# ETC Installation Guide

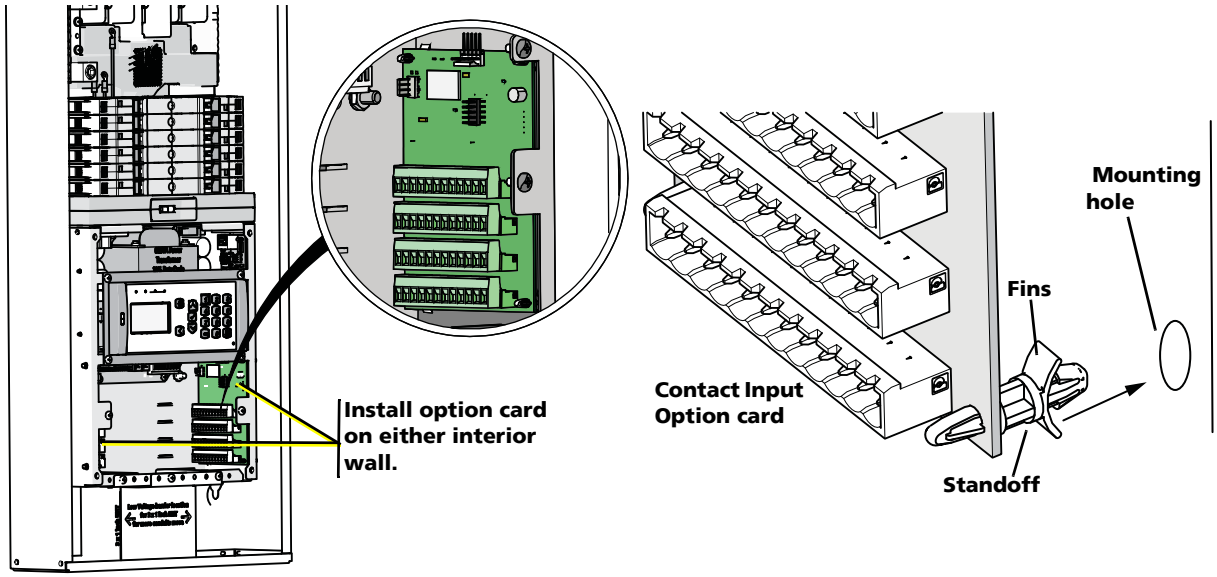
## Sensor® IQ Contact Input Control Option Card

## Overview

The Sensor IQ Contact Input Option Card (IQ-CI) provides the ability to directly control the circuits using a momentary or maintained dry contact input. This document details the installation of this card in the Sensor IQ Intelligent Breaker Panel.

**Note:** It is best to install any panel option kits after conduit rough-in and load wiring terminations are complete to reduce the likelihood of damage to the option card. For additional information on panel installation, reference the *Sensor IQ Installation Manual. All ETC documentation is available for free download at www.etcconnect.com.*

## Installation




*The Contact Input Option Card can be installed on either interior wall of the low voltage cavity.*

Step 1: There are four plastic standoffs included with the option card kit. Align the standoffs with the mounting holes on the option card so the fins are located opposite the connectors.

Step 2: Press gently until the plastic tabs pass through the mounting hole, locking into place.

Step 3: Align the standoffs with the mounting holes on the interior of the low voltage cavity.

Step 4: Press gently until the plastic tabs pass through the mounting hole, locking the option card into place.

## Connect Wiring

The contact input card provides four bus connections for termination of up to 24 individual dry contact inputs. A pluggable screw connector is provided for each input and accepts 12-18 AWG (4 -.5mm$^2$) Class 1 wire. Each connector is labeled to assist in relay referencing during termination.

Step 1: Pull wire from the device supplying the contact closure into the Sensor IQ through the low voltage trough. Reference the *Sensor IQ Installation Manual* for cable routing and conduit access information.

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**Web:** www.etcconnect.com ■  ■ Product information and specifications subject to change.
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Step 2: Strip the insulation from each wire pair back 1/4" (6mm).

Step 3: Remove the pluggable screw connector header on the Contact Input board.

Step 4: Using a 1/8" (3mm) flat blade screwdriver, loosen the terminals and insert each of the data + and data - wire set into the appropriate terminal for the circuit.

- Data wires in the set are polarity independent.

Step 5: Tighten each screw terminal until the wire is held snugly.

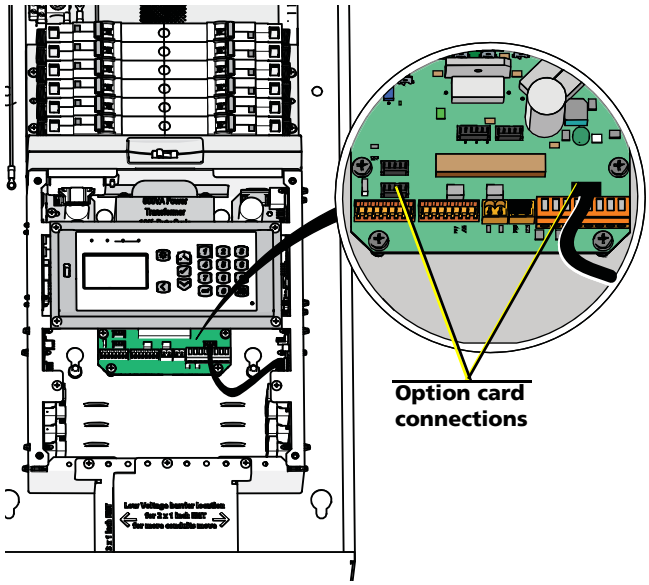
Step 6: Repeat steps 4 and 5 for the remaining dry contact closures.

Step 7: Replace all pluggable screw connectors onto the contact input board.

### Connect the wire harness

Step 1: Noting connector orientation, plug one end of the wire harness (supplied with the option kit) into the connector on the option card.

Step 2: Noting connector orientation, plug the second end of the wire harness into the connector found on the circuit board mounted on the inside rear of the panel.




## Remove the option card

Step 1: Use a small pliers to compress the plastic tabs on the mounting pins.

Step 2: While the tabs are compressed, gently pull the option card away from the panel.

## Programming

The IQ-CI is programmable through the relay panel's user interface. This setting determines how each relay responds to a dry contact input signal.

Step 1: When in the *Main Menu*, select *Switching Setup*.

Step 2: Within the *Switching Setup* menu, select *Relay Setup*.

When the Contact Input card is installed, you will have the following options within the "Switching Setup" menu.

- NO: Normally Open (the default). If the contact is closed, the relay is Closed/On, if the contact is opened, the relay is Open/Off.
- NC: Normally Closed. If the contact is opened, the relay will be Closed/On, if the contact is closed, the relay will be Open/Off.
- Momentary: Closure of the contact toggles the state of the relay.
- Disabled: Contact input is disabled when there is no contact input source available for the circuit.

For additional information on Contact Input card setup and programming, reference the *Power Control Processor Configuration Manual*. ETC documentation is available for free download at www.etcconnect.com.