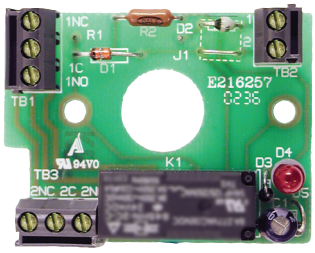
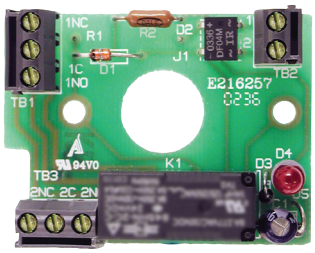
MODEL SUFFIXES:-136 (120 V.) -137 (24 V.)
FOR ALARM AND AUXILIARY DEVICES

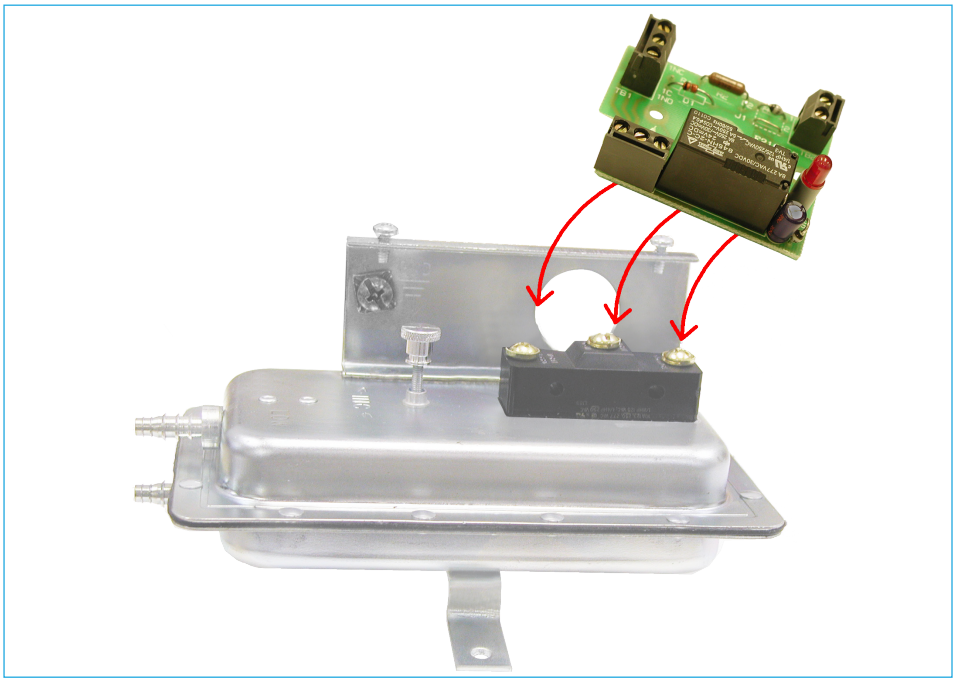
ELECTRONIC DPDT CONFIGURATION



Suffix -136 for 120 VAC applications



Suffix -137 for 24 VAC applications



DESCRIPTION

The versatile electronic DPDT configuration option can be added on to many Cleveland Controls Air Pressure Sensing Switches.

The electronic DPDT configuration option consists of a relay-pack circuit board assembly containing a power connection terminal block and a DPDT slave relay with two form-C 8-amp contacts connected to two terminal blocks. **It must be installed on the snap switch at the factory.**

APPLICATION (FIGURES 1 & 2, PAGE 2)

The DPDT option is ideally suited for applications requiring a second set of contacts for alarm or auxiliary contact devices. The use of a slave relay signal provides simultaneous operation of both sets of contacts.

Electronic DPDT configuration can be applied to SPDT switches (Fig.1) as well as SPST-NC manual reset switches such as AFS-460 (Fig. 2). The option is available for 120 VAC applications (select suffix -136) or 24 VAC applicatio-nEor custom application information.

OPERATION

With power applied to the snap switch, and before pressure is applied to the diaphragm, the snap switch contacts are in the normally closed (NC) position, as shown in the schematic on page 2which covers both SPDT switches and SPST-NC switches with manual reset.

As differential pressure rises above the set point, the snap switch opens, de-energizing the coil on the slave relay, which activates the DPDT contacts. At the same time, an LED lights up to indicate that differential pressure has exceeded set point. The LED remains lit until the differential pressure drops below set point and the switch resets.

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Figure 1: Electronic DPDT Configuration Applied to SPDT Air Pressure Sensing Switch (Series AFS, ANA, DDP, DFS, FS-BO, PAS, RFS).

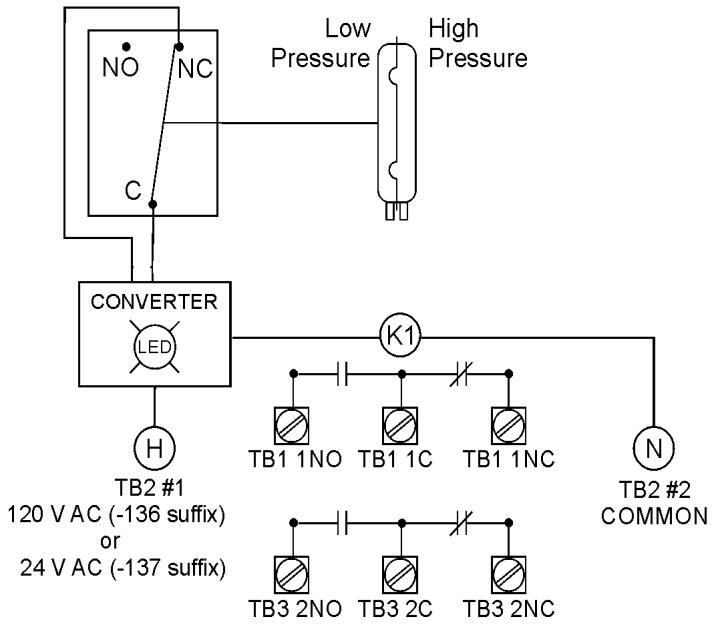
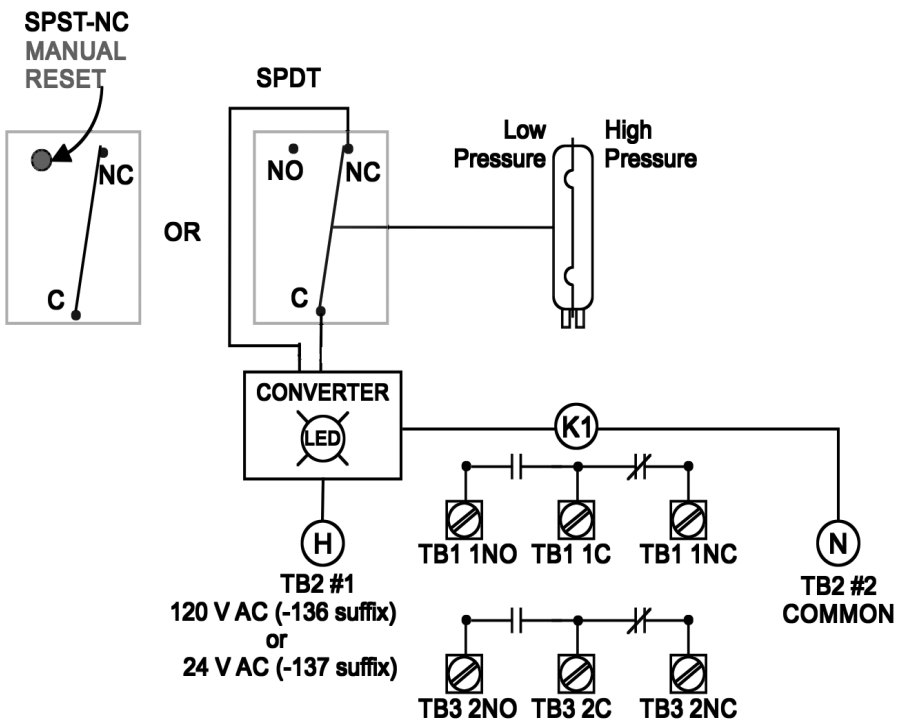


Figure 2: Electronic DPDT Configuration Applied to SPST-NC Manual Reset Air Pressure Sensing Switch (AFS-460).



SPECIFICATIONS
DPDT CONFIGURATION OPTION

Electrical Power Requirements:

- **Suffix -136:**
  4.5 VA @ 120 V ac, 50/60 Hz
- **Suffix -137**
  0.5 VA @ 24 Vac, 50/60 Hz.

Contacts:
DPDT, 2 form-C; Rated: 8 Amp @ 250 V ac

Electrical Connections:
Screw connector, clamp-type terminal blocks suitable for 12-26 AWG.

Shown in "on shelf" condition:
no power and no differential pressure applied. Note that when power is applied across H and N:

- Relay K1 is energized.
- Contacts change state: NO contact closes, and NC contact opens.

When differential pressure exceeds set point:

- LED lights.
- Contacts revert to "shelf" condition.

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