



**INSTALLATION INSTRUCTIONS
AND
OPERATION MANUAL**

STK-5011CP

UL325-2010 Compliant

Commercial and Industrial Door Operator

Logic Control

Duty Cycle – 10 Cycles per Hour

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IMPORTANT INSTALLATION INSTRUCTIONS

WARNING – To reduce the risk of death or serious injury to persons:

1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
2. Install only on a properly operating and balanced door. A door that is operating improperly could cause severe injury. Have qualified service personnel make repairs to cables, spring assemblies, and other hardware before installing the operator.
3. Remove all pull ropes and remove, or make inoperative, all locks (unless mechanically and/or electrically interlocked to the power unit) that are connected to the door before installing the operator.
4. Install the door operator at least 8 feet or more above the floor if the operator has exposed moving parts. If the operator must be mounted less 8 ft (2.44 m) above the floor, then exposed moving parts must be protected by covers or guarding. Contact the manufacturer.
5. Do not connect the door operator to the source of power until instructed to do so.
6. Locate the control station: (a) within sight of the door, and (b) at a minimum height of 5 feet above floors, landings, steps, or any other adjacent walking surface and (c) away from all moving parts of the door.
7. Install the Entrapment Warning Placard next to the control station in a prominent location.
8. Make sure the available power supply to be connected to the operator is of the same voltage, frequency, phase and wattage as indicated on the nameplate of the operator.
9. Read and understand the wiring diagram of the operator and the control station (open-close-stop push button), and any other equipment to be connected to the operator.
10. To avoid damage to the door and operator, make all door locks inoperative. Secure locks in the unlocked position, or install external electrical interlocks to prevent operation with the locks engaged.
11. Always disconnect power whenever installing or servicing the door operator or door.
12. All wiring must be permanent and comply with National Electrical Code (NEC) and local code requirements.
13. Any change in mounting position may result in a change of operator rotation and consequently in a change of control functions. Consult factory for any changes.
14. If the operator is provided with an auxiliary chain operator, the hand chain must be kept inside the chain bag when operating electrically.
15. For products having a manual release, instruct the end user on the operation of the manual release.

SPECIFICATIONS

MOTOR

| | |
|-------------|--|
| Duty Cycle: | Restricted cycle duty (10 cycles per hour) |
| Rating: | 150 ft.lb/sec per motor |
| Speed: | 1560 RPM |
| Voltage: | 115V, 1 phase |
| Current: | See motor nameplate |

ELECTRICAL

| | |
|-------------------|--|
| Transformer: | 24VAC |
| Wiring Type: | Open and close in constant pressure mode only. |
| Limit Adjustment: | Electronic limit switch type, limits setting through the 3-button station. |

MECHANICAL

| | | | | | |
|-----------------------|-----------------------------------|-----------|------------|------------|------------|
| Drive Reduction: | STK6-5011 | STK8-5011 | STK13-5011 | STK44-5011 | STK67-5011 |
| | 60:1 | 88:1 | 113:1 | 144:1 | 167:1 |
| Output Shaft Speed: | 26 RPM | 18 RPM | 14 RPM | 11 RPM | 9 RPM |
| Door Speed: | 6 - 8" per sec. average (typical) | | | | |
| Brake: | Solenoid actuated brake | | | | |
| Auxiliary Hand Crank: | Standard | | | | |

ENTRAPMENT PROTECTION

| | |
|----------------------|----------------|
| Sensing Edge*: | Not applicable |
| Non-Contact Device*: | Not applicable |

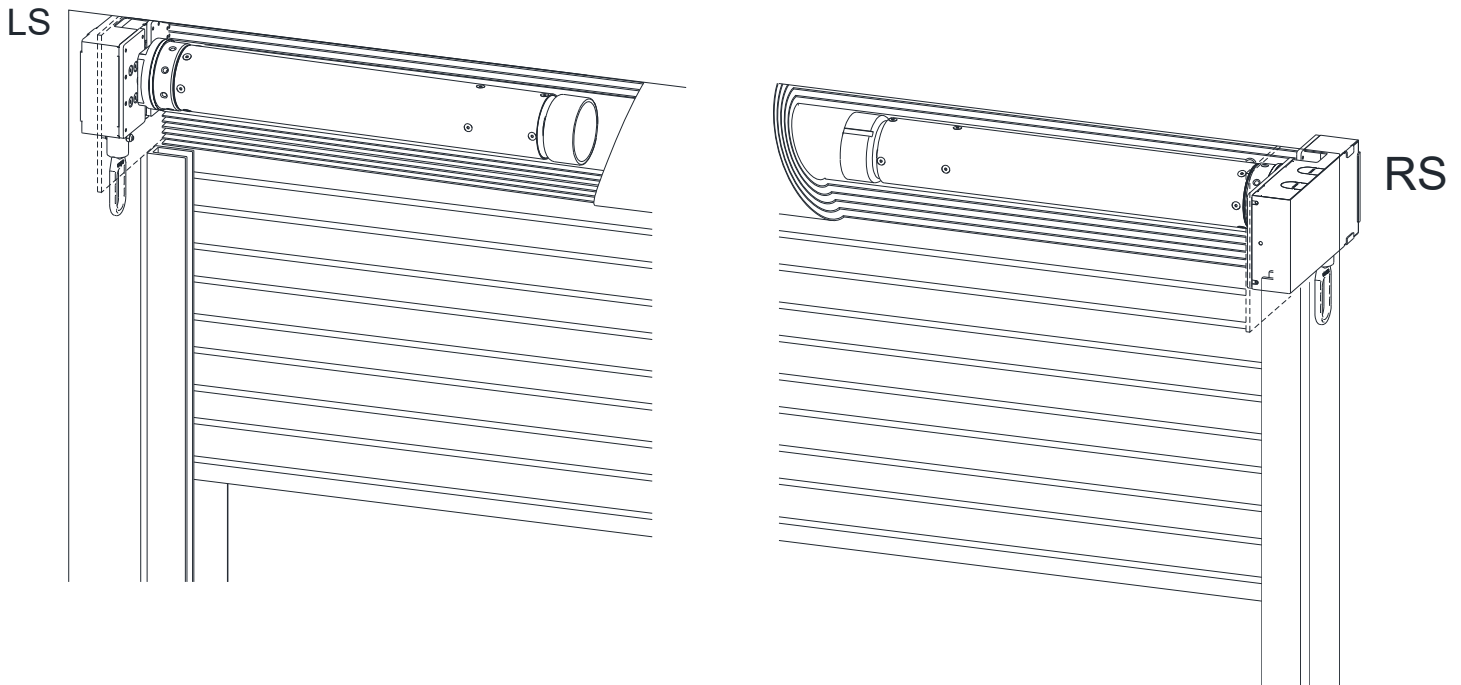
***Per the requirements of UL Standard 325, the door operator is setup for constant pressure to close the door.**

TYPES AND SIZES OF DOORS

Consult factory for details.

INSTALLATION INSTRUCTIONS

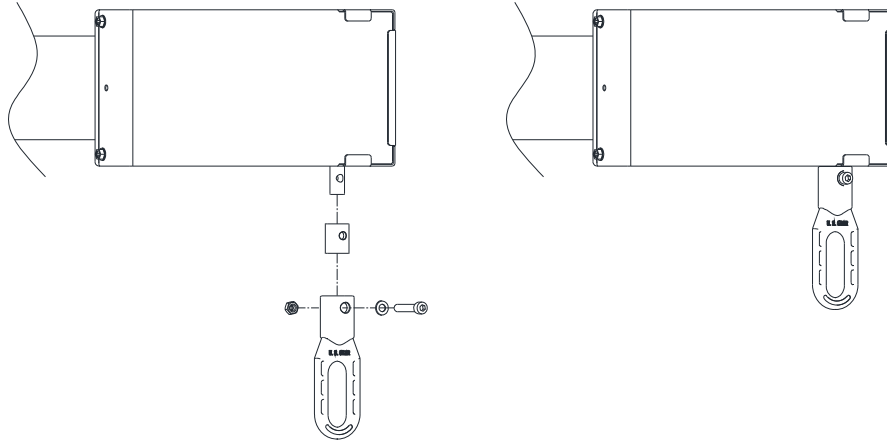
OPERATOR MOUNTING POSITIONS



NOTE: Any change in mounting position may result in a change of operator rotation and consequently in a change of control functions. Consult factory for any changes. (LS mounting position is LH operator, RS position is RH operator)

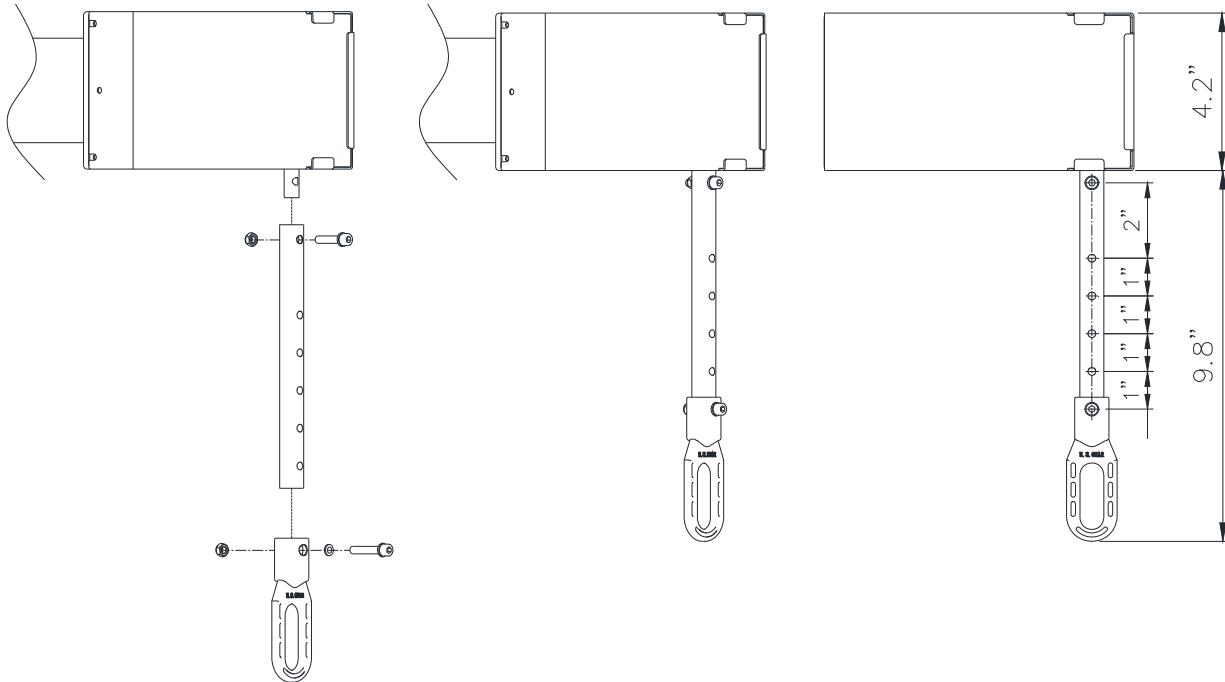
HAND CRANK INSTALLATIONS

1. BOLT THE HAND CRANK TO THE CRANKSHAFT



2. EXTENSION SHAFT FOR CRANK OPERATION

Four (4) holes on the 6" extension shaft with 1" distance apart. When the site requires to cut short, the holes are prepared for the crank eye mounting.



WIRING INSTRUCTIONS

WARNING

Disconnect power at the fuse box before proceeding with any wiring.

1. Do not install any wiring or attempt to run this operator without checking the wiring diagram located on the inside of the control box cover.
2. Do not turn on power until you have finished making all power and control wiring connections.
3. Do not run power and control wiring in the same conduit.
4. Any wire connected to the control panel must be protected by conduit or other means to ensure the safety and permanency of the wiring.
5. Use copper wire inside the control panel.
6. A separate circuit of adequate capacity is needed for the operator.
7. The operator must be properly grounded. The ground screw, painted green, is located inside the control panel.
8. For an operator, system, or external device requiring field installed wiring between a Class 2 output of an operator and an external device, the type of wiring shall be R/C (AVLV2/8), AWM, min. 22 AWG, rated 60°C, with VW-1/FT2.

WARNING

- **Failure to properly ground the operator could result in electric shock and serious injury or death.**
- **To avoid damage to door and operator, make all door locks inoperative. Secure lock(s) in the unlocked position, or install electrical interlocks to prevent operation with the lock engaged.**

CONTROL WIRING

⚠ WARNING

Disconnect power at the fuse box before proceeding with any wiring.

1. Locate the control station where the user can clearly see the operation of the door. Mount the enclosed placard adjacent or near the door.



⚠ WARNING

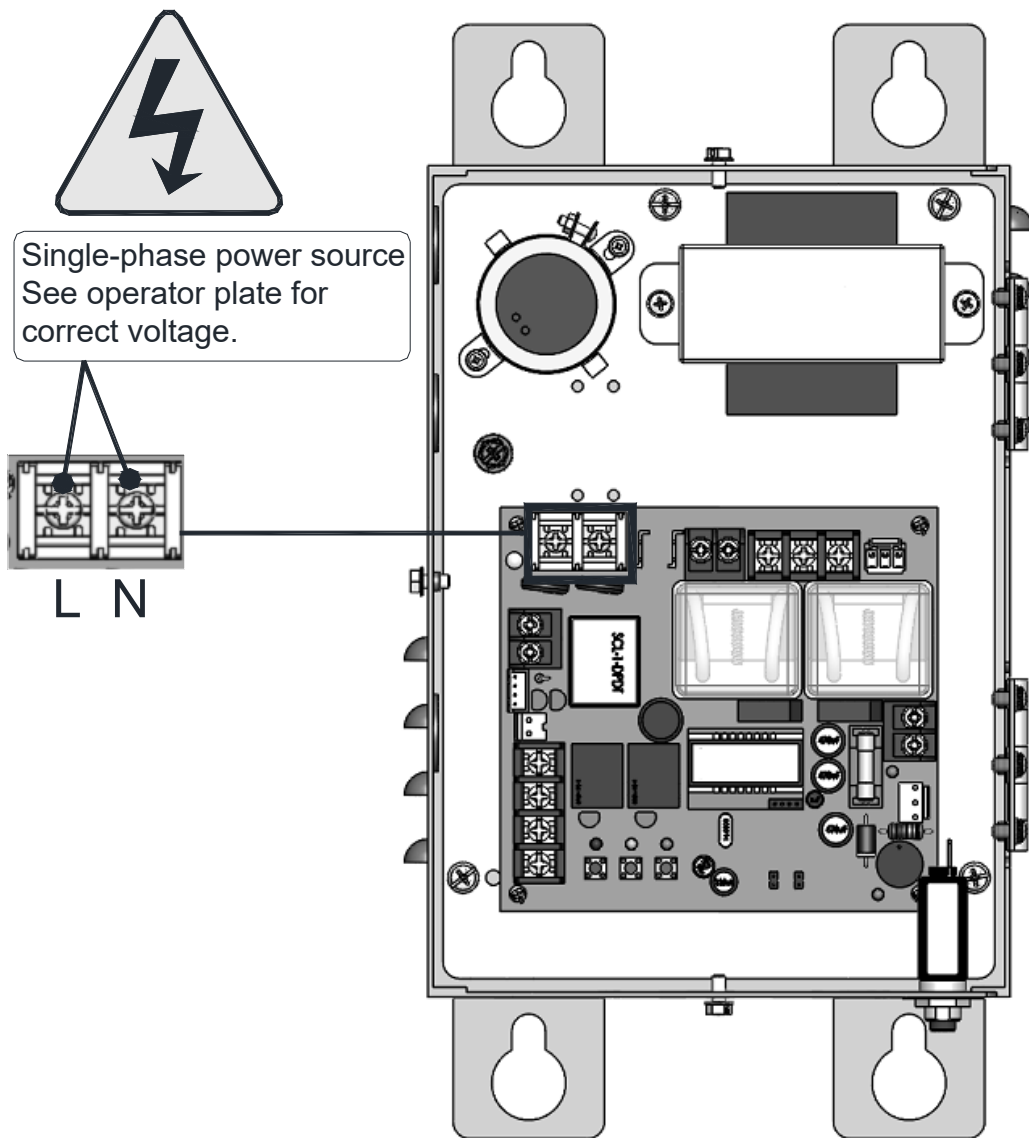
Controls shall be located far enough away from the door, or positioned such that the user is prevented from coming in contact with the door, while operating the controls.

2. Do not run control wiring in the same conduit as power wiring.
3. Any wire connected to the control panel must be protected by conduit or other means to ensure the safety and permanency of the wiring.
4. After installation, be sure that the operator and controls have been tested and function properly.

⚠ WARNING

Changing from left hand to right hand or vice versa could require a resetting of open and close limit positions. Please refer to DOOR LIMIT POSITIONS SETTING section or consult factory for details.

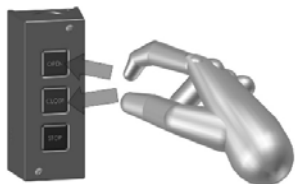
INPUT POWER CONNECTIONS



DOOR LIMIT POSITIONS SETTING

NOTE: The motor is operable in constant pressure open/close mode with audible warning prior to the limits set.

1. Set Up Mode

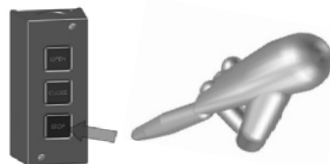


Enter the Set Up Mode

- 1-1 Press & hold both "Open" & "Close" buttons for 5 secs.
- 1-2 A beeping sound means entering the setup mode.

★Note:

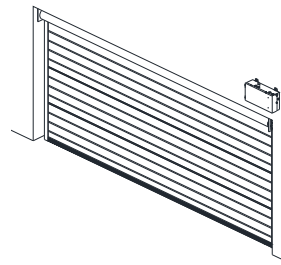
When a warning sound (B.B.B.B.B) be heard after entering the set up mode, **MUST** move the door through OPEN /CLOSE button to clear this warning sound.



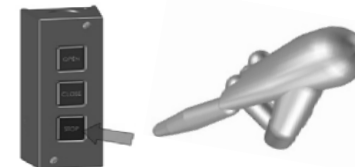
Active the Set Up Mode

- 1-3 Press "Stop" button for 5 secs as a confirmation and a beeping sound shall be heard.

2. Close Limit Position Setting

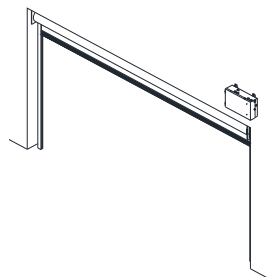


- 2-1 Pressing either "Open" or "Close" button to bring door to close limit position.

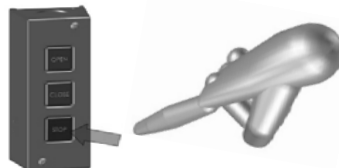


- 2-2 Press "Stop" button for 5 secs as a confirmation and a beeping sound shall be heard.
- 2-3 Close limit position is saved.

3. Open Limit Position Setting



- 3-1 Pressing either "Open" or "Close" button to bring door to open limit position.



- 3-2 Press "Stop" button for 5 secs as a confirmation and a beeping sound shall be heard.
- 3-3 Open limit position is saved.

4. Confirmed Open/Close Limit Position



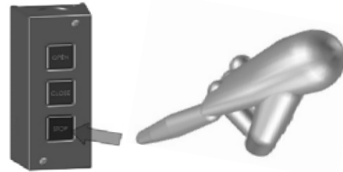
- 4-1 After the limit positions been set, system will change itself to have "Open" button to open door, and vice versa to "Close" button.
- 4-2 Run the door to open & close limit positions 2 times to have better self-turning performance.

**★Note: Constant pressure during limit setting mode.
Short pressing Stop button will end the setting.**

FINE TUNING THE OPEN & CLOSE LIMITS POSITIONS AFTER SETTINGS

(The fine tuning range should be within 50% of the door height)

1. Enter Open Limit Position Fine Tuning Set Up Mode



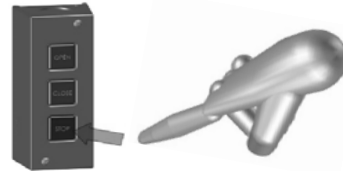
Enter the Fine Tuning Set Up Mode

- 1-1 After door reaching the Open Limit position, press "Open" button for 5 secs.
- 1-2 A beeping sound means entering the fine tuning set up mode.

Active the Fine Tuning Set Up Mode

- 1-3 Press "Stop" button for 5 secs as a confirmation and a beeping sound shall be heard.

3. Enter Close Limit Position Fine Tuning Set Up Mode



Enter the Fine Tuning Set Up Mode

- 3-1 After door reaching the Close Limit position, press "Close" button for 5 secs.
- 3-2 A beeping sound means entering the fine tuning set up mode.

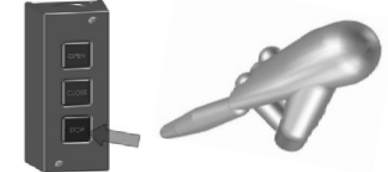
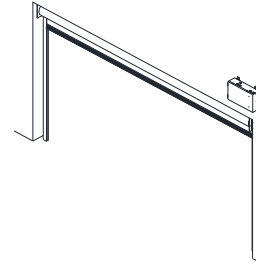
Active the Fine Tuning Set Up Mode

- 3-3 Press "Stop" button for 5 secs as a confirmation and a beeping sound shall be heard.

Remarks:

- ★ Press Stop button once in any step to end the setting.
- ★ Setting will be ended after three minutes of inactivity.

2. Open Limit Position Fine Tuning Setting

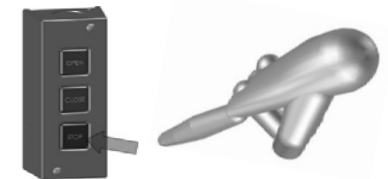
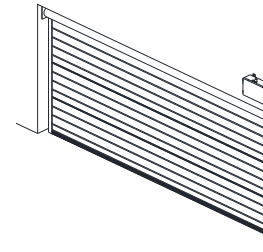


- 2-1 Pressing either "Open" or "Close" button for fine tuning the Open Limit position.
- 2-2 Bi Bi----Bi Bi----Bi Bi----Bi Bi continuous sound means in the fine tuning set up mode.

- 2-4 Press "Stop" button for 5 secs as a confirmation and a beeping sound shall be heard.
- 2-5 Open Limit position fine tuning is saved.

★**Note: Constant pressure during limit setting mode. Short pressing Stop button will end the setting.**

4. Close Limit Position Fine Tuning Setting

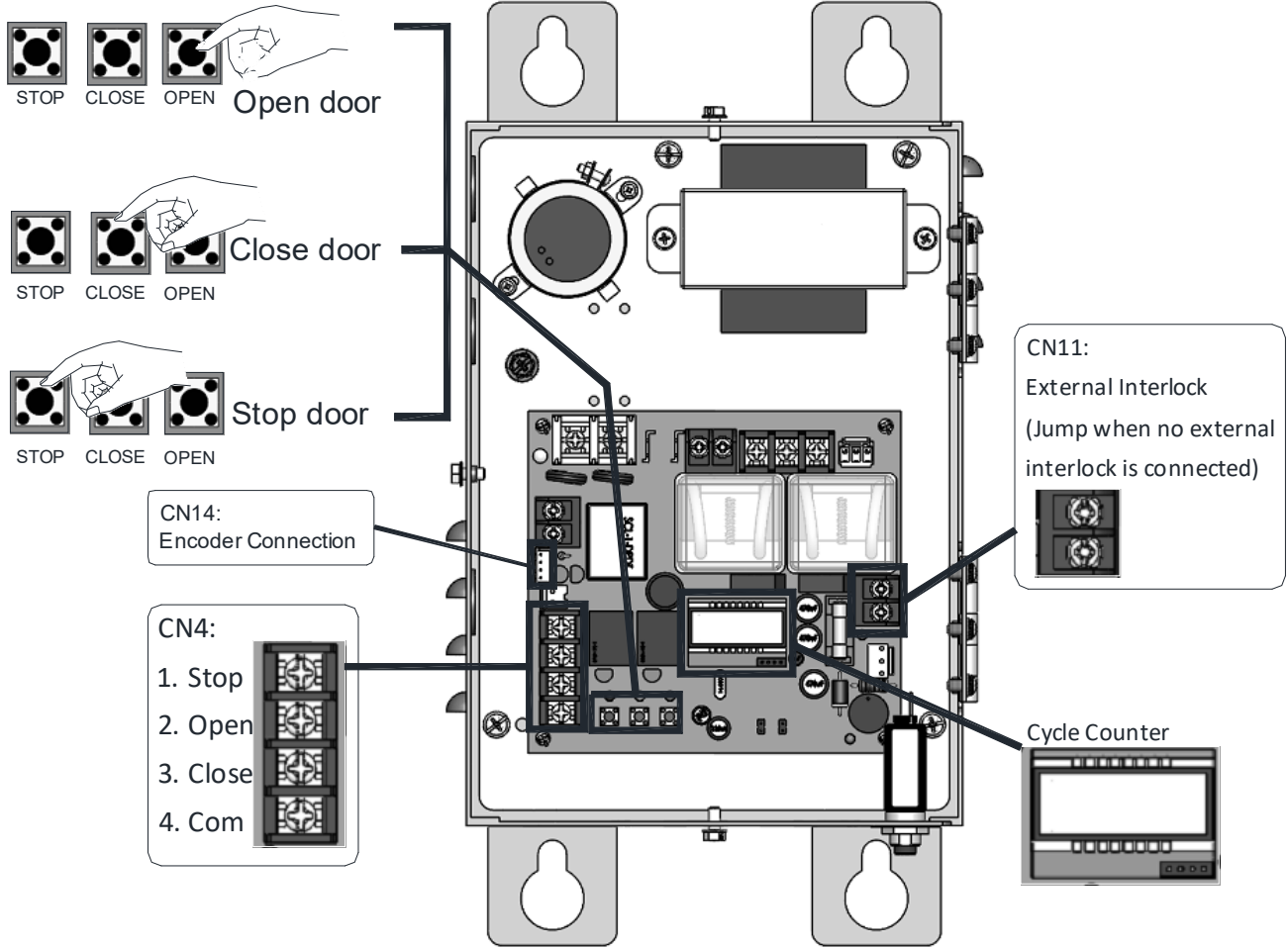


- 4-1 Pressing either "Open" or "Close" button for fine tuning the Close Limit position.
- 4-2 Bi Bi----Bi Bi----Bi Bi----Bi Bi continuous sound means in the fine tuning set up mode.

- 4-3 Press "Stop" button for 5 secs as a confirmation and a beeping sound shall be heard.
- 4-4 Close Limit position fine tuning is saved.

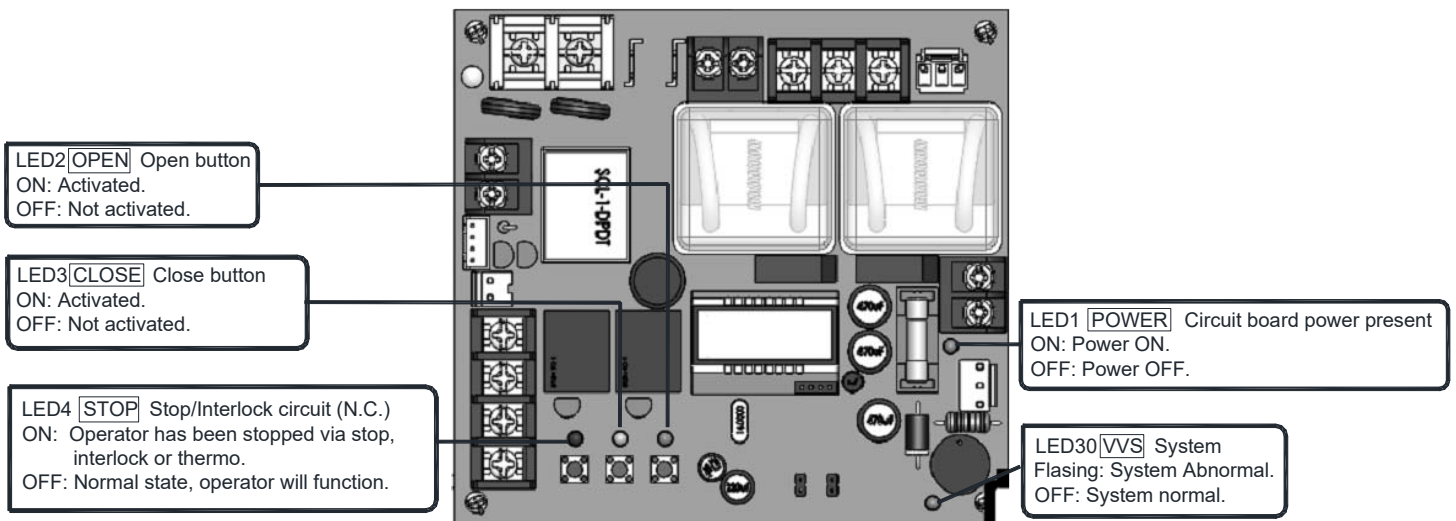
★**Note: Constant pressure during limit setting mode. Short pressing Stop button will end the setting.**

CONTROL OVERVIEW



- ❖ Open and close in constant pressure mode only.
- ❖ A one-second delay on reverse is standard.
- ❖ When the door is closing, pushing the “Open” or “Stop” button will stop the door from moving.

LIGHT INDICATION



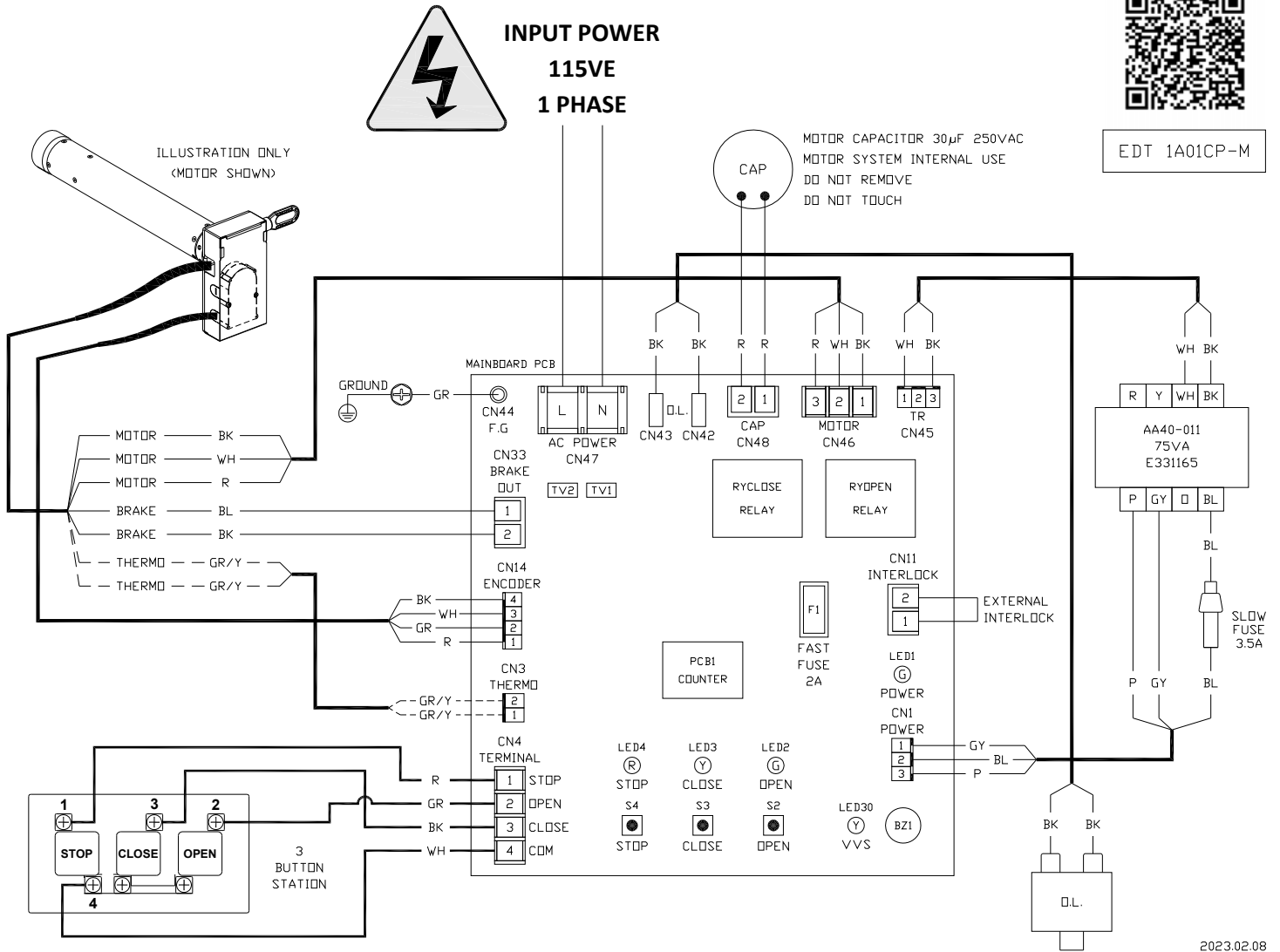
WIRING DIAGRAMS

STK 115V 1 PHASE 50/60HZ
(FOR STK-1511CP)

SCAN FOR
COLOR VERSION



EDT 1A01CP-M



2023.02.08

IMPORTANT SAFETY INSTRUCTIONS

WARNING –To reduce the risk of severe injury or death:

1. **READ AND FOLLOW ALL INSTRUCTIONS.**
2. Never let children operate or play with door controls. Keep the remote control (where provided) away from children.
3. Personnel should keep away from a door in motion and keep the moving door in sight until it is completely closed or opened. **NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR.**
4. Test the door's safety features at least once a month. After adjusting either the force or the limit of travel, retest the door operator's safety features. Failure to adjust the operator properly may cause severe injury or death.
5. For products having a manual release, if possible, use the manual release only when the door is closed. Use caution when using this release when the door is open. Weak or broken springs may cause the door to fall rapidly, causing severe injury or death.
6. **KEEP DOORS PROPERLY OPERATING AND BALANCED.** See Door Manufacturer's Owner's Manual. An improperly operating or balanced door could cause severe injury or death. Have trained door systems technician make repairs to cables, spring assemblies, and other hardware.
7. **SAVE THESE INSTRUCTIONS.**

TESTING

PUSH BUTTON STATION TESTING

1. If a 3-button control station is used to operate the door, push the “OPEN” button to open the door, push the “CLOSE” button to close the door, push the “STOP” button to stop movement of the door while opening or closing. Removing pressure from the “CLOSE” button will cause the door to stop.
2. If a key switch control station is used to operate the door, turn the key to the “OPEN” position to open the door, turn the key to the “CLOSE” position to close the door, push the “STOP” button to stop movement of the door while opening or closing. Removing pressure from the “CLOSE” key position will cause the door to stop.

EMERGENCY MANUAL OPERATION

This operator has provisions for manually operating the door in case of emergency or power failure. This operator is equipped with an auxiliary hand crank.

WARNING

Turn off power to the operator before manually operating the door.

MAINTENANCE INSTRUCTIONS

The brake is a self-adjusting brake. It is maintenance free. The brake assembly requires no additional adjustments for its lifetime.

| |
|--|
|  WARNING |
| Disconnect power supply to the operator before servicing. |

Check the following items at the intervals listed:

| CHECK LIST | DESCRIPTION | EVERY 3 MONTHS | EVERY 6 MONTHS | EVERY 12 MONTHS |
|-------------------|--|-------------------|-------------------|--------------------|
| Drive Chain | Check for excessive slack. Check & adjust as required Lubricate. | ● | | |
| Sprockets | Check set screw tightness | ● | | |
| Fasteners | Check & tighten as required | | ● | |
| Bearings & Shafts | Check for wear & lubricate | ● | | |

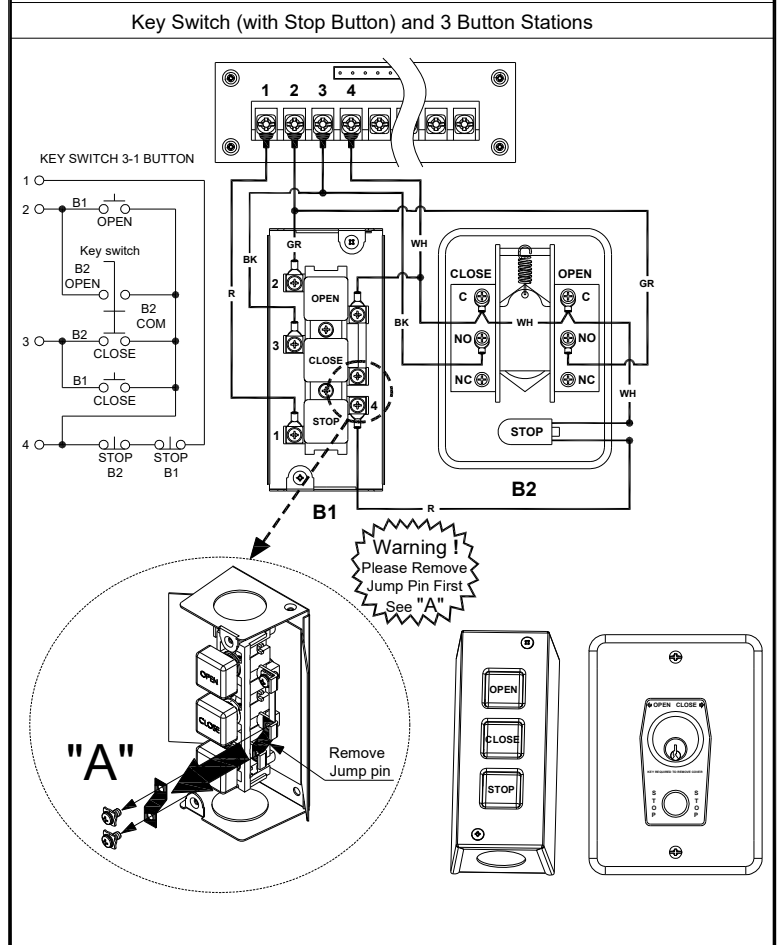
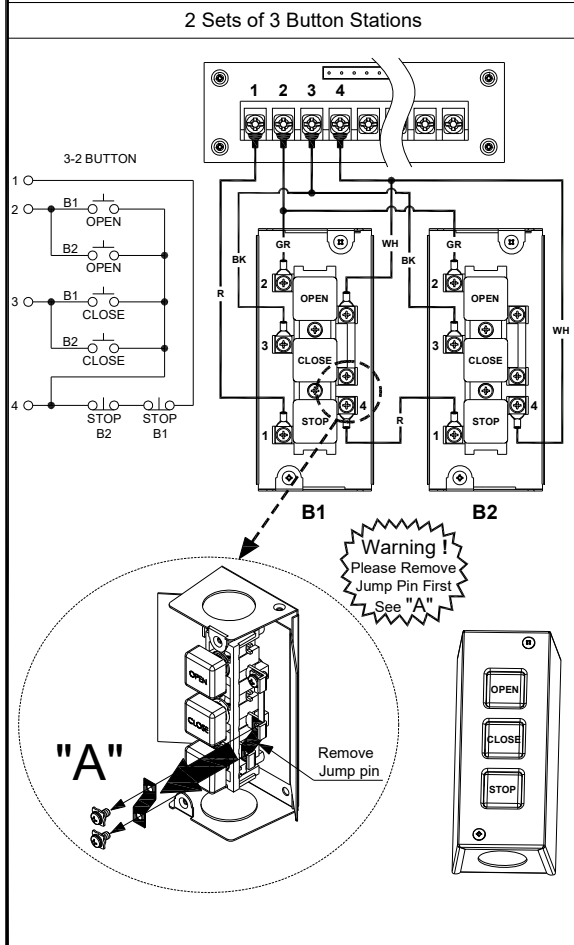
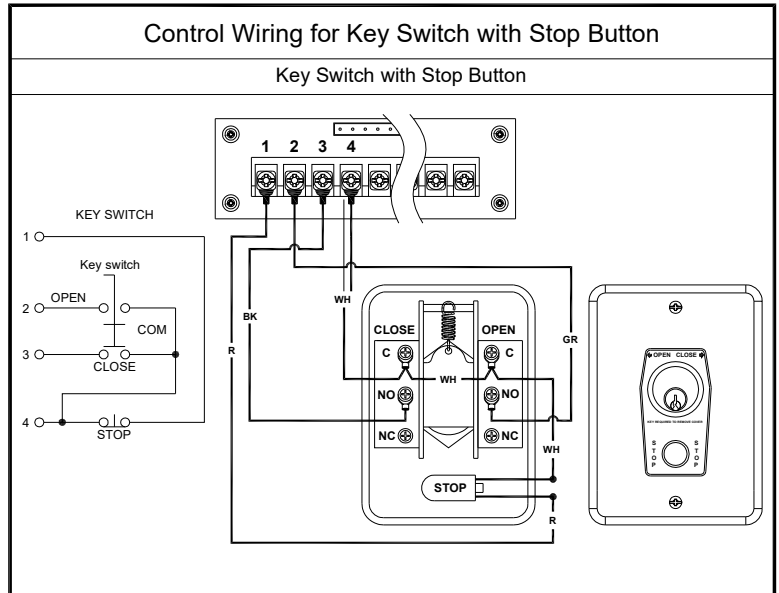
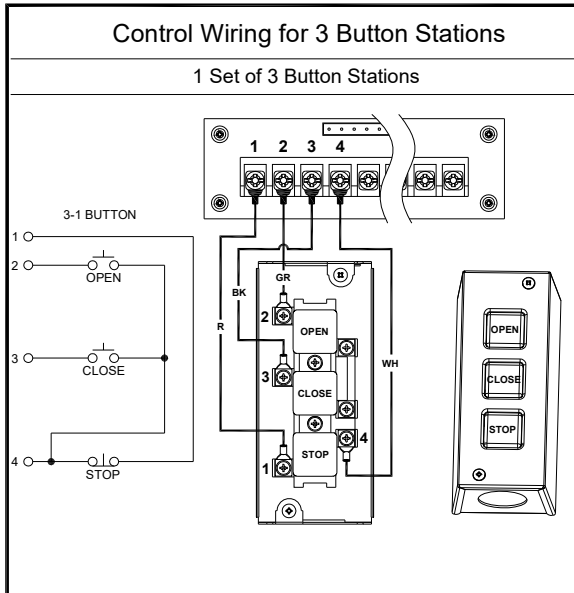
- ❖ Do not lubricate motor. Lubrication could cause damage.
- ❖ Inspect and service whenever a malfunction either door or operator is observed or suspected.
- ❖ Before servicing, always disconnect power supply to the operator.
- ❖ Replace fuses only with those of the same type and rating.
- ❖ All replacement parts must be compatible with those originally provided. Consult manufacturer for replacement parts.

| |
|---|
|  WARNING |
| Do not place hands or tools in or near the operator when the power is connected or when testing control. Always disconnect power before servicing or adjusting the operator. |

APPENDIX 1: Control Connections Diagrams

Control Connections Diagrams

CCD-PCB-A01



APPENDIX 2: Control Connections Diagrams

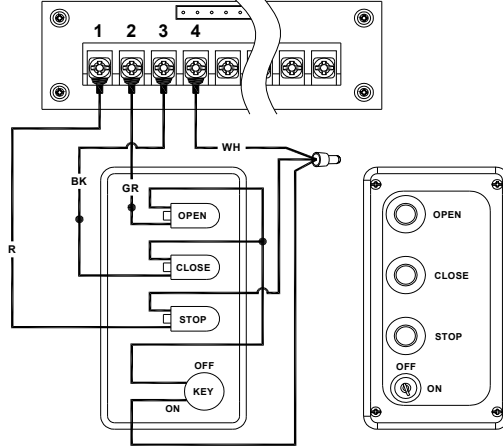
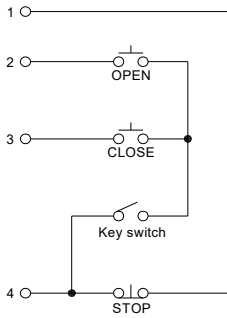
Control Connections Diagrams

CCD-PCB-B02

Wiring 3 Button Stations With Key Lockout

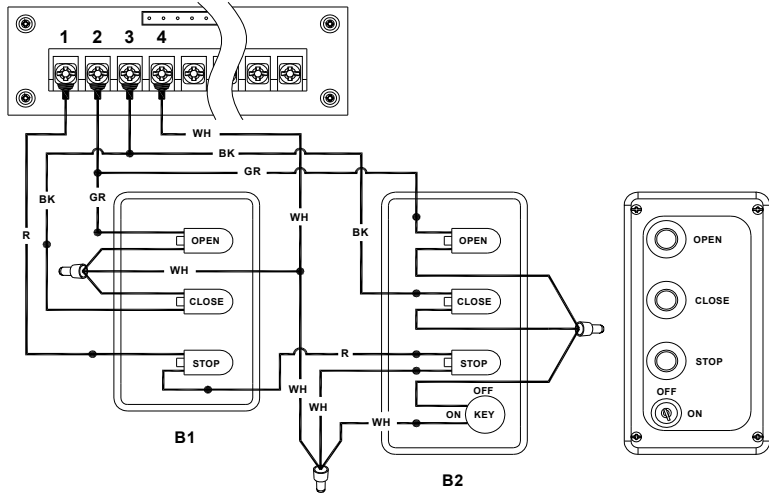
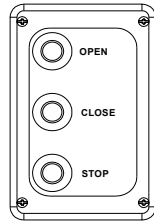
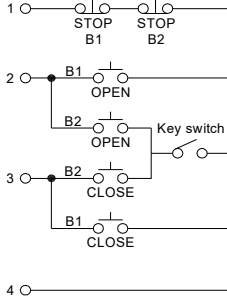
1 Set

KEY LOCKOUT 3 BUTTON



With and without key lockout

KEY LOCKOUT 3-2 BUTTON



Ceiling Pull Switch Station

