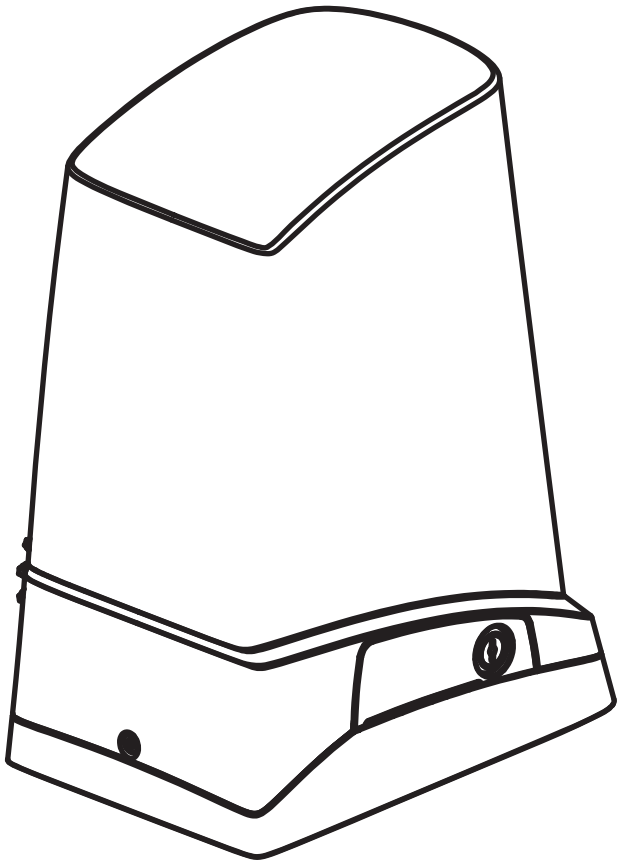
HUSKY SERIES

AC SLIDING GATE OPENER

USER MANUAL



Reuse
Reduce
Recycle

INDEX

1. GENERAL PRECAUTION:

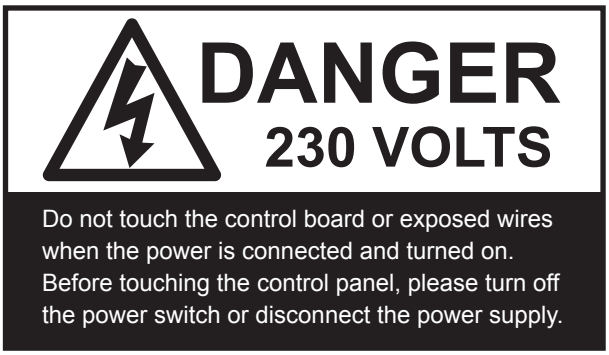
WARNING :

This user manual is only for qualified technicians who is specialized in installations and automations.

(1) All installations, electrical connections, adjustments and testing must be performed only after reading and understanding of all instructions carefully.
(2) Before carrying out any installation or maintenance operation, disconnect the electrical power supply by turning off the magneto thermic switch connected upstream and apply the hazard area notice required by applicable regulations
(3) Make sure the existing structure is up to standard in terms of strength and stability
(4) When necessary, connect the motorized gate to reliable earth system during electricity connection phase.
(5) Installation requires qualified personnel with mechanical and electrical skills.
(6) Keep the automatic controls (remote, push bottom, key selectors…etc) being placed properly and away from children.
(7) For replace or repair of the motorized system, only original parts must be applied. Any damage caused by inadequate parts and methods will not be claimed to motor manufacturer.
(8) Never operate the drive if you have any suspect with what it might be faulty or damage to the system.
(9) The motors are exclusively designed for the gate opening and closing application, any other usage is deemed inappropriate. The manufacture should not be liable for any damage resulting from the improper use. Improper usage should void all warranty, and the user accepts sole responsibility for any risks there by may accrue.
(10) The system may only be operated in proper working order. Always follow the standard procedures by following the instructions in this installation and operating manual.
(11) Only command the remote when you have a full view of the gate.

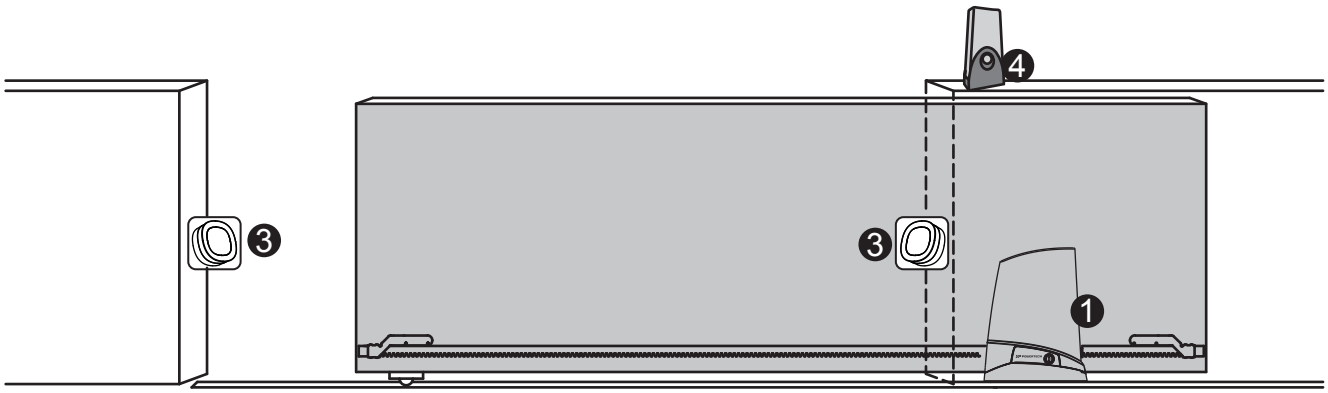
TMT AUTOMATION INC. shall not be liable for any injury, damage, or any claim to any person or property which may result from improper use or installation of this system.

Please keep this installation manual for future reference.



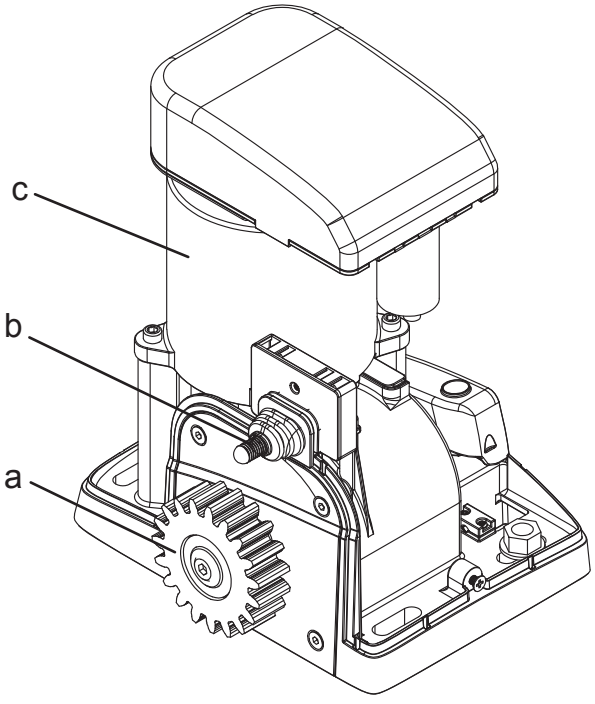
2). INSTALLATION:

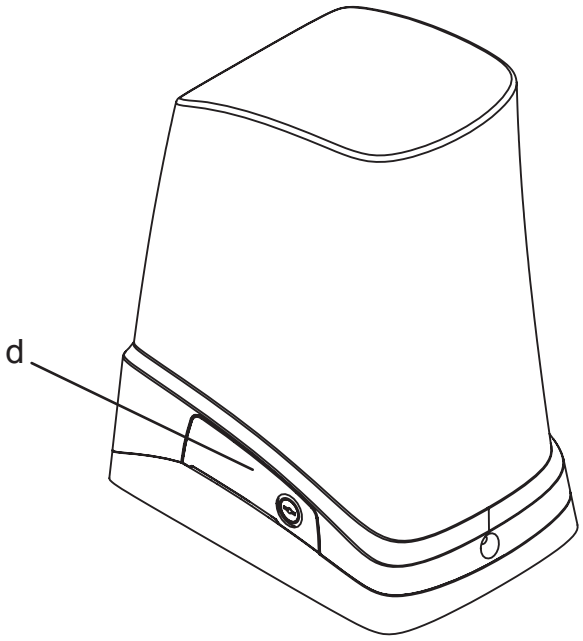
2.1 Standard Installation Demonstration



1. Sliding motor
2. Transmitter
3. Safety photo sensor
4. Flashing light

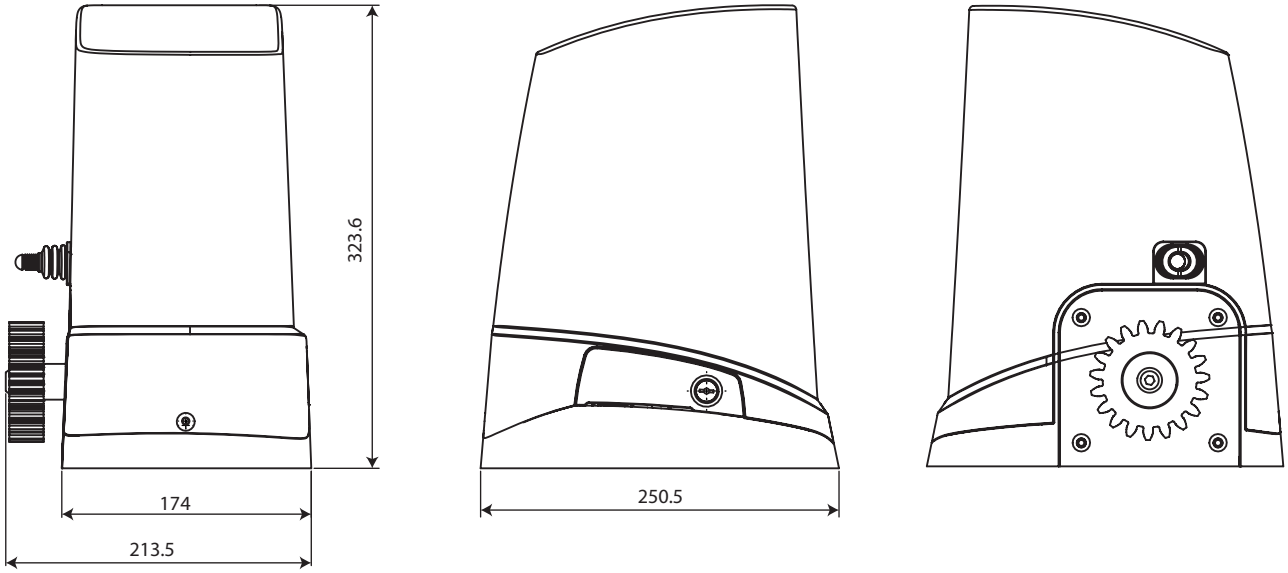
2.2 Description of Device



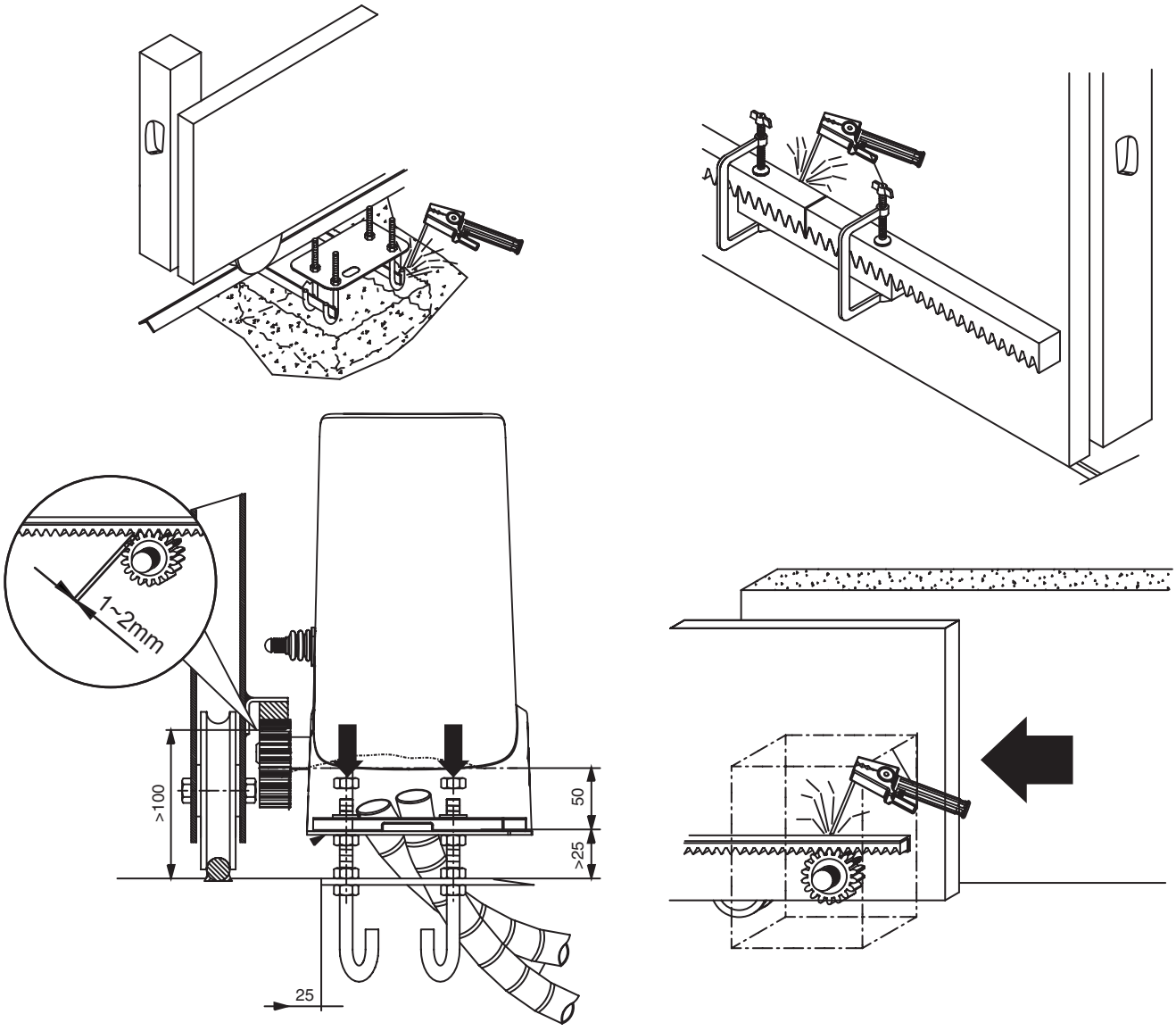


a. Operation gear
b. Limit switch device
c. AC motor
d. Release device

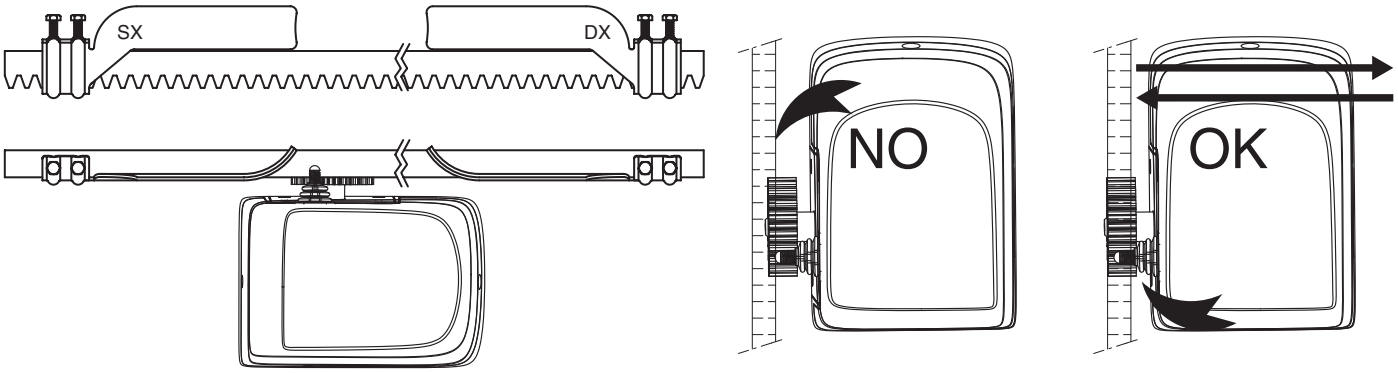
2.3 Dimension of Device



2.4 Installation of Motor Gear and Gear Rack



2.5 Checking for Installation



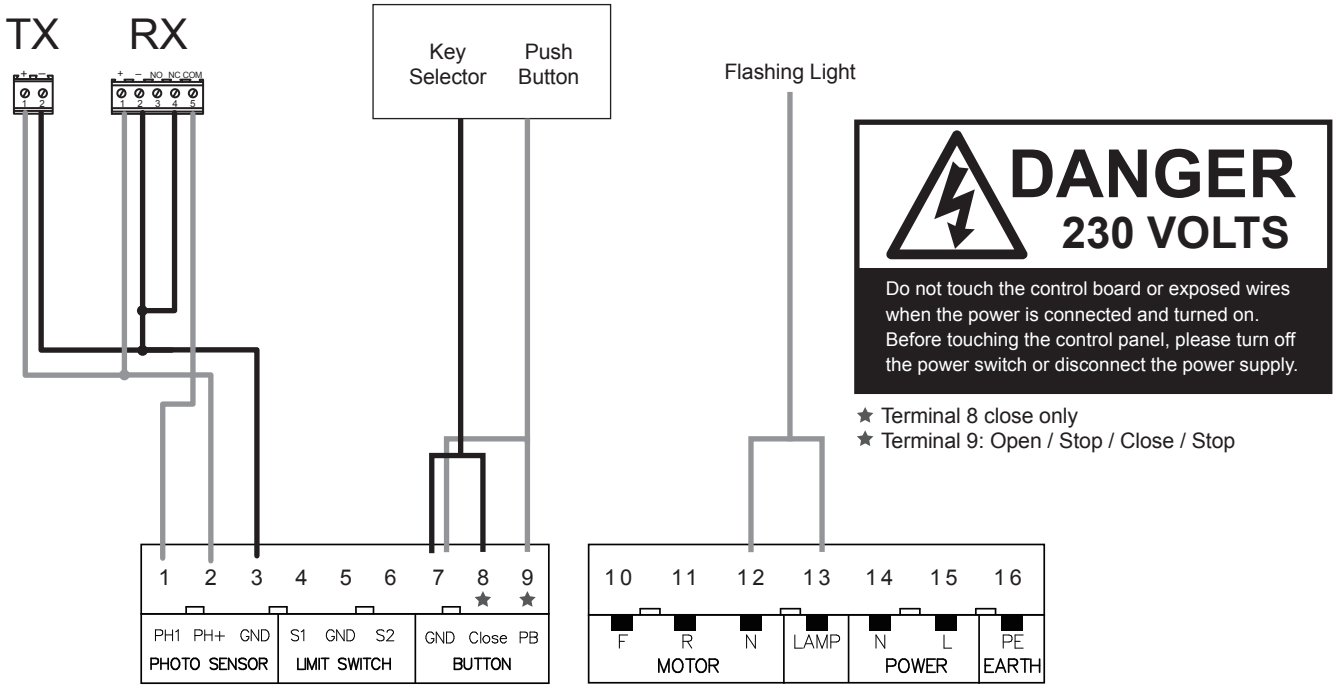
2.6 Emergency Release

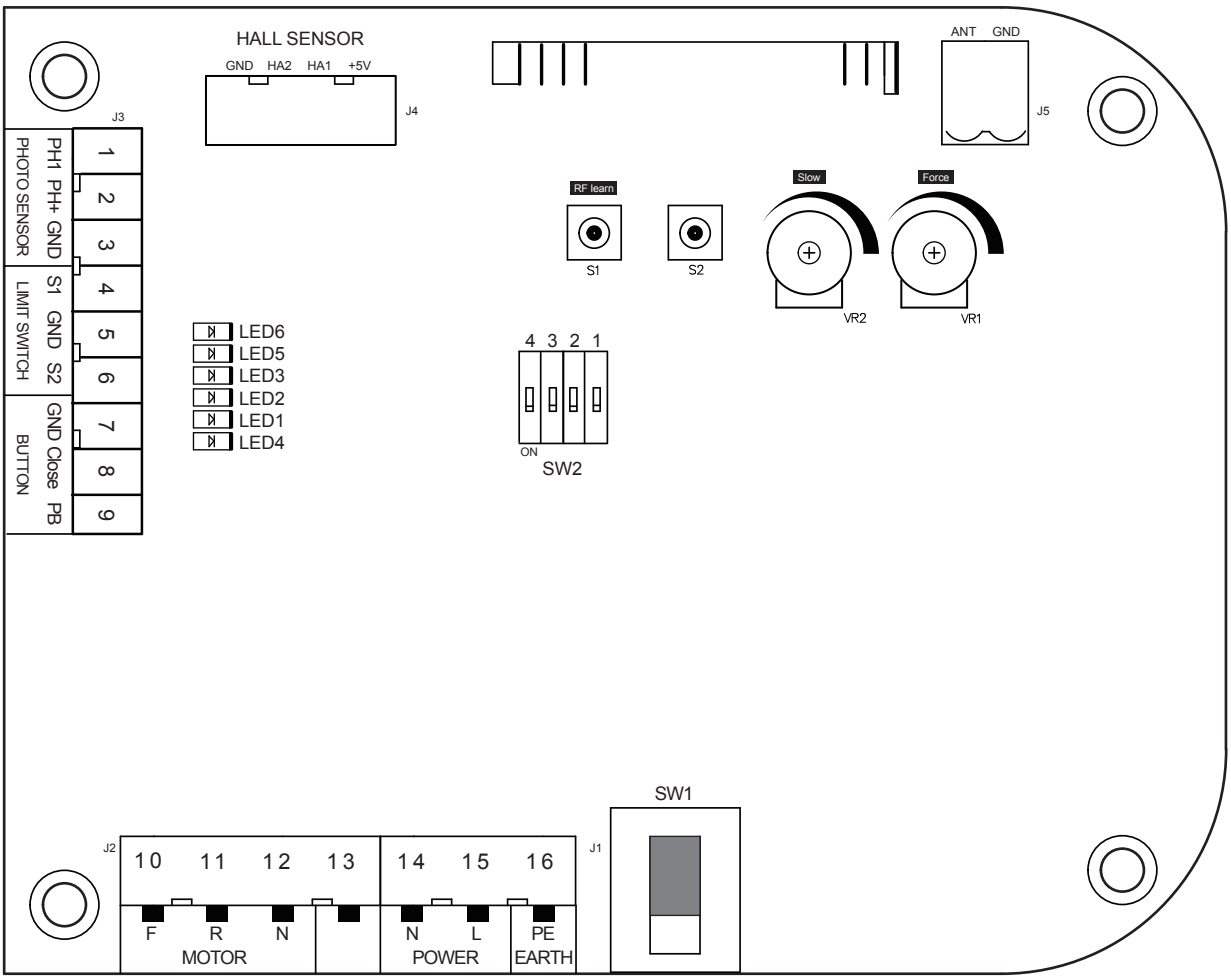
In the case of power failure for emergency release of the motor, please follow the procedure as below:

Step1. Insert the key into the release slot and turn the release key counter-clockwisely.

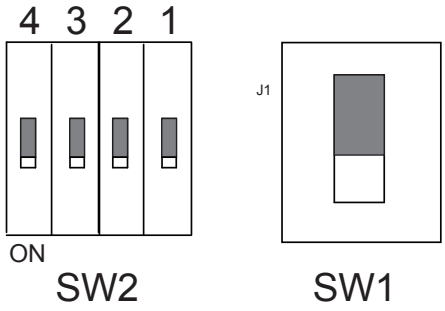
Step2. Pull the release bar.

To restore the automation, simply reverse the above procedure.


TX
RX
Key Selector
Push Button
Flashing Light
DANGER
230 VOLTS
Do not touch the control board or exposed wires when the power is connected and turned on. Before touching the control panel, please turn off the power switch or disconnect the power supply.
★ Terminal 8 close only
★ Terminal 9: Open / Stop / Close / Stop
1 2 3 4 5 6 7 8 9
PH1 PH+ GND S1 GND S2 GND Close PB
PHOTO SENSOR
LIMIT SWITCH
BUTTON
10 11 12 13 14 15 16
F R N LAMP N L PE
MOTOR
POWER
EARTH


HALL SENSOR
GND HA2 HA1 +5V
J4
J3
PH1 PH+ GND S1 GND S2 GND Close PB
PHOTO SENSOR
LIMIT SWITCH
BUTTON
1 2 3 4 5 6 7 8 9
ANT GND
J5
RF learn
S1
S2
Slow
Force
VR2
VR1
LED6
LED5
LED3
LED2
LED1
LED4
4 3 2 1
ON
SW2
SW1
J2
10 11 12 13 14 15 16
F R N N L PE
MOTOR
POWER
EARTH
J1

3). SETTING OF A CONTROL BOARD



SW1	Power Supply
SW2-1	Photocells Setting
SW2-2	Flashing Light Adjustment
SW2-3	Gate Auto-Closing Adjustment
SW2-4	Direction of closing

3.1 SW1 Dip Switch Setting – Power Supply

ON: Power Supply ON, the control board can be operated.
OFF: Power Supply OFF.

3.2 SW2-1 Photocells Setting

ON: Photocells function ON, and photocells can be triggered.
OFF: Photocells function OFF.

3.3 SW2-2 Flashing Light Adjustment

ON: The flashing light blinks for 3 seconds before the gate moves, and blinks simultaneously during the movement.
OFF: The flashing light blinks and the gate moves simultaneously.

3.4 SW2-3 Gate Auto-Closing Adjustment

ON: When gate opened, gate closes after 20 seconds.
OFF: When gate opened, gate will not close automatically.

3.5 SW2-4 Direction of closing

ON: Outer metal gear goes clockwisely as closing.
OFF: Outer metal gear goes counter-clockwisely as closing.

3.6 VR Adjustable VR Knobs

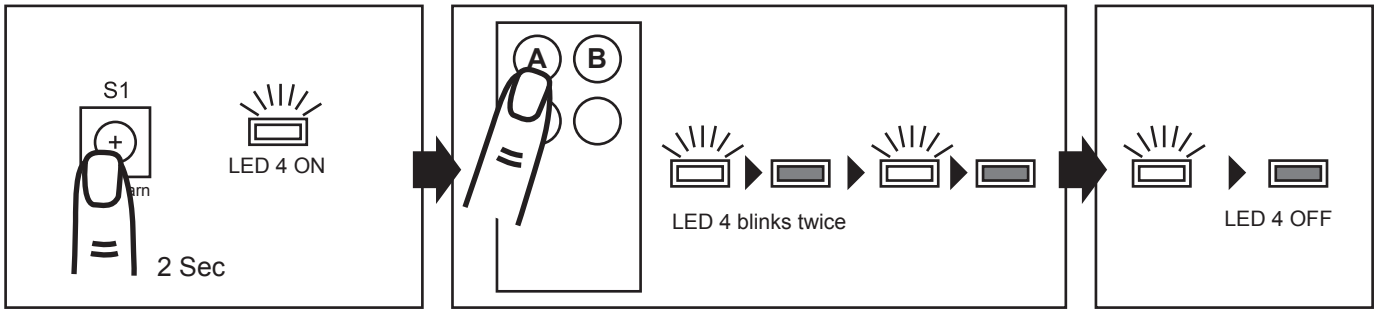
VR1: Over-current adjustment. Turn clockwisely to increase the limit of over-current.
VR2: Torque adjustment. Turn clockwisely to increase the torque.
Step1. Turn VR1, VR2 clockwisely to maximum. The torque is at maximum at this step.
Step2. Torque adjustment: During gate running, turn VR2 counter-clockwisely till the gate can be stopped easily by force but the motor is still running.
Step3. Over-current adjustment: During running, turn VR1 counter-clockwisely till a proper point when the gate is stopped and the motor stops as well.

4). REMOTE SETTING AND SYSTEM LEARNING

4.1 Remote setting

a. Remote learning: Press S1 3 seconds to enter remote learning mode and LED4 is on. Press A button on the remote in 10 seconds and LED4 blinks twice. After LED4 goes off, remote learning completed.

b. Clean the remote memories: Press S1 for 10 seconds. After 10 seconds, LED4 will blink 4 times and the remote memories are removed.



4.2 System learning

After remote learning, press A button to start system learning. The gate closes 10 seconds with full speed and move with decelerated speed till limit-switch triggered.

5). FUNCTIONS

5.1 LED Indications

LED1: Power indicator. LED is blinking indicates there is power supply.
LED2: LED2 is ON indicates the sliding motor meets the OPEN LIMIT.
LED3: LED3 is ON indicates the sliding motor meets the CLOSE LIMIT.
LED4: Remote and System learning indicators
LED5: Blinking while opening
LED6: Blinking while closing

5.2 Photocell logic

Position of Gate	Photocell activated
Gate closed	No action
Gate Opened	Stop moving, waiting for further indications. If auto-closing function is ON, start auto-closing after 20 seconds
Stop in the middle	Stop moving, waiting for further indications. If auto-closing function is ON, start auto-closing after 20 seconds
Gate closing	Gate stops and reverses to opened
Gate Opening	Door stops. If auto-closing function is ON, start auto-closing after 20 seconds

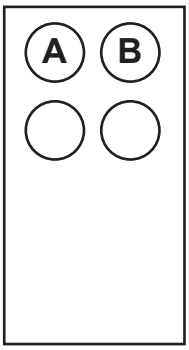
5.3 Deceleration function

The 5% of the final stroke is the deceleration zone. The gate moves with 20% full speed till closed or limit switch is triggered.

5.4 Gate Operation

Press the button "A" on the transmitter for dual-gate operation.

Press the button "B" on the transmitter for single-gate operation in either single-gate or dual-gate installation.



5.5 Gate-moving Logic

(A) In gate-opening phase: The gates stop if the transmitter/push button/key selector is activated, and close when the transmitter/push button/key selector is reactivated.
(B) In gate-closing phase: The gates stop if the transmitter/push button/key selector is activated, and open when the transmitter/push button/key selector is reactivated.
(C) In gate-opening or gate-closing phase: For safety purpose, the gates stop if encountering obstacles.

6). TECHNICAL CHARACTERISTICS:

6.1 Techanical Data Sheet of Series

	HUSKY500	HUSKY700	HUSKY1000
Specifications	500kg level	700kg level	1000kg level
Power supply	AC230V 50Hz	AC230V 50Hz	AC230V 50Hz
Gate Weight	500kg	700kg	1000kg
Gate speed	17.4cm/sec	17.4cm/sec	17.4cm/sec
Limit switch	Spring/Magnetic	Spring/Magnetic	Spring/Magnetic
Temperature	-20°C to +65°C	-20°C to +65°C	-20°C to +65°C
Protection class	IP 54	IP 54	IP 54

6.2 TM3 Transmitter Data Sheet

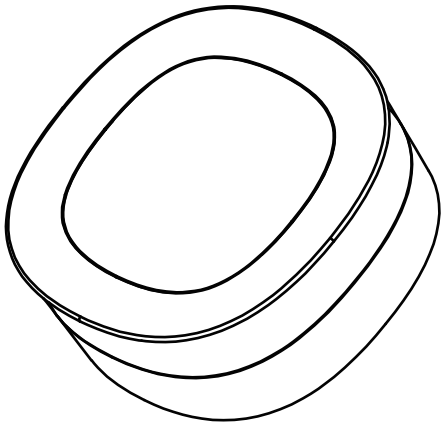
Application	Radio transmitter
Frequency	433.92Mhz
Coding	Rolling code
Buttons	4, for single-gate or dual-gate operation
Power Supply	3V with one CR2032 button type lithium battery
Operating Temperature	-20℃~+50℃
Dimension	71.5mm * 33mm * 14mm

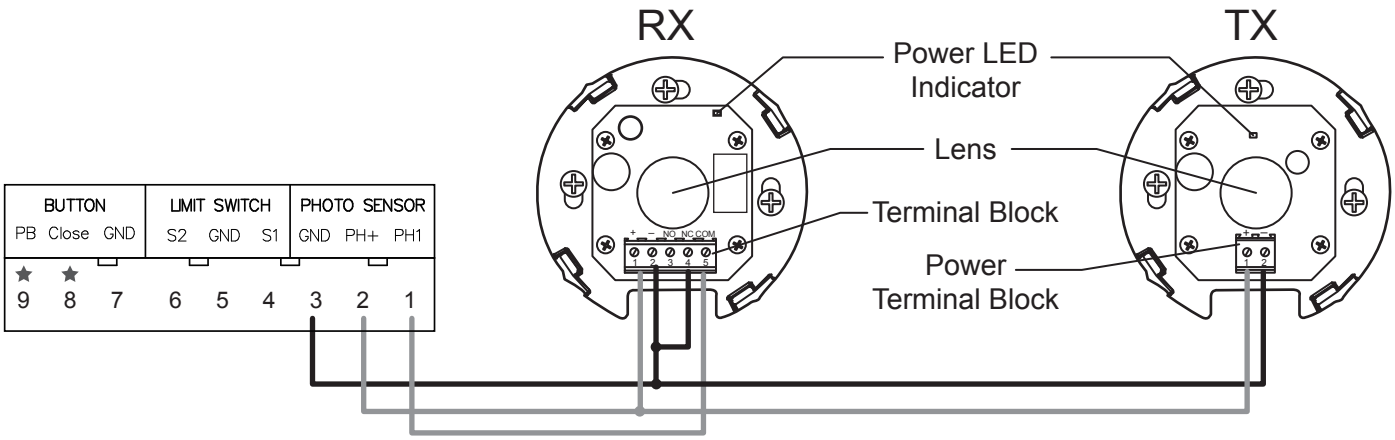
7). PHOTOCELL INSTALLATION GUIDE

The safety photocells are security devices for control automatic gates. Consist of one transmitter and one receiver based in waterproof covers; it is triggered while breaking the path of the beams.

SPECIFICATION:

Detection Method	Through Beam
Sensing Range	MAX~15m
Input Voltage	AC/DC 12~24V
Contact Current	TX: 30mA Max , RX: 25 mA Max
Response Time	<100mS
Emitting Element	Infrared LED/ Wave Length：940nm
Operation Indicator	RX：Red LED On (beam broken) / Off (beam aligned) TX：Red LED On
Dimensions	63*63*30 mm
Output Method	Relay Output
Current Consumption	Beam aligned：RX<25ma\TX<30ma Beam broken：RX <10ma\TX <30ma
Connection Method	Terminal Block
Housing Material	ABS / PC
Water Proof	IP44
Safety Standard	CE





INSTALLATION:

1. Open the cover and connect wires.
2. Mounted the receiver and transmitter on the proper position.
3. Ensure there are no obstacles between receiver and transmitter.
   For optimal efficiency, the receiver and transmitter should be properly aligned.
4. Power-up the photocells and make sure the LED light on receiver and transmitter are ON.