.

- Microprocessor Control Unit
 Safety Photocell (Receiver Transmitter)
 Motor with Encoder
 Radar Movement Sensor
 Position Switch
 Power Button
- 7. Belt
- 8. Double Carrier Roller

- 9. Stopper
- 10. Side Covers
- 11. Idle Roller
- 12. Belt Coupling Piece
- 13. Frame
- 14. Frame Top Cover
- 15. Motor Drum









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AUTOMATIC SLIDING



CSD 150 AUTOMATIC SLIDING

LEDS (INDICATORS) :

PHOTOCELL: If the receiver and transmitter sensors of safety photocells detect each other, the photocell led will be activated.

RADAR1: If the internal radar detects any movement, the Radar1 led will be activated.

RADAR2: If the external radar detects any movement, the Radar2 led will be activated.

POSITION1: When the position switch is taken to "Automatic mode", the Position1 led will be activated.

POSITION2: When the position switch is taken to "always open" position, the Position2 led will be activated.

OPEN: When it is triggered from the Open input, the Open led will be activated.

CLOSE: When it is triggered from the Close input, the Close led will be activated.

POWER: It is activated when the microprocessor unit is energized.

FAULT CODES:

LD9 led next to the reset button shows the fault code. The fault code will be specified by how many time the led flashes. For example, if the Led flashes 5 times, the fault code is 5.

CODE 3: NO STOPPER

CODE 4: SHORT DISTANCE FAULT

CODE 5: POSITIONING FAULT

CODE 6: CRUSHING FAULT

CODE 7: INSTALLATION FAULT

CODE 8: SAFETY CURRENT- IF THERE IS ANY CRUSHING OR SOFTWARE-RELATED FAULT, THE SYSTEM WILL GO TO PROTECTION STATE

PROBLEM	CAUSE	REMEDY
Power led doesn't turn on.	Socket on the microprocessor coming from the transformers may not be mounted.	Please check the transformer entrance on the microprocessor.
When socket connection is done, microprocessor power led doesn't turn on.	On-off switch may not put into the sequential electric terminal.	By checking the sequential elec- tric terminal, please make sure that the power is delivered to the microprocessor while the On-Off switch is at "On" position.
Installation cannot be performed.	Failing to provide connections for microprocessor unit of the DC motor with encoder and failing to provide supply connections.	Please check the motor encoder and supply end connection which ensure communication between microprocessor unit and DC motor.
Leaves are opening slowly.	Causing slowing down by any obstacle or object on the leaf rail, lower opening and closing speeds.	Please check whether there is any obstacle on the rail which pre- vents opening of leaves quickly; increase the opening and closing speed to the required level.
If leaves are not opening when radars are active	Incorrect radar connections, or cutting cables.	Correct tie of radar connections, please make sure that radar1 and radar2 expression are found in the socket.
If position switch doesn't work	The junction cable of the position switch is not attached on position switch socket	Please check position switch socket is attached on the socket card for position switch junction cable.
Door operates irregularly.	Wrong connection any of the encoder and supply cable between the microprocessor and DC motor.	Please make sure that encoder and supply cables between DC motor and microprocessor are not attached to the wrong side that color codes match, and that a proper connection is ensured.
Microprocessor unit is operating, but the door doesn't move.	Keeping the door continuously opened or closed on the position switch	Please make sure that operating mode on the position switch is selected as "Input-output active".
Safety photocell doesn't work.	Safety photocells cannot detect each other as a result of vertical position of receiver and transmit- ter, and that they are not level. Also wrong connection between the receiver and transmitter.	Please mount the safety photocell to the vertical position at a position that can detect each other. Also, please make sure that receiver and transmitter connec- tions are at the right socket.
Safety photocell is working, but it is not functioning if there is any obstacle.	Activating switch no 1 on dip switch.	





SAFETY WARNINGS

• The manufacturer reserves the right to make any changes which deemed beneficial or necessary.

• Electrical safety of your product can only be ensured if only it is connected to an earthing system accurately. The manufacturer cannot be held responsible if these conditions are not complied with.

• Assembly of electronic parts should be performed only by authorized personnel. Any maintenance or service should be performed by an expert authorized by the manufacturer.

• The product you purchased can be used as a general entrance and exit. It cannot be used as an emergency exit.

• Do not put any foreign object into the rail region or door mechanisms.

• Please don't prevent opening or closing of moving door or any equipment by any object, equipment, or machinery.

- Do not force the door for opening or closing for any reason.
- Do not put inflammable or burning objects next to the door.

• Do not reset functions of faulty door without assistance of an expert authorized by the manufacturer company, or without reading assembly and installation instructions.

• Please do not perform works which should normally be performed by the expert authorized by the manufacturer.

• Please do not put moving tools or materials within radar detection distance of the door. It is recommended to use micro-radar with curtain photocell for a full safety.

• While the door is in automatic state, do not clean, and make sure that electronic parts don't have contact with water.

• During maintenance of door, please make sure that the system is closed.

• Please do not exert excessive power to the doors or accessories under any condition.

- Please keep DVDs for future reference which include assembly and user's manual, and assembly video of the product.
- Please cut off the power prior to perform any work on the system.

• Check if the earthing is done properly. All metal components of closing sections (building doors, garden gates, etc.) and all components of the system which have earthing end to the earthing line.

TECHNICAL SPECIFICATIONS

Technical Specifications

Operating Voltage	230 V AC±10% 50 Hz
Motor Voltage	24 V DC
Opening Speed (Adjustable)	0.9m/s
Closing Speed (Adjustable)	0.7m/s
Max. Leaf Weight	75kg (1 leaf), 75+75kg (2 leaves)
Kit Measurements & Weight	50x30x15cm/11kg
Fault Notification	With a led indicator on the main board
Motor Lock	Available
Self Positioning	Available
Extra Photocell	Optional
Manual Sensor	Optional
Numbering Machine & RF Card Reader	Optional
Always Closed-Open	Available
Automatic Operation	Available
Current Taken	0.6A
Motor Power	95W
Opening Time	3 & 5 seconds (2 levels with a switch)
Protection Degree	IP 20 (Only for dry environments)
Operating Temperatures	from -15°C to 60°C
Aluminum Frame Measurements	3.5 / 4.5 / 6.5 meters
Adjustable Open Time	2 levels with a switch
Adjustable Speed	Available
Adjustable Speed Photocell	Available Available
Adjustable Speed Photocell Height Photocell	Available Available Optional
Adjustable Speed Photocell Height Photocell Curtain Photocell Microwave Radar	Available Available Optional Optional
Adjustable Speed Photocell Height Photocell Curtain Photocell Microwave Radar Bluetooth Technology	Available Available Optional Optional Optional
Adjustable Speed Photocell Height Photocell Curtain Photocell Microwave Radar Bluetooth Technology Elbow Button	Available Available Optional Optional Optional
Adjustable Speed Photocell Height Photocell Curtain Photocell Microwave Radar Bluetooth Technology Elbow Button ID Car Pass	Available Available Optional Optional Optional Optional
Adjustable Speed Photocell Height Photocell Curtain Photocell Microwave Radar Bluetooth Technology Elbow Button ID Car Pass Only Entrance-Exit	Available Available Optional Optional Optional Optional Optional Available

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