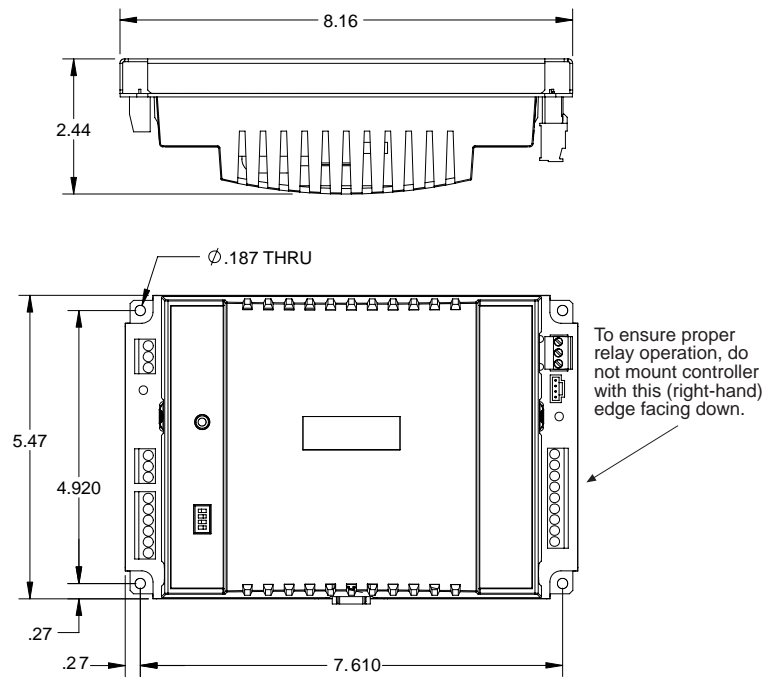


Mechanical



850 Series Installation

30-3001-808 Rev G.1

Wiring Rules

These modules are intended for installation within the enclosure of another product.

Do not remotely ground any part of the input sensor wiring.

Remote grounds connected to the return terminal could make the system operate incorrectly or damage the equipment.

The signal return is not true earth ground. It is an electronic reference point necessary to interpret the sensor properly.

For reliable input operation, follow these input wiring guidelines:

- Never lay wires across the surface of a printed circuit board.
- Wires should never be within 1 in. or 25 mm of any component on a printed circuit board.
- Use shielded input wire.
- Terminate the shield of the input wires at one end of the run only—preferably at the end where your I/O module is located.
- Be careful when stripping wire not to drop small pieces of wire inside the cabinet.
- Don't run your input wiring in the same conduit with AC power.
- Don't run your input wiring in the same conduit with your output wiring.

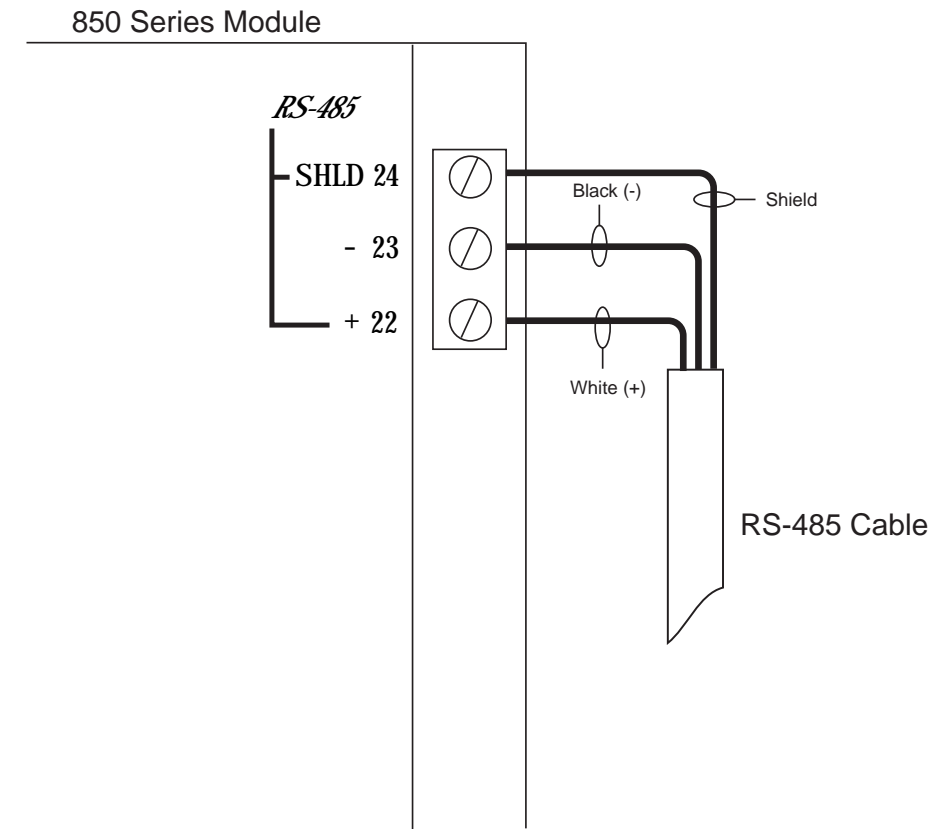
Grounding the Controller

To insure proper operation of the controller, it is imperative that it be connected to a good earth ground. It is important that this connection be made as close to the module as possible.

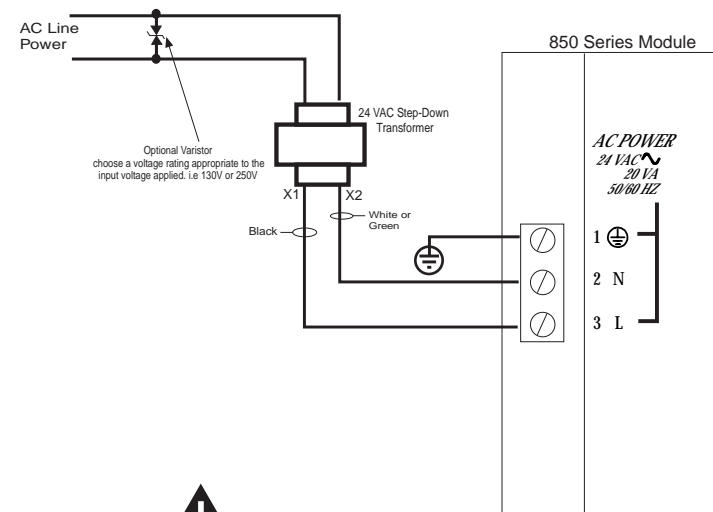


Caution: Earth ground (⊕) must be connected to avoid module damage.

RS-485 Connection

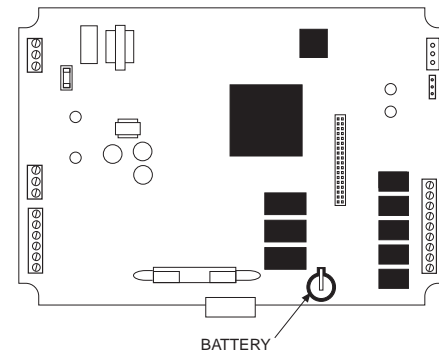


AC Power & Battery Backup Connection



Use care when attaching power wiring to these connectors. They are not to be used as a strain relief. The connectors cannot withstand excessive bending or flexing.

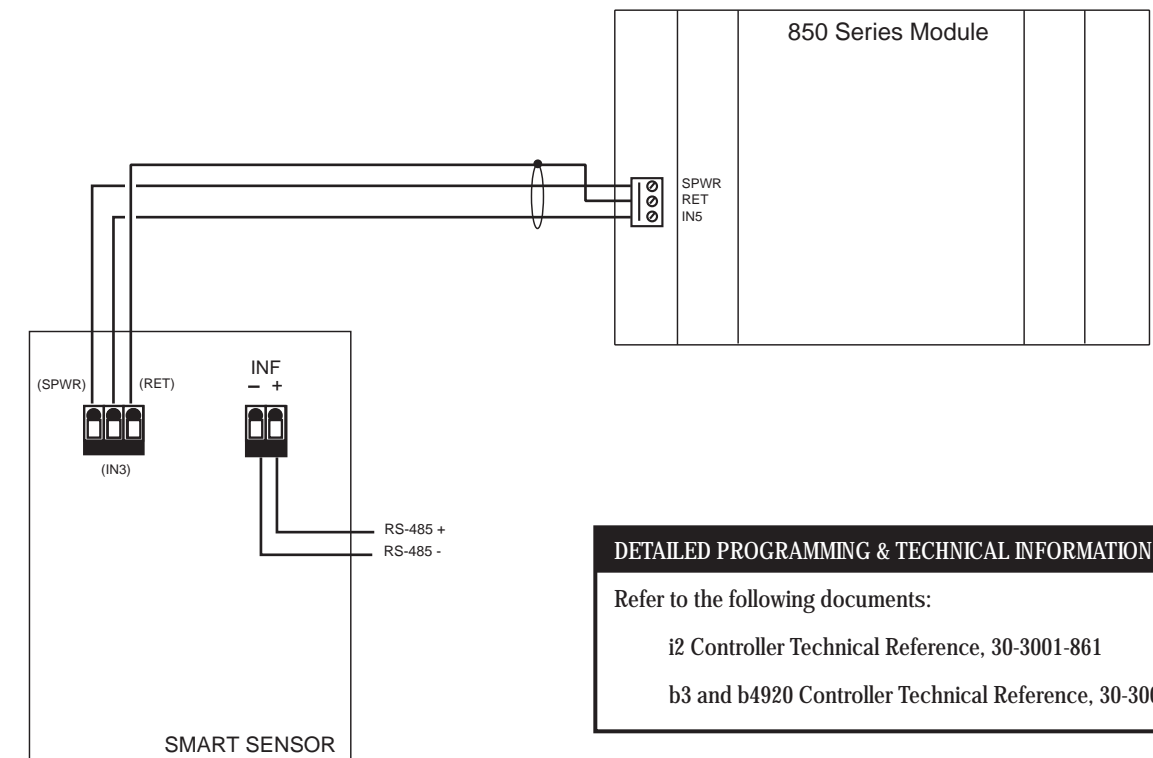
Use a separate transformer for each unit installed.



BATTERY ENABLE INFORMATION

During shipment, an insulating plastic tab is inserted under the clip on the battery to prevent it from draining prior to installation. To activate the battery, this tab must be removed. Remove the top of the plastic case to access the board.

Smart Sensor Bus Interface (IN5 & SPWR)



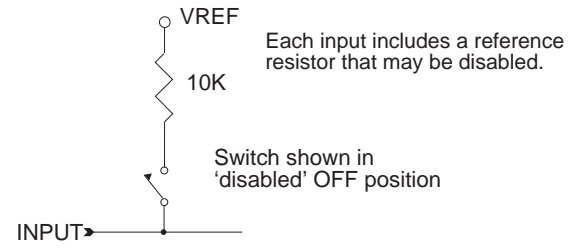
DETAILED PROGRAMMING & TECHNICAL INFORMATION

Refer to the following documents:

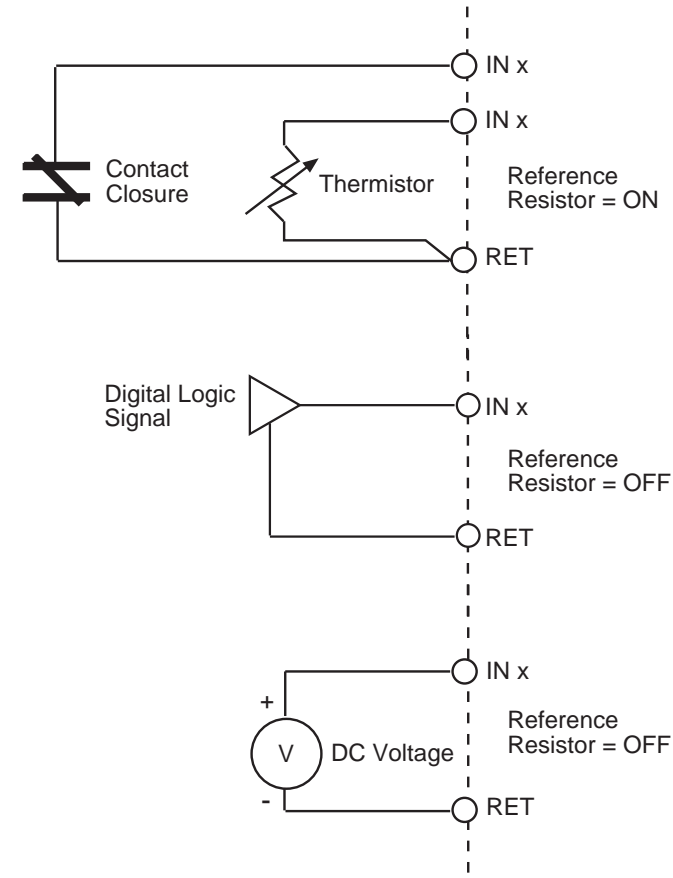
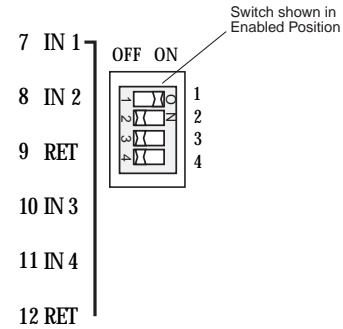
i2 Controller Technical Reference, 30-3001-861

b3 and b4920 Controller Technical Reference, 30-3001-862

Inputs

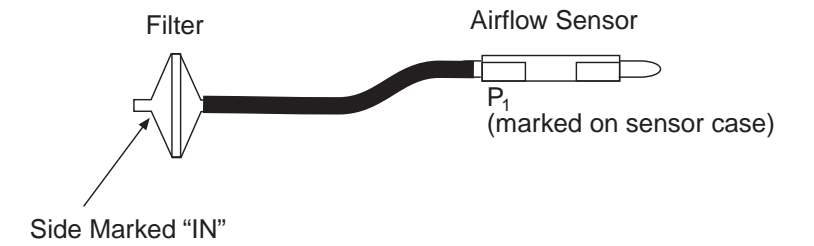
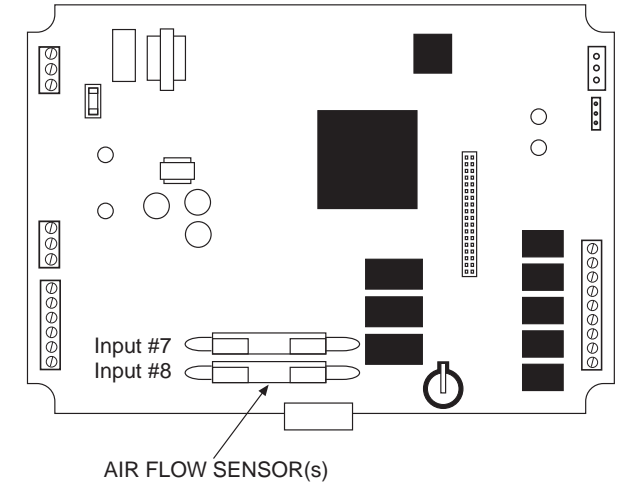


Accessing the Reference Resistor Switch



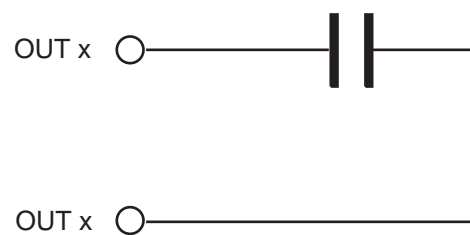
Max DC Input Voltage = 5V

Airflow Sensor Input



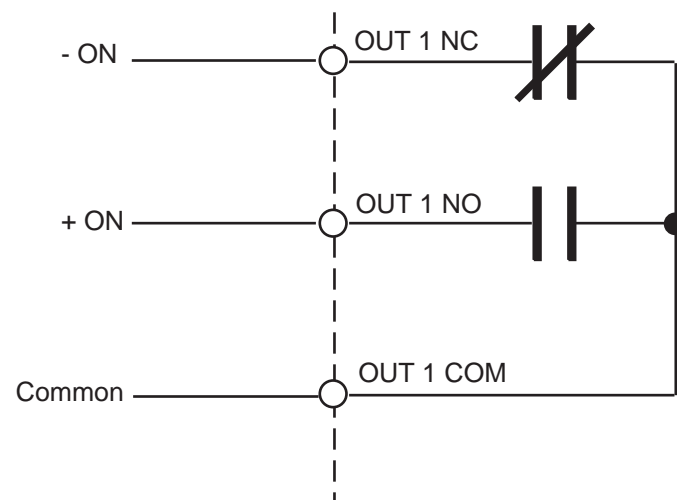
Outputs

Digital Form A Output

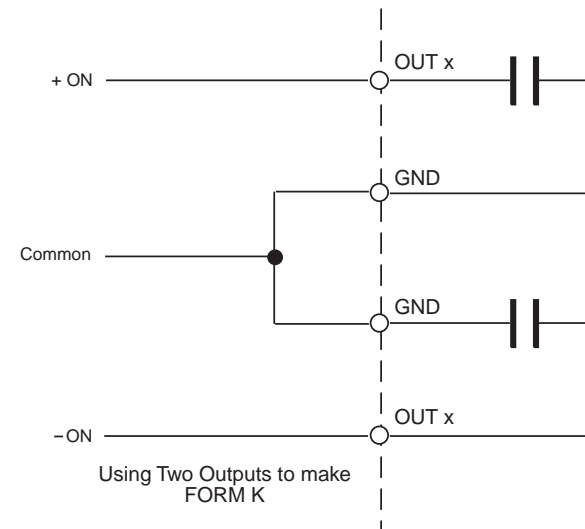


Output Rating: 24 VAC @ 3 A
30 VDC @ 3A

Tristate Output



Tristate from 2 Form A Outputs



Using Two Outputs to make FORM K

Adjacent output pairs:

OUT 1 and OUT 2

OUT2 and OUT3

can be combined to form a standard Tri-state output. The outputs are electrically connected as shown in the schematic for the built-in Tri-state output.

Configure the output point of the first point of a pair (i.e., OUT1 of the pair OUT1 and OUT2) with an Electrical Type of Tri-state.

WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov