Relialign™ CDI Series Commercial Door Interlock

ISSUE 3 ***50066001***

WARRANTY/REMEDY
Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

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Internet: sensing.honeywell.com
Phone and Fax:
USA/Canada +1-800-537-6945
International +1-815-235-6847; +1-815-235-6545 Fax

⚠ PERSONAL INJURY WARNING
DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.
Failure to comply with these instructions could result in death or serious injury.

⚠ WARNING
Honeywell does not recommend using devices for critical control applications where there is, or may be, a single point of failure or where single points of failure may result in an unsafe condition. It is up to the end-user to weigh the risks and benefits to determine if the products are appropriate for the application based on security, safety and performance. Additionally, it is up to the end-user to ensure that the control strategy results in a safe operating condition if any crucial segment of the control solution fails. Honeywell customers assume full responsibility for learning and meeting the required Declaration of Conformity, Regulations, Guidelines, etc. for each country in their distribution market.

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Installation Instructions for the
Relialign™ CDI Series Commercial Door Interlock

Honeywell

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ELEVATOR INTERLOCK
29BR



GENERAL INFORMATION
Honeywell Relialign™ CDI Series Residential Door Interlock switches are electromechanical devices designed for use in swing door applications, specifically dumbwaiters, material lifts, lifts for the mobility impaired and private residence swing-door elevators in the USA. In Canada, the CDI is designed for use in swing door applications, specifically dumbwaiters, material lifts, and residential elevators, but is not designed for use in lifts for the mobility impaired. The interlock holds the door in place and prevents it from being opened in potentially unsafe conditions (e.g. the elevator/lift car is not present at the door).

Featuring a custom internal solenoid control mechanism that uses Honeywell MICRO SWITCH™ switches, the Relialign™ Series of door interlocks may reduce complexity of the host controller, reduce power consumption, extend solenoid life, and reduce solenoid timeouts. CDI Series interlocks are configurable and available in left- and right-hand versions, allowing for simplified installation, customization, and retrofitting into current designs.

Honeywell CDI Commercial Door Interlocks comply with ASME A17.1 & A18.1 :2010, (the safety code standards for elevator and escalators), CAN/CSAB44, and UL104 standards. A robust key and cam mechanism extends the life to 1 million mechanical operations. The snap-action cam mechanism reduces adjustment set-up time and the key engagement was designed to minimize maintenance costs due to false alarms. The CDI Series has a robust zinc die cast housing and cover with white powder coat finish.

⚠ WARNING
Relialign™ CDI Series Commercial Door Interlocks are not a sealed switch. It is not recommended to be used in the areas where liquid or oil may splash.

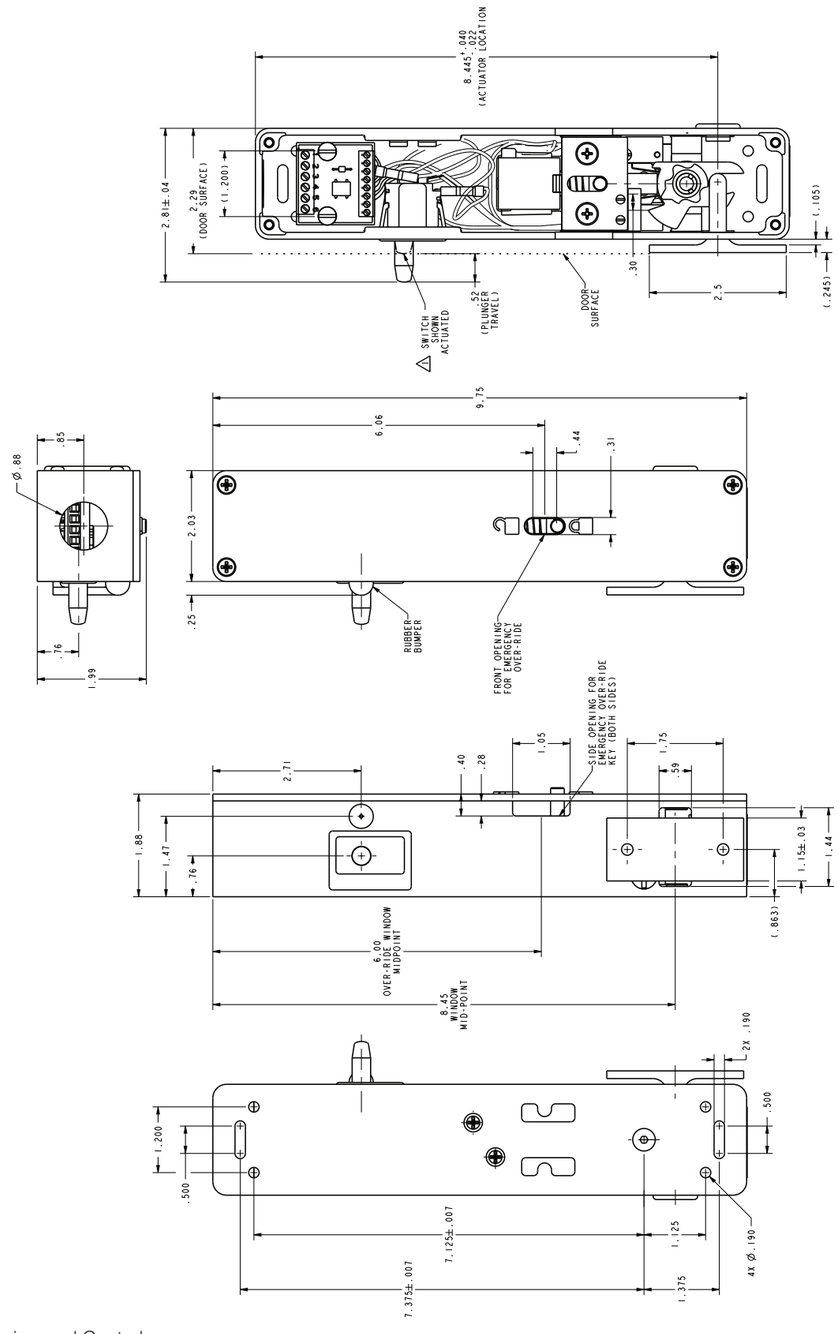
⚠ WARNING
RISK TO LIFE OR PROPERTY
Never use this product for an application involving serious risk to life or property without ensuring that the system as a whole has been designed to address the risks, and that this product is property rated and installed for the intended use within the overall system.
Failure to comply with these instructions could result in death or serious injury.

MOUNTING
Note mounting dimension drawings for the installation locations. (See Figure 1). A separate mounting template provided in the product packaging will guide the installer on how to prepare for the installation of the switch. The switch shall be mounted only in vertical orientation with the conduit opening up. For the switch that use the 6-pin terminals, remove the terminal block assembly inside the housing to reach the mounting holes. Ensure that the terminal block is assembled back onto the housing securely using the screws, once the switch is mounted.

ADJUSTMENT
The mounting template aligns the key to the center of the opening in the interlock housing allowing for door sag over time without any adjustment.

WIRING INSTRUCTIONS
1. Remove the cover by unscrewing the cover screws.
2. **CAT5 option only –** Plug the mating CAT5 connector into the female receptacle on the CDI interlock.
3. **Terminal Block option –** Unscrew the terminal screws. Connect wires per the schematics provided on the inside of the interlock's cover. Torque all terminal screws with a tightening torque of 0.5 Nm to 0.7 Nm.
4. Assemble back the cover. Securely tighten the four screws. Recommended tightening torque for the cover screws is 1.99 Nm max.

FIGURE 1. DIMENSIONS



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PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Endurance life	1 million operations minimum
Operating temperature	4 °C to 38 °C [40 °F to 100 °F]
Storage temperature	-40 °C to 60 °C [-40 °F to 140 °F]
Standards/approvals	cULus listed per UL 104 Complies with ANSI/ASME A17.1, A18.1 Complies with CAN/CSA B44
Electrical rating	0.20 A max., 24 Vdc 0.35 A max., 24 Vac, 60 Hz

RELIALIGN™ CDI SERIES NOMENCLATURE

CDI	R	B	S	1	W	
Switch Type	Key Entry Position	Solenoid Type	Wiring	Connector	Color	Specials
CDI Series Relialign™ Commerical Door Interlock	**L** Left	**B** ac/dc	**P** Parallel	**1** Terminal strip	**W** White	Two characters, letters or numbers to signify customer name or other unique features of the product not covered in the nomenclature. This field is not required.
	R Right		**S** Series	**2** RJ-45 Category 5 connector		
				3 Other		
				4 RJ-45 Category 5 - no solenoid switch		
				5 Terminal strip - no solenoid switch		

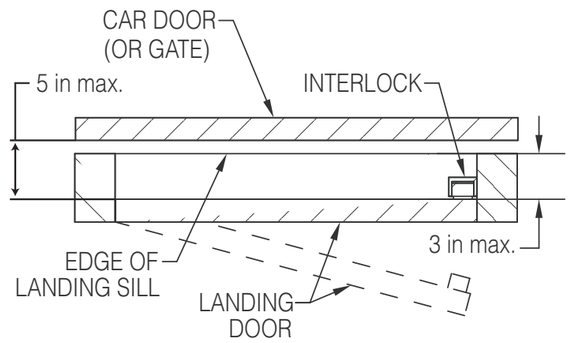
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CLEARANCE BETWEEN HOIST WAY DOORS, LANDING SILLS, AND CAR DOOR

The clearance between the hoistway doors or gates and the hoistway edge of the landing sill shall not exceed 75 mm [3 in]. The distance between the hoistway face of the landing door or gate and the car door or gate shall not exceed 125 mm [5 in]. (See Figure 2).

FIGURE 2. CLEARANCE



MAXIMUM CLEARANCES ACCORDING TO ASME A17.1, CLAUSE 5.3.1.7.2

IMPORTANT NOTICE

Strict compliance with installation instructions / mounting template is essential for safety. It is the customer's responsibility to ensure they are followed. It is imperative any wear on the actuator key or on the switch itself are identified at an early stage and the necessary corrective actions implemented (replacement), thus ensuring safety.

GENERAL DIRECTIONS

A. The actuator key for the switch MUST move freely without jamming during operation
B. The alignment of the key to the switch MUST be checked as per the mounting template
C. Visually ensure that no mechanical damage has occurred to the switch body or key. If damage is found the complete switch assembly MUST be replaced
D. Test the switch for correct electrical operation while installed and operated normally

FIGURE 3. WIRING SCHEMATIC PARALLEL CONNECTION (CAT 5 CONNECTOR)

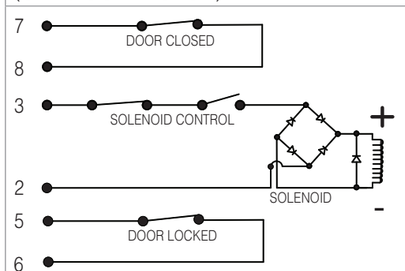


FIGURE 4. WIRING SCHEMATIC PARALLEL CONNECTION (6-PIN TERMINAL)

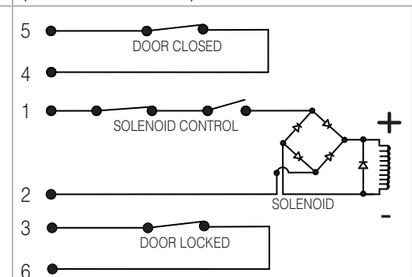


FIGURE 5. CAT 5 CONNECTOR PIN DETAILS

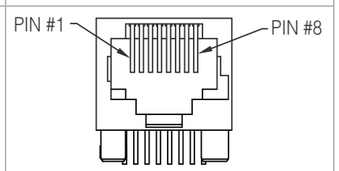


FIGURE 6. WIRING SCHEMATIC SERIES CONNECTION (CAT5 CONNECTOR)

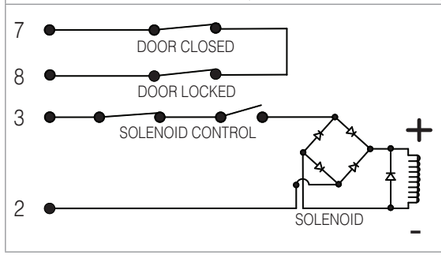
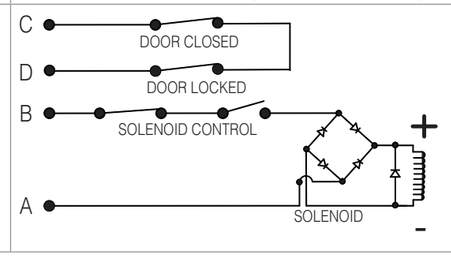
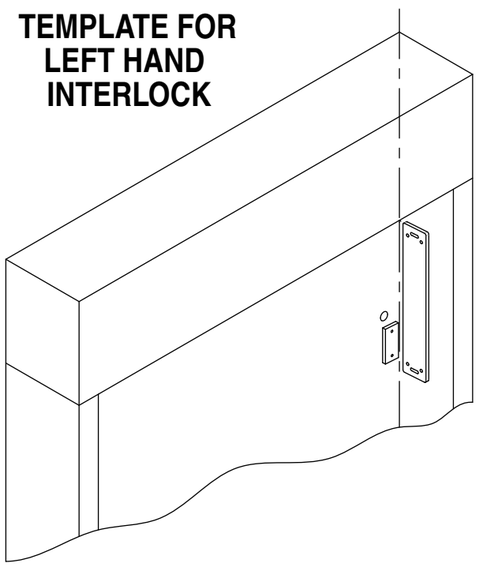


FIGURE 7. WIRING SCHEMATIC SERIES CONNECTION (4-PIN TERMINAL)

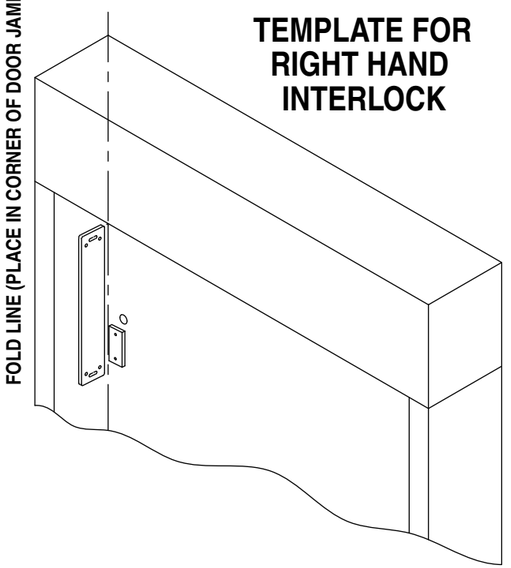


Honeywell Relialign™ ELEVATOR INTERLOCK MOUNTING TEMPLATE

TEMPLATE FOR LEFT HAND INTERLOCK



TEMPLATE FOR RIGHT HAND INTERLOCK



RECOMMENDED DISTANCE BETWEEN TOP OF SWITCH AND BOTTOM OF DOOR HEADER. FIELD CONDITIONS MAY VARY.

INTERLOCK MOUNTING TEMPLATE

VERIFY OUTLINE AREA ALIGNS WITH POSITION OF INTERLOCK BEFORE DRILLING HOLES.

INTERLOCK MOUNTING TEMPLATE

VERIFY OUTLINE AREA ALIGNS WITH POSITION OF INTERLOCK BEFORE DRILLING HOLES.

FOLD LINE (PLACE IN CORNER OF DOOR JAMB)

FOLD LINE (PLACE IN CORNER OF DOOR JAMB)

FOLD LINE

FOLD LINE

2.025

1.200

.500

2.025

1.200

.500

8.250

8.250

9.75

9.75

STEP 1
CENTER PUNCH HOLE LOCATION FOR INITIAL MOUNTING (2 PLACES)

STEP 2
CENTER PUNCH HOLE LOCATION (2 PLACES)

STEP 2
CENTER PUNCH HOLE LOCATION (2 PLACES)

STEP 3
ADD CORNER SCREWS AFTER ADJUSTMENTS. (4 PLACES)

STEP 4
LOCATION FOR EMERGENCY OVERRIDE OPENING. USE Ø 0.625 DRILL

STEP 4
LOCATION FOR EMERGENCY OVERRIDE OPENING. USE Ø 0.625 DRILL

1.600

1.600

1.150

1.150

3.500

2.5

1.750

.375

.375

.902

.260

KEY MOUNTING TEMPLATE

KEY MOUNTING TEMPLATE

KEY ENTRY

.59

KEY ENTRY

.59

.260

.902

3.500

2.5

1.750

.375

.375

ALL DIMENSIONS ARE IN INCHES
SCALE 1:1