

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.

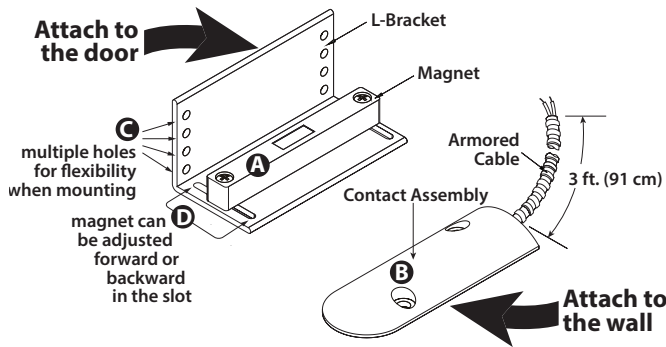
Door Switch - Specifications - pn 20543

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.

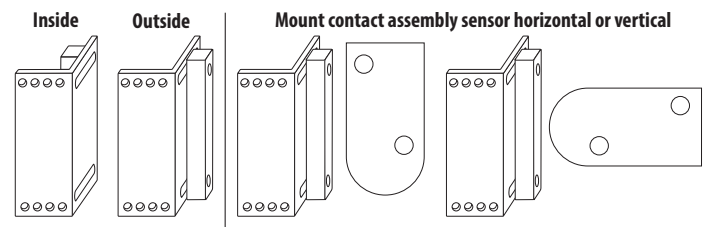
If the gap is greater than 2" (5 cm) the door switch will continually signal that the door is open, and the controller will turn off the evaporators. To adjust the gap, the L-bracket has **C** multiple mounting holes, and the magnet can be moved forward, or backward, in the slot **D**.



Position

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

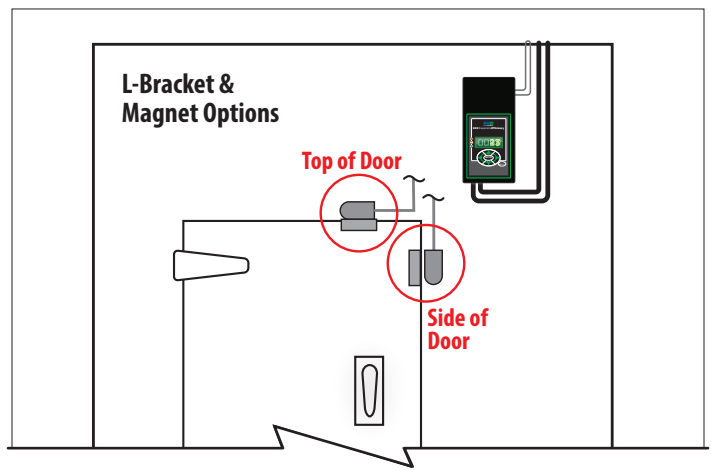
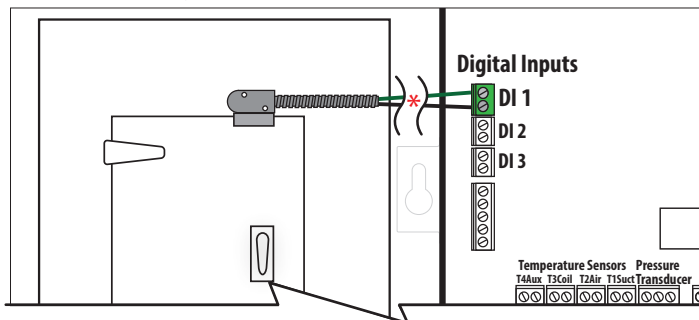
The Contact Assembly / Sensor mounts in any position, as long as it is within two inches of the magnet when the door is closed.



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).



