

FAIRCHILD 24XF SERIES M/P CONVERTERS

DC PULSE INPUT UNIT

Installation Instructions

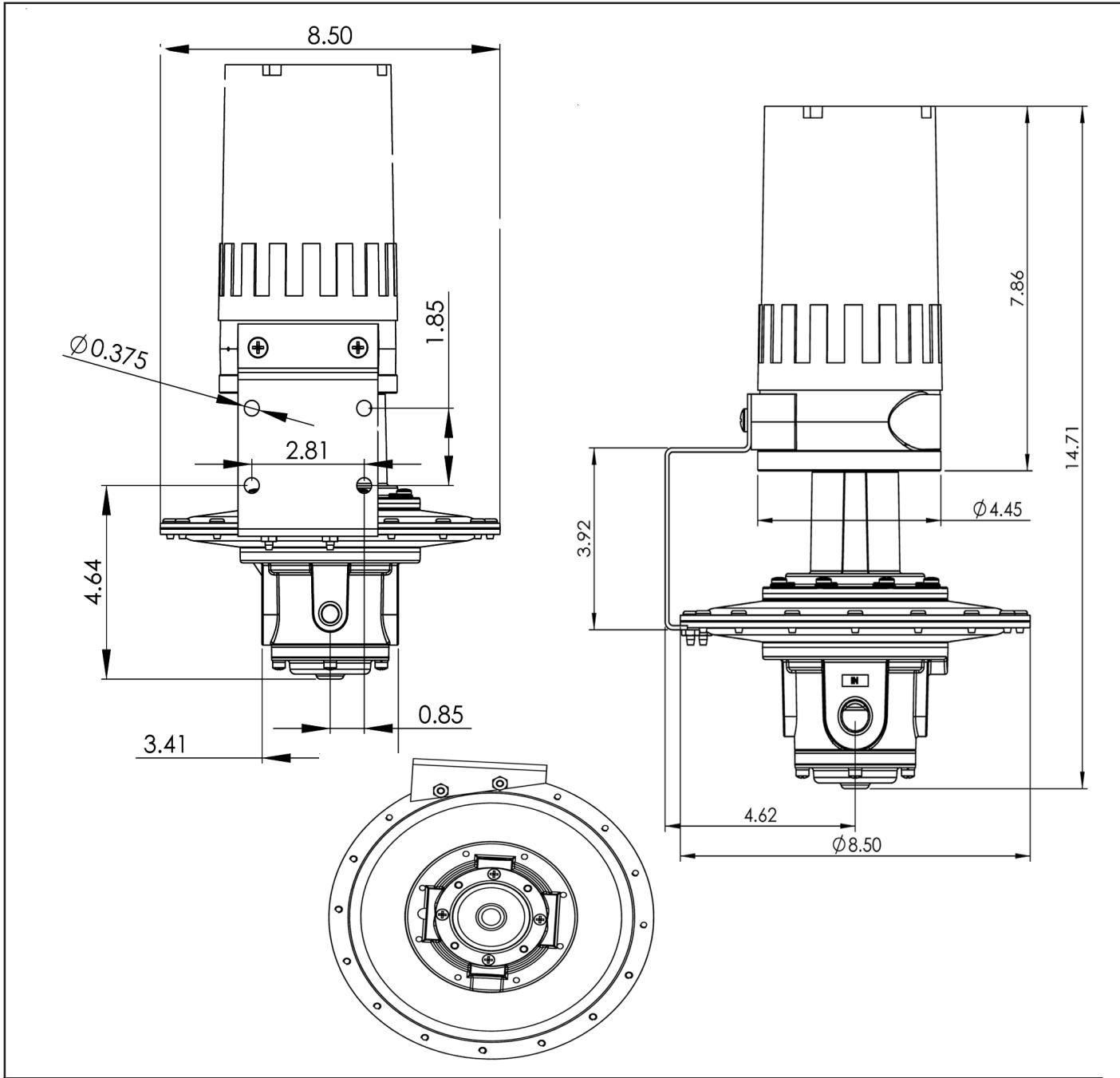


Figure 1. DC Pulse Outline Dimensions. (*Typical*)

INSTALLATION

The DC Pulse unit can be mounted directly onto a flat surface using any two of the four $\varnothing 3/8"$ holes in the

mounting bracket. For more information, see Figure 1. "DC Pulse Outline Dimensions" above.

Installation (continued)

The DC Pulse unit can be mounted on a 2" pipe using the optional pipe clamp and bracket. The pipe clamp is

available in zinc plated steel or carbon steel. The bracket is only available in zinc plated steel.

| <u>Part Number</u> | <u>Description</u> | <u>Qty Needed</u> |
|--------------------|-------------------------------|-----------------------|
| 19168-1 | 2" Pipe Clamp, Zinc Plated | 2 |
| 19168-2 | 2" Pipe Camp, Stainless Steel | 2 |
| 19169-1 | Bracket, Zinc Plated | 2 |

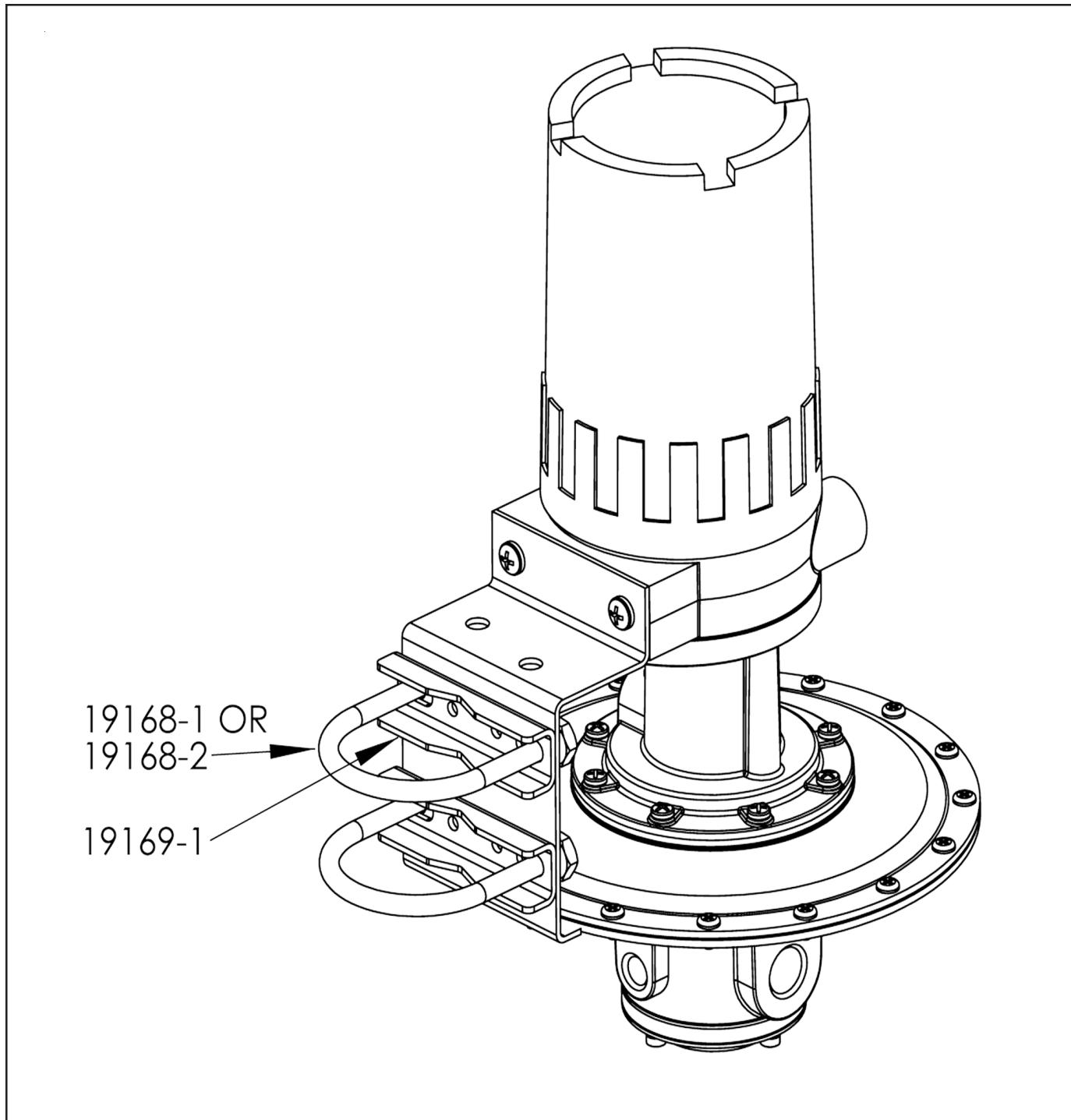


Figure 2. Mounting Kit 18187-1. (*Sold Separately*)

Pneumatic Connections

Clean all pipelines to remove dirt and scale before installation.

Apply a minimum amount of pipe compound to the male threads of the fitting only. Start with the third thread back and work away from the end of the pipeline to avoid the possibility of contaminating the regulator. Install the regulator in the air line.

The inlet and outlet ports are labeled on the underside of the regulator with the arrows pointing to the direction of the flow. Tighten connections securely. Avoid undersized fittings that will limit the flow through the regulator and cause a pressure drop downstream. For more information, see Figure 1. "DC Pulse Outline Dimensions" on page 1.

NOTE: Oil free gas only must be applied to the regulator. Use a filter to remove dirt and liquid in the gas line ahead of the regulator for correct performance. If an air line lubricator is used, it MUST be located downstream beyond the regulator to avoid interference with regulator performance.

Electric Connection

Make connections to the terminal board through the 1/2-14 NPT conduit fitting in the base of the housing. Wires should be routed inside the unit to prevent entangling them in the actuating mechanism. For signal lines of six feet or less, use 22 gage wire. For longer signal lines, use 18 gage wire due to voltage drop considerations. Use shielded cable for noise immunity for the signal lines.

To maintain signal integrity, DO NOT run power leads within the same shield as the signal lines. To avoid voltage drops and noise in the power supply, which can detract from optimal unit performance, signal and power returns (-) should be kept separate. Wire the unit following NEC and ANSI/NFPA: 70 for hazardous location installation. Connections from J1 and J2 on the Clock Generator Board are wired to the Pressure Limit Switches on the unit. For more information see Table 1 below.

Customer connections to the Clock Generator Board are made to the Pressure Limit Alarm pigtailed and attached from J3 and J4. For more information see Table 1 below.

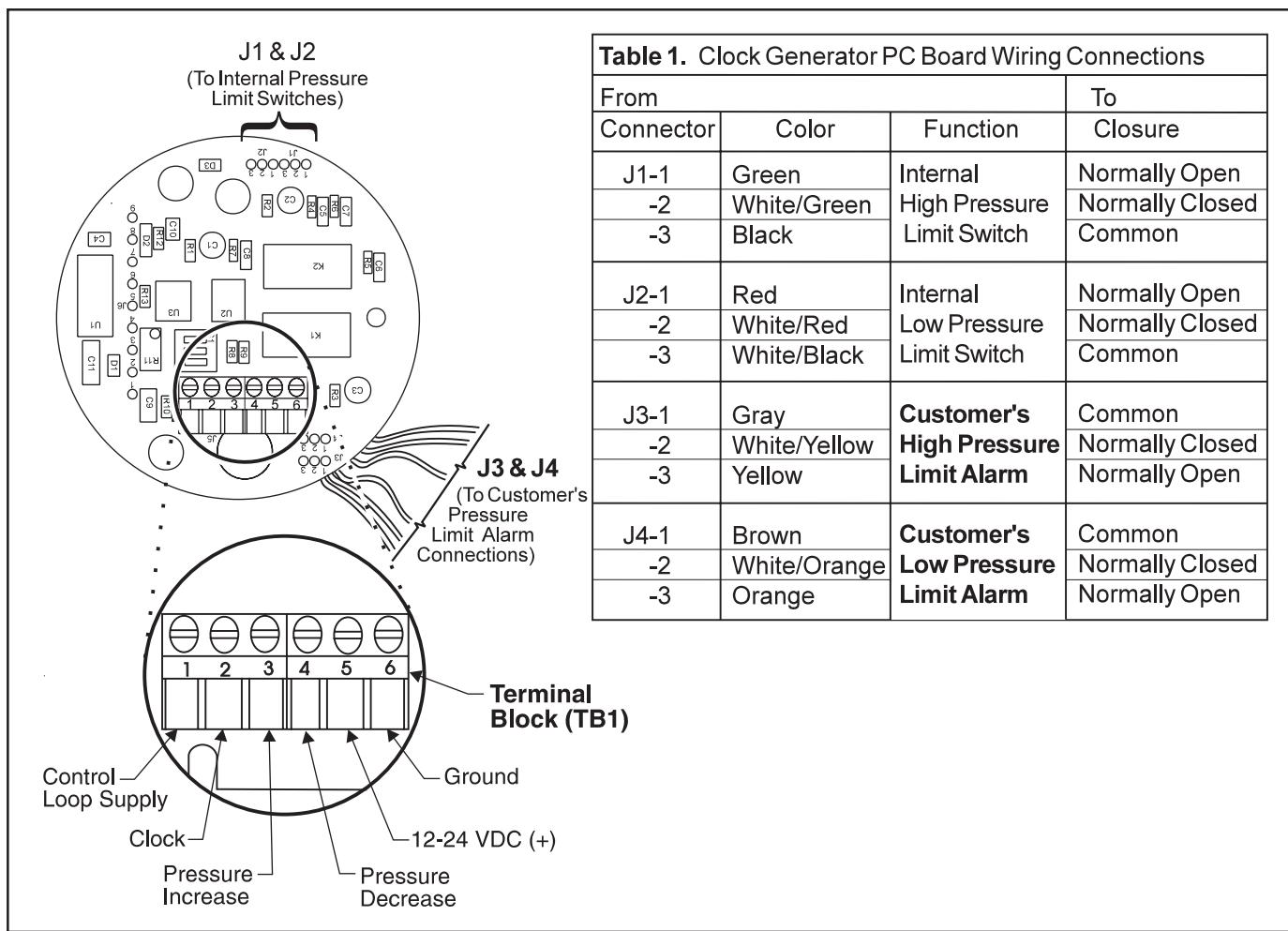


Figure 3. Electrical Connections.

Customer's Controller Connections

Figures 4, 5, and 6 show the customer's controller connections to the Clock Generator Board for various controller and loop supply configurations:

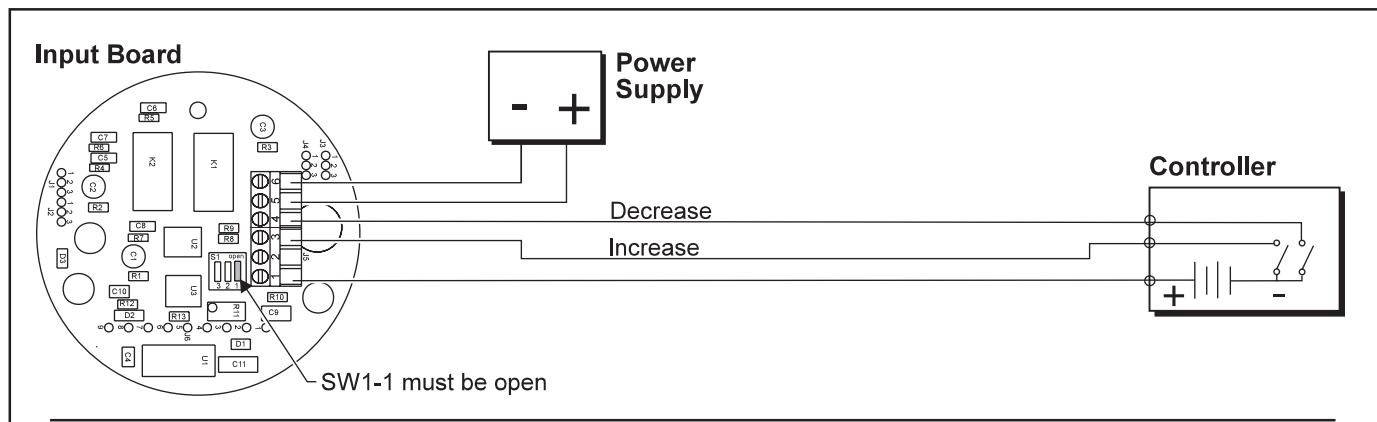


Figure 4. Controller (Pulse Input) using the isolated loop supply.

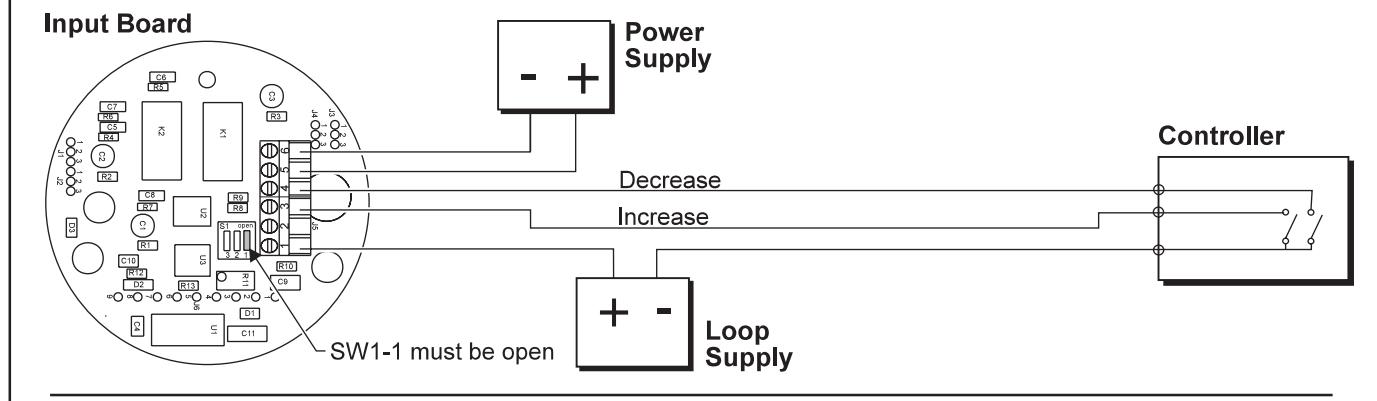


Figure 5. Controller (Pulse Input) using the dual isolated loop supply.

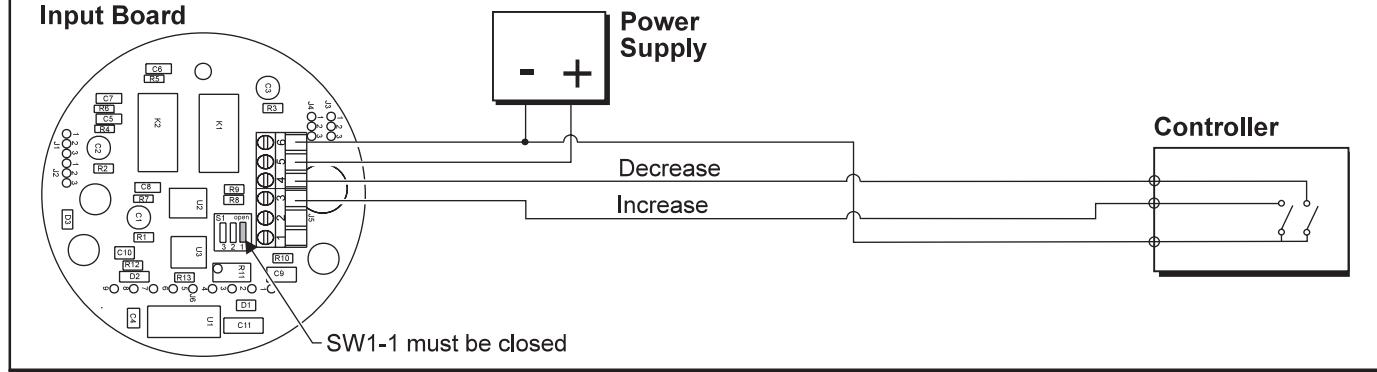


Figure 6. Controller (Pulse Input) using the non-isolated loop supply.

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