# ELECTRIC BOLT LOCKS (FOR AUTO SLIDING DOOR) AR-1203H SERIES

(Fail-Safe)(Power to Lock)

INSTALLATION INSTRUCTIONS





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# **I. Order Information**

|                 | Features & Functions |                   |      |               | Additional Functions  |                        |     |                   |                    |
|-----------------|----------------------|-------------------|------|---------------|-----------------------|------------------------|-----|-------------------|--------------------|
| M/NO.           | Power<br>Input       | Remote<br>Release | ADSW | Time<br>delay | Bicolor<br>indicators | Auto-detective logical | LSS | Warning<br>buzzer | Connect<br>Bicolor |
| AR-1203H-L-12V  | 12VDC                | 0                 | 0    | 0             | 0                     | 0                      | 0   | ×                 | ×                  |
| AR-1203H-LA-12V | 12VDC                | 0                 | 0    | 0             | 0                     | 0                      | 0   | 0                 | ×                  |
| AR-1203H-LC-12V | 12VDC                | 0                 | 0    | 0             | 0                     | 0                      | 0   | ×                 | 0                  |

# **II. Features & Functions**

#### A. Whole alloy housing

- B. Power Input: 12VDC (24VDC- Specify on order)
- C. Bicolor indicators
- D. Auto-relocking timer setting: 0, 3, 6, 9 sec. for door locking time delay self-regulating by 2-pin dip-switch.
- E. Built-in exit switch input to unlock (If connected with latch type of exit switch, the bolt lock will be as N.O. without activated till switch off.)
- F. Auto door signal (output) <ADSW>: Signal will trigger motor controls which in turn activate to open sliding door.

## III. Additional Functions (See "I. Order Information")

- 1. Auto-detective logical MCU
- 2. Lock status sensor output (LSS): Indicates locked or unlocked bolt status (COM, NO, NC)
- 3. Warning buzzer: Indicates error status or forced entry. (BUZZER)
- 4. Capability to extend the bicolor indicator by external indicators about 50cm

#### **IV. Specifications** (24VDC-Specify on order)

| Item                      |         | Co              | ontents | Remarks  |  |  |
|---------------------------|---------|-----------------|---------|--|--|--|
| Power Input and Tolerance |         | 12VDC           | 24VDC   | Stable PSU recommended                           |  |  |
| Current Draw              | Pull in | 0.98A           | 0.55A   | Changeable by power input and higher outer temp. |  |  |
|                           | Holding | 0.24A           | 0.15A   | Changeable by power input and higher outer temp. |  |  |
| Surface Temperature       |         | < 40 °C         |         | Room Temp. 25 °C                                 |  |  |
| LSS                       |         | Max.30VDC;Max1A |         | COM,NO,NC  |  |  |

#### V. Contents

Red

Black

🗅 Gray



NO-Green (26AWG) Bolt locked

NC-Blue (26AWG) Bolt unlock

X Caution: Please make sure the "+" and "-" wires are connected well and correctly before you apply a power source to the lock; Warning, Reverse polarity will make a short circuit and void products warranty.

(Lock Status Sensor)

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Door sensor switch for bolt lock.

**VII. Auto relocking timer setting:** 4 sets of timer-0, 3, 6, 9 sec. - set up by 2-pin dip-switch and apply for following situations.

• Setting up the auto relocking timer: (Default Value: 0 sec.)





6 sec. 9 sec. (Door locking time delay)

## VIII. Indicators-LED and BUZZER identification as following chart:

| Indicators                  | LED   | Buzzer                                |
|-----------------------------|---|---------------------------------------|
| Waiting for locking         | Red LED lights up   | None                                  |
| Door locking time delay     | Green LED flashes once per second                                   | None                                  |
| Detecting lock              | Red LED flashes once per second                                     | None                                  |
| Locked well                 | Green LED flashes once every two seconds                            | 2 beeps per seconds                   |
| Fail to lock                | Red LED flashes once per second for 10 seconds                      | 1 beep per second for 10 seconds      |
| Keeping locking             | Red LED flashes once every two seconds for 30 seconds               | 1 beep every 2 seconds for 30 seconds |
| Forced entry (Alarm)        | Green and Red LED's flash alternately every 0.5 sec. for 30 seconds | Keeps beeping for 30 seconds          |
| Remote Release(Exit Switch) | Red LED flashes once per second for 3 seconds                       | 1 beep per second                     |

**IX. System functions:** By logical program systems to control the bolt lock; It has auto-detective functions including bolt fixed position, door locking time delay, locked well and forced entry (alarm) and remote release (exit switch). (\*)-See "I. Order Information"

- **1. Standby** (Power on the system when door is open): If you close the door, the system will receive an induction and the time delay (0/3/6/9 sec.) will start to count, and then the auto-detective function will execute the following movements:
  - However, the period of time delay, if door is opened, the bolt will automatically retract and the systems will return to standby.
  - After a time delay (0/3/6/9 sec.), if door is closed, the bolt will automatically extend into the "Detecting lock" and may execute the following functions.
  - After "Detecting lock" (or system received an induction of "Locked well"-(\*)), the bolt will enter into an economical mode of electricity and locking will hold.
- (\*) After "Detecting lock", if the bolt is out and not in the right position-"Fail to lock", the bolt will automatically retract in 10 seconds. Meanwhile, the users can see bicolor indicators or listen to the "warning buzzer" and push the door in the right position, the bolt will automatically extend into an economical mode of electricity and locking will hold.
- (\*) In "Fail to lock", after 10 seconds, the bolt will enter into "Keeping locking" mode and re-lock every 30 seconds, The users can see bicolor indicators or listen to the "warning buzzer", users must open the door and then closed it again in the right position, the bolt will automatically extend into an economical mode of electricity and locking will hold.
  - **2.** Unlock (In locking, push the exit-switch) "Remote Release": The bolt will automatically retract, (after 1 seconds, Auto door signal will trigger motor controls which in turn activate to open sliding door.) if the door is closed, the time delay (0/3/6/9 sec.) will reset and count and execute the following functions.
- (\*)3. Forced entry (Alarm): Indicates an error status or forced entry, the system can increase the thrust of the bolt and an alarm bell given (30 seconds).

# X. Installation Diagram:

A. Assembling the door sensor-switch for bolt lock.



B. Assembling the bolt lock and lock-bracket and connect door sensor-switch.



C. Assembling the mounting plate into the auto sliding-doors track-bracket.



**D.** Installs the bolt lock (**B**.)



E. Installs the L-Bracket and adjustment of the door sensor-switch distance. (Press the switch to ON.)



# F. Dimension

| Bolt         | Ø15.8 mm          | Bolt Depth | 16 mm (5/8")     | Lock Body | 150L×25.4W×33D mm   |
|--------------|-------------------|------------|------------------|-----------|---------------------|
| Cover(Eaves) | 200L×32W×1.5T mm  | Face plate | 193L×25.4W×2T mm | L-Bracket | 102.55L×25.4W×2T mm |
| Lock-Bracket | 300L×41H×53.5D mm |            |                  |           |                     |



## **G.** Installation Diagram

