AUTOMOTIVE AIR CONDITIONING (A/C) PRESSURE SWITCHES

Low Cost, Low Weight, Industry Proven

FEATURES
• Designed for underhood environment
• Low weight
• Custom packaging for specific application needs
• Automotive temperature range of -30°C to 125°C
• Normally open and normally closed contact logic
• Dual function capability
• Line mount or compressor pocket mount capability
• Industry proven since 1984

TYPICAL APPLICATIONS
• Dual Function Pressure Switch (DFPS): combines High Pressure Cut-Out (HPCO) with Fan function or High Side Low Pressure (HSLP) function
• HPCO: disables A/C compressor when system pressure becomes excessively high
• Fan: energizes fan to supplement condenser cooling
• Compressor cycling: controls A/C compressor cycling to optimize vehicle cooling
• Loss of charge: disables A/C compressor when system pressure becomes too low
• High Side Low Pressure (HSLP): disables compressor when system becomes too low

DIMENSIONS
Typical examples, other styles available.

PROVEN TECHNOLOGY
For more than 30 years, Sensata’s pressure switches have been trusted to provide low cost on/off controls for many automotive systems. The snap action disc reacts to changing pressure by reversing its curvature and activating electrical switch contacts.
SPECIFICATIONS

**ELECTRICAL**
- **Supply Voltage**: 5 VDC – 24 VDC
- **Supply Current**: 5.0 mA resistive, 3.5 A inductive
- **Response Time**: <10mS

**ENVIRONMENTAL**
- **Operating Temperature**: -30°C to 125°C
- **Pressure Ranges**: 10 to 500 psig

**DURABILITY**
- **Cycle Life**
  - Dual Function Pressure Switch: 50,000 cycles min.
  - High Pressure Cut-Out: 50,000 cycles min.
  - Loss of Charge: 50,000 cycles min.
  - Fan Switch: 300,000 cycles min.
  - Compressor Cycling Switch: 300,000 cycles min.
- **Proof Pressure**: 500 psig
- **Burst Pressure**: 1,250 psig

1 Typical

* Performance data available upon request.

TYPICAL OUTPUT CHARACTERISTICS

![Diagram showing displacement and pressure characteristics](Diagram)

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