KTH TH-3
AUTOMATIC DOOR SYSTEM

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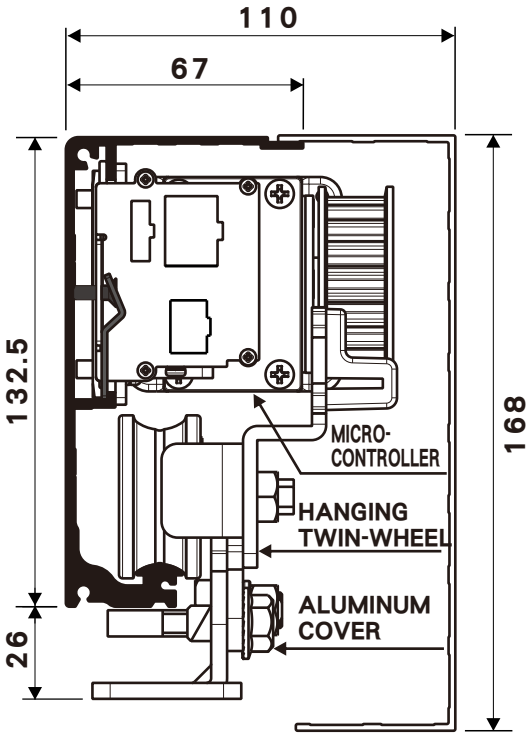
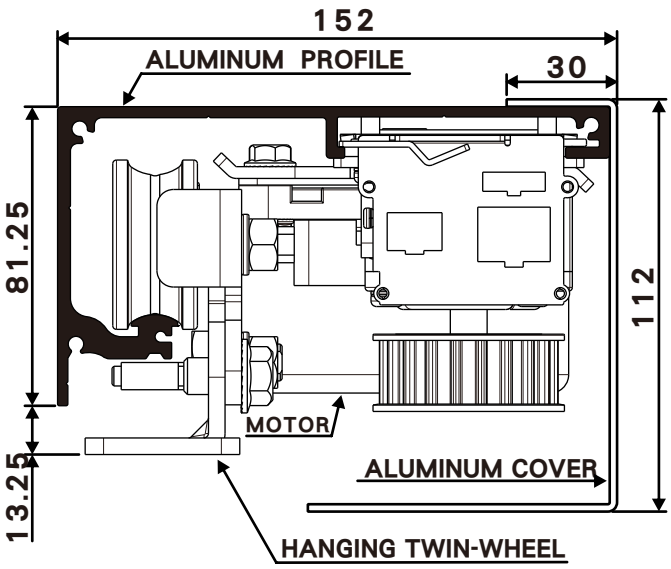
SPECIFICATION&PROFILE

Standard

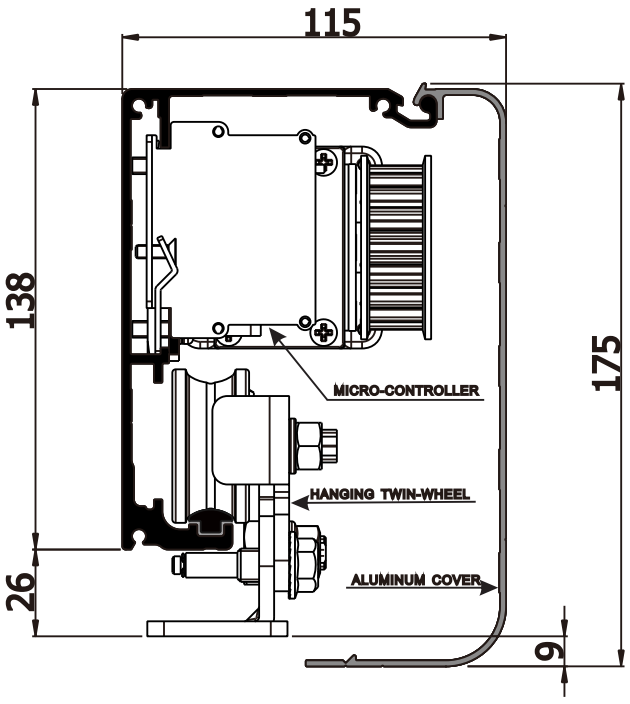


Slim



MEASURE : mm

Noiseless



MEASURE : mm

TYPE	TH-3	
MODEL	SINGLE-WINGED	BI-PARTING
DOOR WEIGHT	150kgX1(door)	130kgX2(door)
DOOR WIDTH	DW=500mm~2500mm	DW=500mm~2500mm
INSTALL WAY	Surface install	Surface install
MOTOR	DC24V 75W BRUSHLESS DC MOTOR	
CONTROL	STANDARD MICRO-CONTROLLER	
POWER CONSUMPTION	75w	
VOLTAGE	AC100V~240V	
ENVIRONMENTAL TEMPERATURE	-20℃~+50℃	
VOLUME	60 decibel(max.)	
STARTING SPEED	600mm(second)	550mm X 2 (second)
STARTING TIMES	0~20 sec. (regulable)	
TRANSMISSION IMPORTANT CONDITION	RACK BELT S8M	
OPEN DOOR RANGE	FULL/HALF-OPEN (regulable)	
PFC POWER EFFICIENCY	0.95(in AC100V Full load)	
TRACTION FORCE	3kg	

COMPONENTS

MICRO-CONTROLLER

MICRO-CONTROLLER FOR EN16005

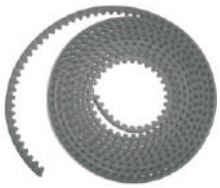
COMBINED TERMINAL BLOCK

COMBINED TERMINAL BLOCK FOR EN16005

BRUSHLESS DC MOTOR

SENSORS (OPTIONAL DEVICE)

BELT ROLLER



RACK BELT

(BI-PARTING) HANGERS & IRON PARTS

ACTIVE BRACE with BELT FIXER

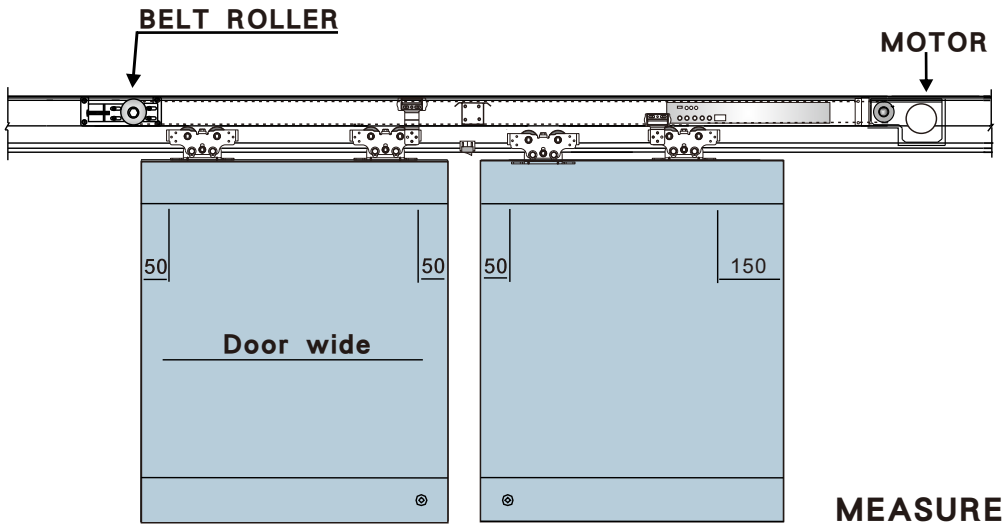
PASSIVE BRACE with BELT FIXER

HANGING BRACE-4 PCS

BELT BRACE

HANGING TWIN-WHEEL 4 PCS

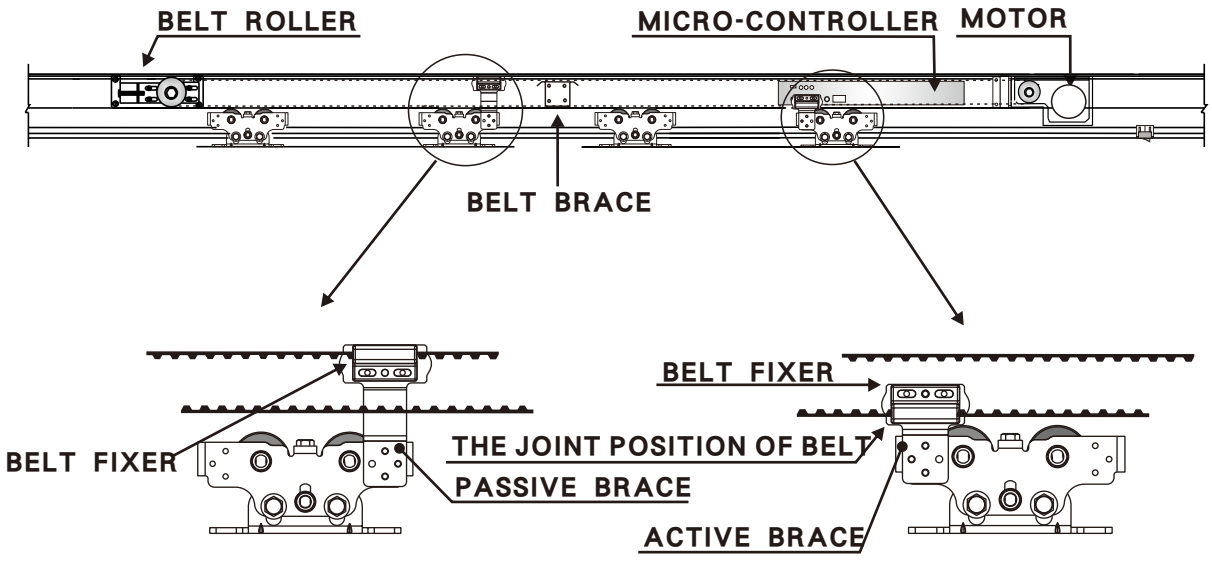
THE POSITION OF THE HANGING TWIN-WHEEL



MEASURE : mm

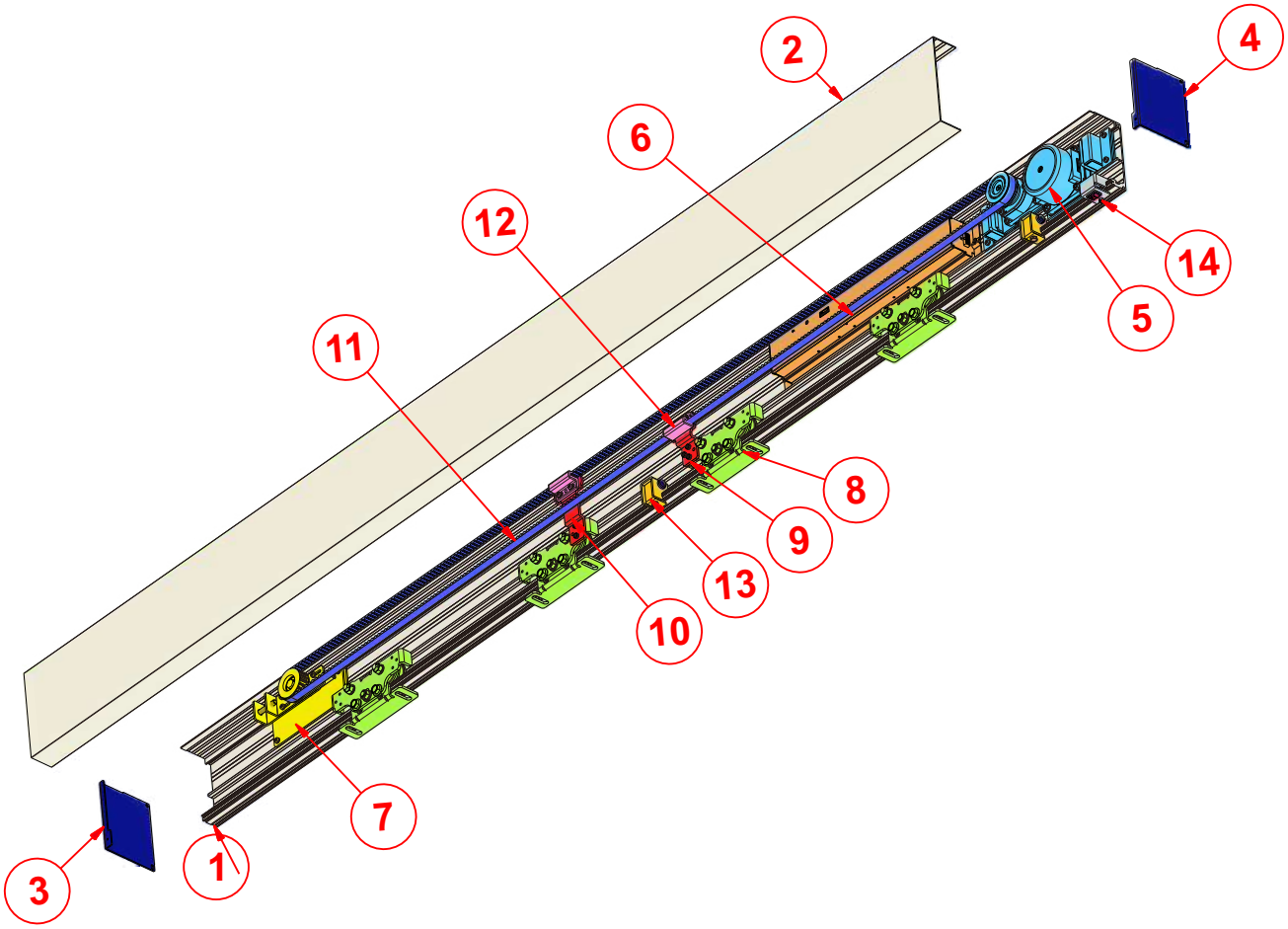
Inside the room, the distance between the "right side hanging-wheel" and "the edge of door" must be more than 150mm.

INSTALL THE RACK BELT

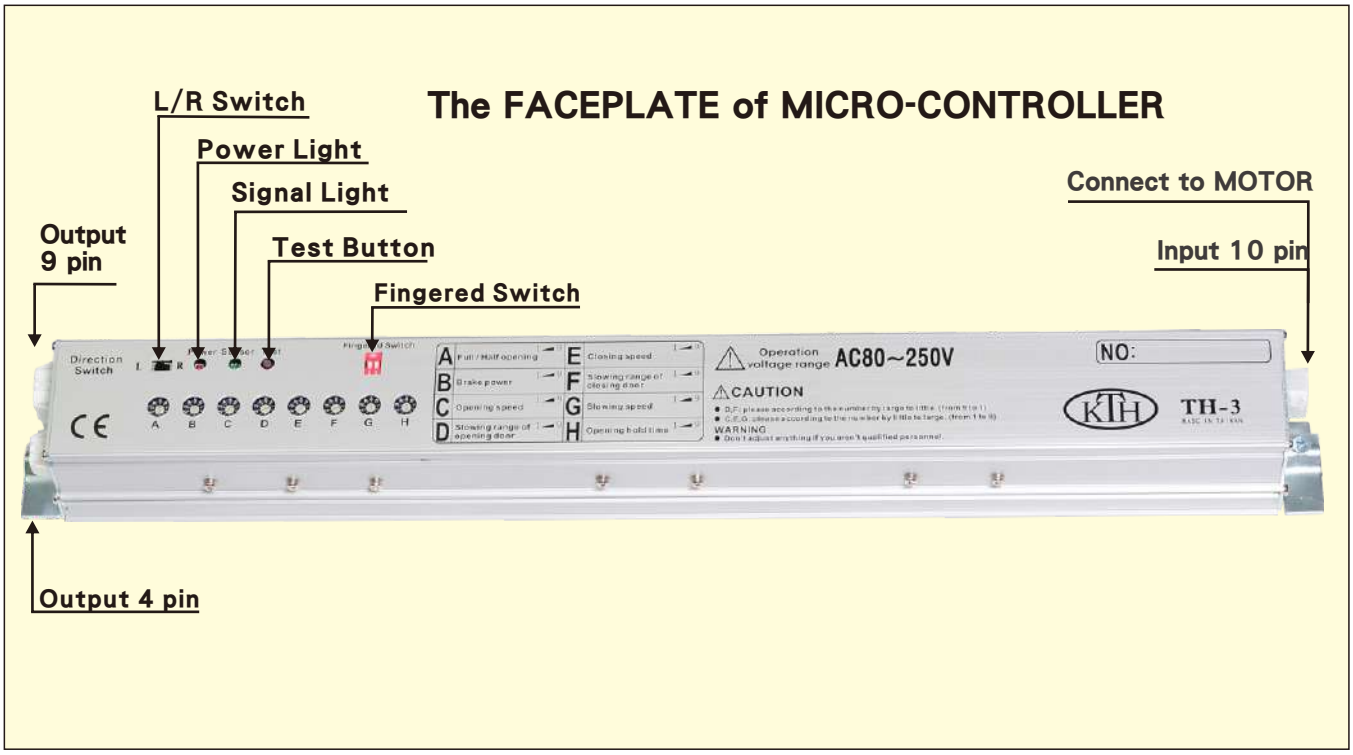


LEGEND OF PART DRAWING

Parts List		
No.	Parts Name	Quantity
1	"Standard" Aluminum Profile	1
2	"Standard" Aluminum Cover	1
3	Left side end cap	1
4	Right side end cap	1
5	Motor	1
6	Controller	1
7	Belt roller	1
8	Hanging-wheel	4
9	Active brace	1
10	Passive brace	1
11	Rack Belt	1
12	Belt Fixer	2
13	Stopper	2
14	Power switch	1



TEST & ADJUST(STANDARD)



Red LED-Power is connected.

Green LED-Input the open door signal.

L/R switch-The direction of the door opening: right/left(R/L).

Fingered Switch- Pin 1 - Directional Function

Operation

- **OFF: Normal mode.**
- **ON: push once , open the door. Push again,close the door.**

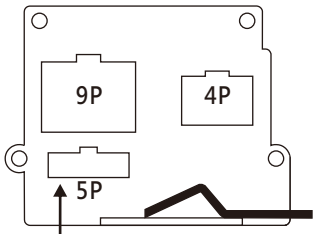
Fingered Switch-Pin 2-Reverse Switch: in order to control opening and closing direction of the Door -Leaf after power resumes.

Operation

- **OFF: Normal mode, after power resumes, the Door-Leaf opens the door first.**
- **ON: suitable for Security System, after power** resumes,the Door-Leaf closes the door first.

OUTPUT CONNECT

MICRO-CONTROLLER



Connect to Terminal Block

Red DC13V⊕ — Output DC13V 1A for ELECTRIC LOCK use
Black GND⊖

Blue — Output NC signal
Green

Orange — ELECTRIC LOCK enable
Yellow

Gray — Full/Half opening signal
Purple

Red DC24V⊕ — Power of SENSOR
Black GND⊖

Orange — The signal of SENSOR
Orange

PS : 5P terminal is required using with Combined Terminal Block.

OUTPUT CONNECT

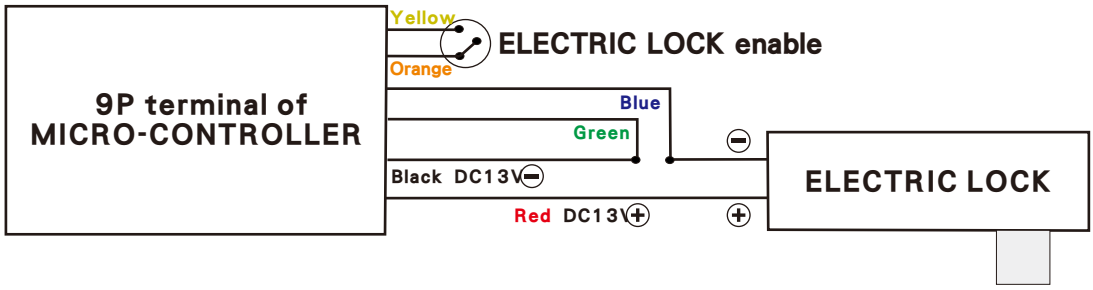
9P terminal

Black	Red	Orange
Yellow	Green	Blue
Purple	Gray	

4P terminal

Black	Red
Orange	Orange

THE ILLUSTRATION OF THE ELECTRIC LOCK CONTACT



PS: After the orange and the yellow lines are short circuit, the blue and the green lines would output NC signal.

ADJUST CONTROLLER

A Full/Half opening

Adjust the RANGE of the HALF OPEN DISTANCE.
Higher number, wider range.

B Brake power

The Door-Leaf is slight, the BRAKE POWER is less.
Please choose 0~2 if the Door-Leaf is under 50kg.
Please adjust number from number 5 if the Door-Leaf is over 80kg.

C The opening speed of the door

Adjust the OPEN SPEED.
Higher number, faster speed.
CAUTION: please adjust the number one by one from low to high.

D The slowing range of opening door

Adjust the SLOW RANGE of OPENING DOOR
Higher number, more range about the slow range at open door position.
CAUTION: please adjust the number one by one from high to low.

E The closing speed of the door

Adjust the CLOSED SPEED. Higher number, faster speed.
CAUTION: please adjust the number one by one from low to high.

F The slowing range of closing door

Adjust the SLOW RANGE of CLOSED DOOR
Higher number, more range about the slow range at open door position.
CAUTION: please adjust the number one by one from high to low.

G The slowing speed of the door

Adjust the SLOW SPEED. Higher number, faster speed.
CAUTION: please adjust the number one by one from low to high.

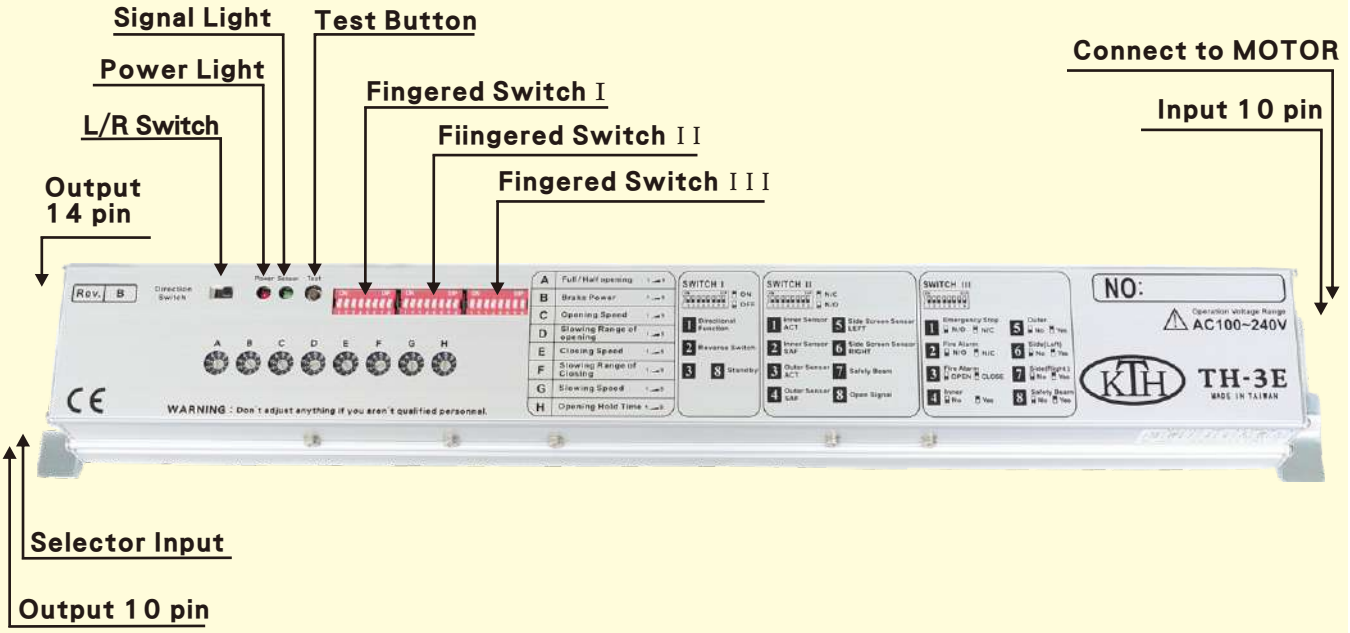
H Opening hold time

Adjust the HOLD OPEN TIME.
Higher number, the hold time is longer.

NUMBER	0	1	2	3	4	5	6	7	8	9
SECOND	0	1	2	3	4	5	6	10	15	20

TEST AND ADJUST(EN16005)

The FACEPLATE of MICRO-CONTROLLER



Red LED-Power is connected.

Green LED-Input the open door signal.

L/R switch-The direction of the door opening: right/lift(R/L).

ADJUST CONTROLLER-1

A Full/Half opening

Adjust the RANGE of the HALF OPEN DISTANCE.
Higher number, wider range.

B Brake power

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Please choose 0~2 if the Door-Leaf is under 50kg.
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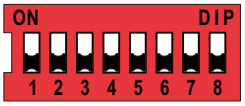
NUMBER	0	1	2	3	4	5	6	7	8	9
SECOND	0	1	2	3	4	5	6	10	15	20

ADJUST CONTROLLER-2

The Slowing Range of Opening and Closing Door is controlled by "Fingered Switch". There are two kinds of choice: SHORT and LONG range. (The setting of productionis SHORT range).



Switch I

1 Directional function

OFF ON

OFF: Normal mode.
ON: Push once , open the door.
Push again, close the door.

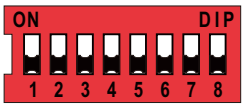
3 ~ 8 Standby

2 Reverse Switch:

in order to control opening and closing direction of the Door-Leaf after power resumes.

OFF ON

OFF: Normal mode, after power resumes,the Door-Leaf opens the door first.
ON: suitable for Security System, after power resumes the Door-Leaf closes the door first.



Switch II

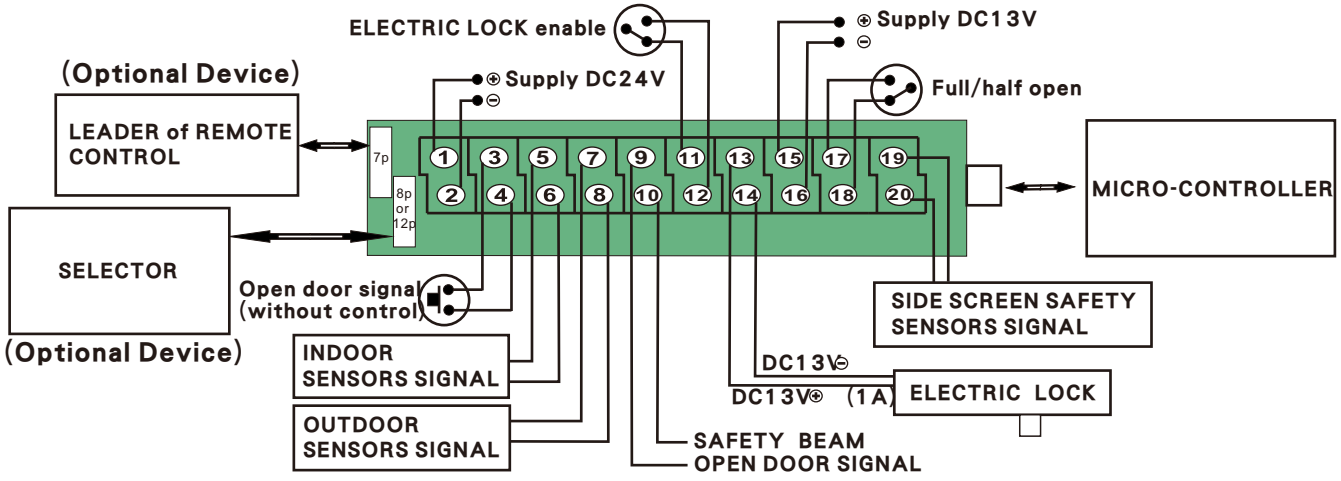
1	Inner Sensor ACT	N/O	N/C	5	Side Screen Sensor LEFT	N/O	N/C
2	Inner Sensor SAF	N/O	N/C	6	Side Screen Sensor Right	N/O	N/C
3	Outer Sensor ACT	N/O	N/C	7	Safely Beam	N/O	N/C
4	Outer Sensor SAF	N/O	N/C	8	Open Signal	N/O	N/C

Switch III

1	Emergency Stop	N.O.	N.C.	5	Outer	OFF	ON
2	Fire Alarm	N.O.	N.C.	6	Side(Left)	OFF	ON
3	Fire Alarm	OPEN	CLOSE	7	Side(Right)	OFF	ON
4	Inner	No	Yes	8	Safety Beam	OFF	ON

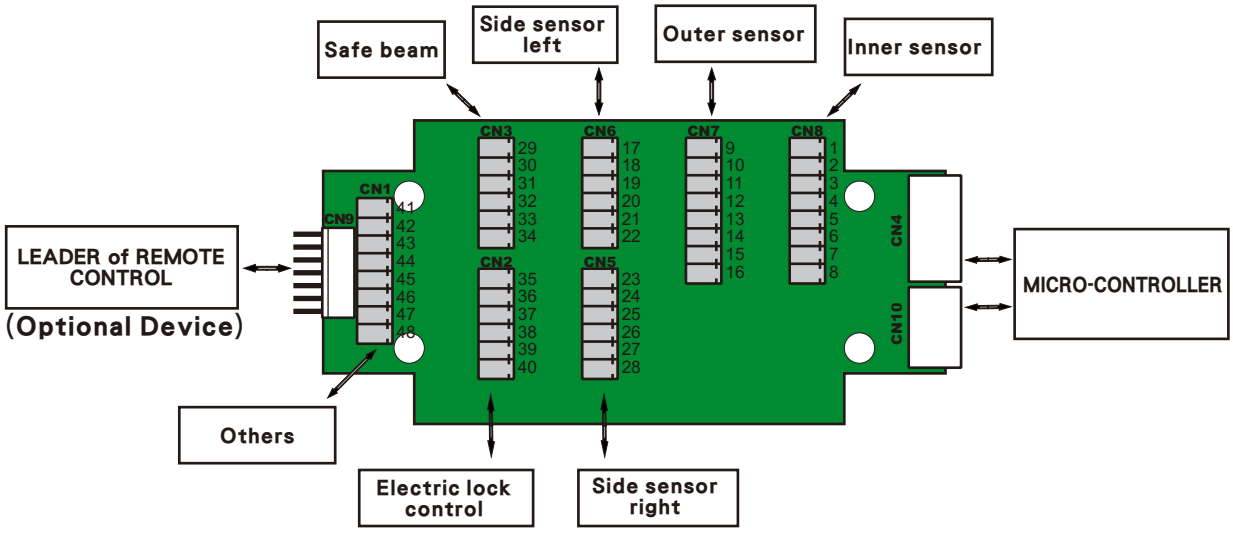
Fyi. (4)-(7) are for the function of Monitored Sensor.

WIRING DIAGRAM OF TH-100(STANDARD)



WIRING DIAGRAM OF TH-100(EN16005)

Wiring diagram



The ILLUSTRATED of WIRING.

REMOTE CONTROL (OPTIONAL DEVICE)

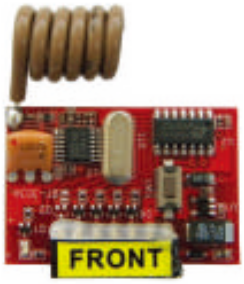
COMBINED TERMINAL BLOCK

COMBINED TERMINAL BLOCK MICRO-CONTROLLER

TH-125 (NEW)-REMOTE CONTROL

1.Transmitter is 20 bit digital code that is much safety and use fix-frequency component to transmit signal. The frequency of transmitter won't be affected by battery consumption and outside environment.
2.Wireless receiver use super-heterodyne from U.S.A..
The receiver is stably, anti-interference, no extra-wave.
3.Control unit is 8 bit single chip. The order is accurate and action is correct.

Transmitter × 2pcs



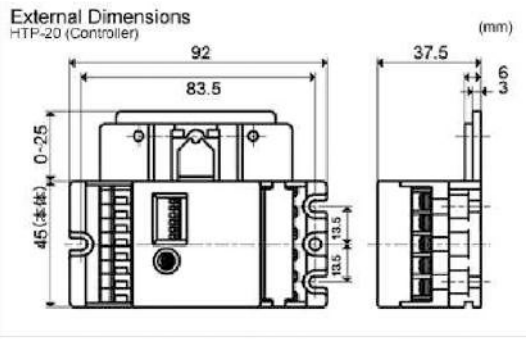
Receiver × 1pcs

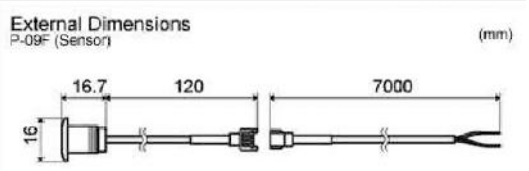
TH-136-MULTIFUNCTION DIGITAL SWITCH

1.Particular Memory Mode according different sessions to work.
2.Safety Alarm by itself to avoid danger happening.
3.Optional Language for easier operate in your location
4.Date and Time setting
5.Easy to install and program.
6.Beautiful and clear LCD panel
7.With buttons lock-on function

VOLUME	124.5X80X38.5(mm)
NET WEIGHT	0.46kg
ACCESSORIES	One piece of 5M cable

HTP-21C-SAFETY BEAM(HOTRON)





1. Beam sensor consisting of a controller and a single or dual set of infrared beams.
2. No need to use tools for wiring connection with compact controller.
3. Available to select penetration set-up or direct reflection set-up by setting switch.
4. Blink(under penetration setting), ON or OFF of LED tells you about the most suitable setting of volume adjustment by microcomputer control.

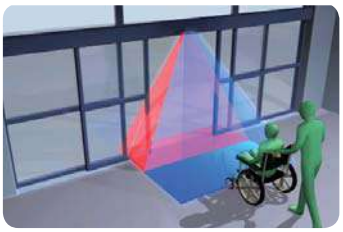
HR942D-INFRARED RAY SENSOR

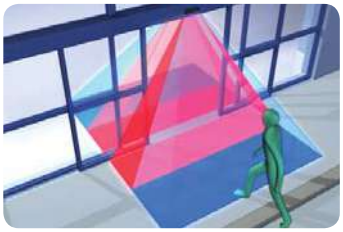
1. The sensor body can be angled at up to 10° to ensure timely detection of fast moving traffic.
2. Presence timer settings adjustable to 2, 15 60 and 180 seconds.
3. The sensor microprocessor automatically takes countermeasures against adverse conditions such as falling snow and strong sunrays and electrical noise.
4. Quick installation and easy to adjust.
5. Active area is very specific with high degree of adjustment flexibility.
6. 12-24V AC-DC operations, Normal Open relay.
7. Simple design to suit with every Automatic Door.

HR100-CT-ACTIVATION+MONITORED SAFETY(HOTRON)

Advanced Unidirectional Detection Sensor with Monitored Safety and Unique"Door Learn" Ability

Pioneering super sensor offers pedstian door activation and unprecedented safety at mounting heights of up to 3m





- **Energy Efficient**
  Intelligent unidirectional detection ability reduces door hold open time by 20% and building energy loss by 6% in a standard installation.

- **Unparalleled Pedestrian Safety**
  Unique ability to memorize door motion allows the infrared safety unparalleled pedestrian safety.

- **Versatile**
  Flexibility to adjust the door activation and pedestrian safety detection zones independently makes the HR100-CT the ideal sensor for every sliding door installation

- **Ease of Installation**
  All the information necessary to install the HR100-CT sensor is printed on the sensor body

HR94D1-C1- MONITORED SAFETY(HOTRON)

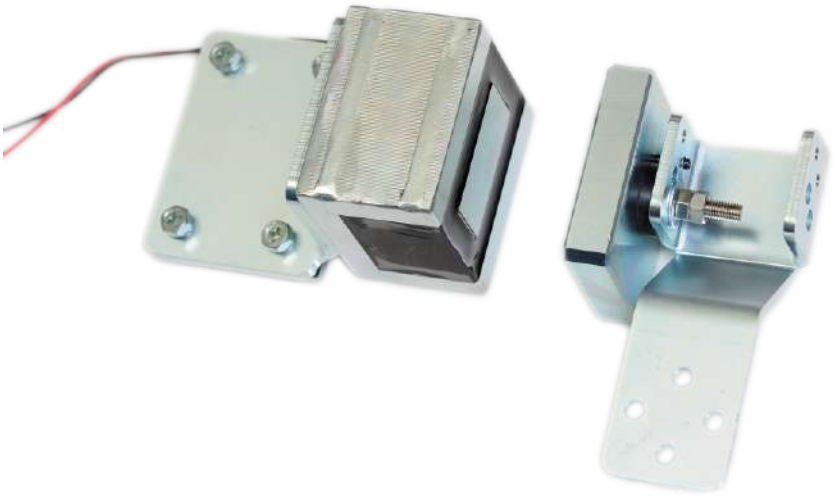
Monitored Sliding Door Side Screen or Door Threshold Pedestrian Safety Sensor.

ACCESSORY FOR EN16005 OPERATORS

Versatile and simple to set up, the HR94D1-C1 protects pedestrians from the dangers of both opening and closing sliding doors at mounting heights of up to 3m

- **Sliding Door Side Screen Pedestrian Safety**
  Protect pedestrians from the dangerous leading door edge during door open cycles with a dense curtain of infrared safety
- **Door Threshold Pedestrian Safety**
  Safeguard pedestrians from hazardous door closures due to a shallow but wide infrared safety curtain that is monitored once per door cycle
- **Solid & Reliable**
  Avoid the risk of loss or damage to individual sensor parts through a one piece sensor body construction
- **Simple to Install**
  Install with ease without the need for a remote control thanks to comprehensive instructions printed on the sensor body

TH-201-MEGNETIC LOCKS

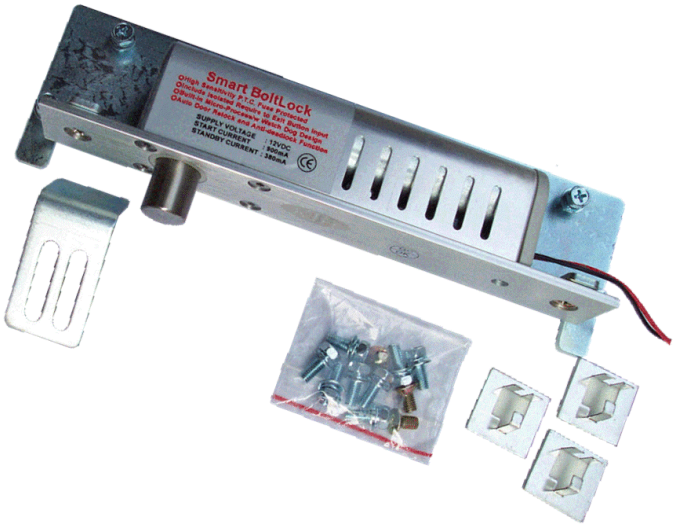


1.Main subject molded integrally and it can simplify installation procedures

2.Use aluminum alloy frame, strong crashworthy

3.Compact size, it can follow the installation (door type, sliding type)

TH-200LK-ELECTRIC BOLT



1.Don’t increase the temperature while it running and working.

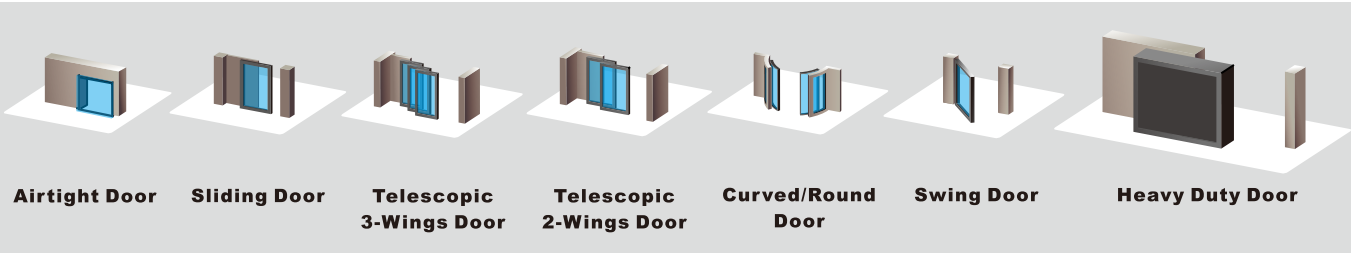
2.Tough and durable. There is no problems about the lock be lodged.

TH-135-FUNCTION KEY SWITCH

1.It's is suitable any Door Operator of KTH.
2.Easy to install and adjust.

• SIX PRESS FUNCTION

1. DOOR OPEN
2. IN ONE-WAY
3. AUTO
4. OUT ONE-WAY
5. DOOR CLOSE
6. FULL/HALF



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