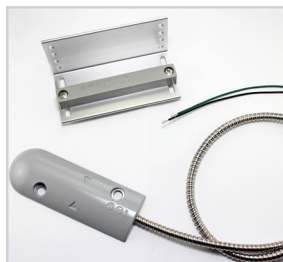




Installing the KE2 Therm Door Switch

- **Configuring Ethernet Enabled Controllers:** KE2 Evaporator Efficiency, KE2 Evap for Rack Efficiency & KE2 Controlled Environment
- **Configuring Non-Ethernet Enabled Controllers:** KE2 Low Temp & KE2 Adaptive Control



Basic Description: Designed to withstand rugged high traffic installations, the door switch provides increased energy efficiency, more stable product temperature, and is effective at preventing coil freeze ups. The reed switch is hermetically sealed with a PVC shock absorber, enclosed within a solid aluminum housing.

Installation wires are protected in a 36" (61 cm) stainless steel armored cable. The magnet is mounted on an adjustable L shaped bracket providing greater flexibility, universal mounting, higher pulling power, and a professional appearance.

Controller Operation with Door Switch Activated

- Normal system operation while the door is closed.
- When the door is opened, evaporator fans are turned off.
- If the door is open for longer than 60 seconds, the solenoid & EEV close to initiate system pumpdown. System will remain in pumpdown until door is closed.
- If the door is open for time set in **Door Alarm Delay** (default 30 min.) and the temperature rises 5°F (2.8°C) above setpoint, a Door Alarm is activated and the system turns on to resume cooling
- Once the door is closed, normal system operation resumes.

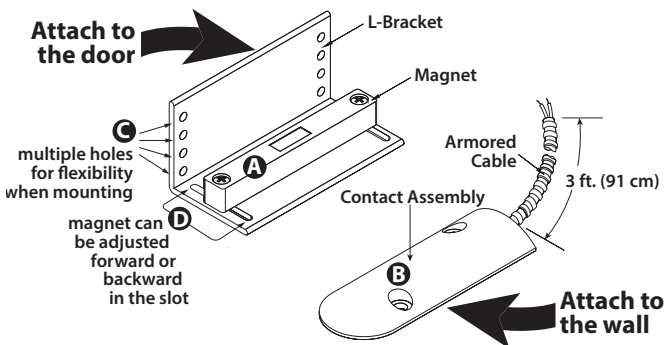
Door Switch - Specifications - pn 20543

Contact	22AWG
Contact Rating	10VA
Contact Type	Normally Open
Max Carry Current	2 Amp
Max Switching Current	.5 Amp
Breakdown Voltage	250 VDC
Operating Gap	2 inches (5 cm)
Temperature Range	32°F to 120°F (0°C to 49°C)
Housing Material	solid aluminum housing
Cable Length	36" (91 cm) stainless steel armored cable
Certifications	UL and ULC listed

Mounting the Door Switch

The door switch mounts in any position along the door, however the gap between the magnet **A** and the contact assembly/sensor **B** cannot exceed 2" (5 cm) when the door is closed.

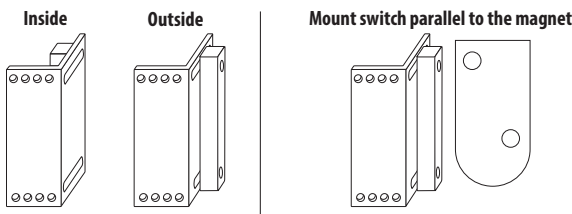
If the gap is greater than 2" (5 cm) the door switch will continually signal that the door is open, and the controller will turn off the evaporators. To adjust the gap, the L-bracket has **C** multiple mounting holes, and the magnet can be moved forward, or backward, in the slot **D**.



Position

The magnet mounts to the inside or outside of the L-Bracket.

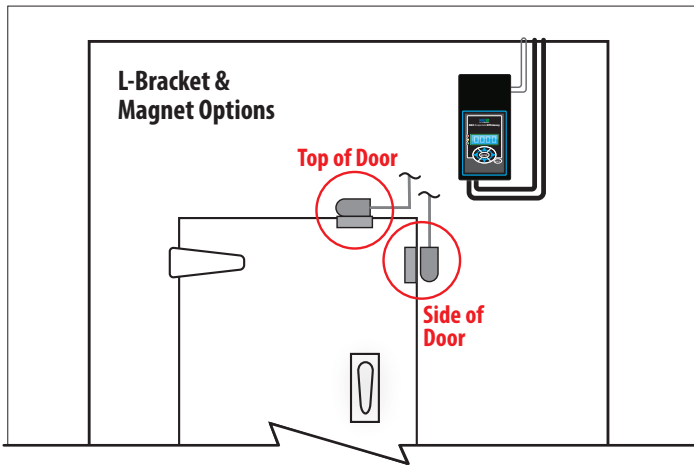
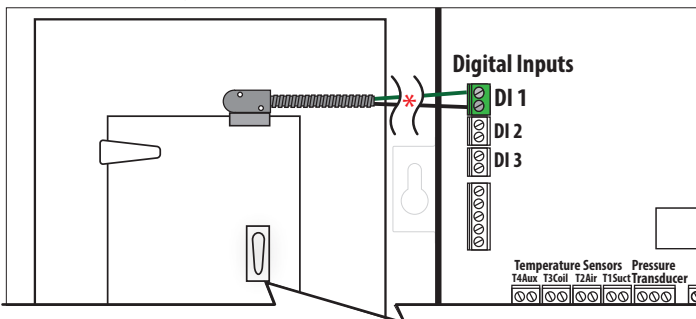
The Contact Assembly / Sensor should be mounted parallel to one another. The switch should activate when within two inches of the magnet, but may need to be closer depending on the material the switch and magnet are mounted to.



Wiring to the Controller's Digital Input

Wire the door switch (dry contact) to a Digital Input (DI1 default). Because the wires are not polarized, either wire can connect to either terminal on the pluggable connector.

* Door switch wires may be extended with 18 AWG twisted shielded pair wire. Max 100ft.)



KE2 Therm has videos on door switch installation and programming on our YouTube channel, at [YouTube.com/ke2therm](https://www.youtube.com/ke2therm).

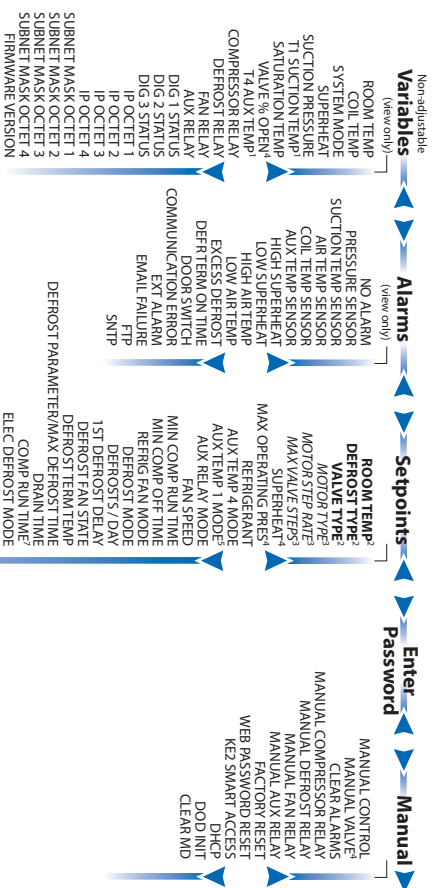


Setting the controller for use with a door switch using the controller's display

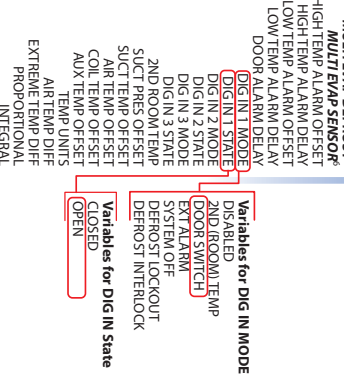
KE2 Evaporator Efficiency, KE2 Evap-RE & KE2 Controlled Environment

NOTE: The navigation shown is representative of the menu. They menu will vary slightly based on the controller being installed, and on the version of firmware. The basic controller navigation remains the same for all.

- 1 Press the right arrow until Setpoints Menu is scrolling across the display, then press the down arrow to enter the Setpoints Menu column.
- 2 Enter password will be displayed, press the ENTER button. Using the arrows enter the default password of 2222 then press and hold enter.
- 3 Scroll down using the down arrow until Dig In 1 State is displayed, hit enter.
- 4 Press and hold ENTER until the LEDs start blinking (if LEDs are already blinking, do not press and hold ENTER). Press UP or DOWN to change the setpoint to OPEN, then press and hold ENTER to save.
- 5 Press the BACK button several times to return to the default display.



- 1 T1 and T4 are parameters that can be set to various functions. The default for T1 is Suction Temp, the T4 is Coil Temp.
- 2 The Setpoint parameters shown in **BOLD** (Valve Type, Room Temp Setpoint and Defrost Mode) need to be set by the user prior to start up. The other Setpoint Parameters can also be adjusted, however the default setpoints are generally correct for most applications.
- 3 The Setpoint parameters shown in **ITALIC** are only displayed when a Custom EVI is used.
- 4 Displayed when an EVI is used.
- 5 Only available if mechanical valve is selected. When using an electric valve the default suction temperature, is required.
- 6 The Setpoint parameters shown in **BOLD ITALIC** are used for bonded controllers only.
- 7 Only displayed when Run Time Defrost is selected.



KE2 Low Temp + Defrost & KE2 Adaptive Control

NOTE: The navigation shown is representative of the menu. The menu varies slightly by controller type and firmware version, however basic navigation remains the same for all.

- 1 Press and hold the BACK button to access the ADVANCED SETPOINT MENUS.
- 2 Using the down arrow, scroll down to find **AUX2*** (Auxiliary Input 2), press ENTER. Press the up or down arrow to change the setpoint to **DOOR**. Press and hold ENTER to save
- 3 Using the down arrow, scroll down to find **SA2** (Aux Input 2 Active State), then press ENTER.
- 4 Press the BACK button several times to return to the default display.

ADVANCED MENUS

Press and hold for 3 seconds

BASIC MENU

Press and hold for 3 seconds

