

The Series ADPS/EDPS/BDPA HVAC Differential Pressure Switches are designed for pressure, vacuum, and differential pressures. The dual scaled adjustment knob in inches water column and pascals allows changes to the switching pressure to be made without a pressure gage. The ADPS/EDPS/BDPA are available with settings from 0.08 in w.c. (20 Pa) up to 20 in w.c. (5000 Pa). The silicone diaphragm and PA 6.6 body make the series ADPS ideal for use with air and other noncombustible gases. Series EDPS models meet UL508 and are constructed of plenum rated plastics. The series BDPA Adjustable Differential Pressure Alarms offer a versatile range of configurations allowing utilization of their many features including buzzer and LED notification, and battery or line powered. The compact size, adjustment knob and low cost make the ADPS/EDPS/BDPA the perfect choice for HVAC applications.

### FEATURES/BENEFITS

- Adjustment knob changes switching pressure easily with a pressure gage reducing components for application
- Low cost device makes it an excellent solution in BAS and HVAC applications requiring duct control and monitoring
- Relay contact allows simple integration with DDC or building systems

## APPLICATIONS

- Air filter and ventilator monitoring
- Industrial cooling circuits
  Fire-protection damper control
- Fan heater overheating protection
  Heat exchanger frost protection

· Ventilation duct monitoring

| The protocion damper control Theat exchanger nost protocion                                                                                                                                                                                                                                                               |                                                       |                                                   |                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| MODEL CHART - ADPS                                                                                                                                                                                                                                                                                                        |                                                       |                                                   |                                                   |
| Model                                                                                                                                                                                                                                                                                                                     | Set Point Range<br>in w.c. (Pa)                       | Approx. Dead Band @<br>Min Set Point in w.c. (Pa) | Approx. Deadband @<br>Max Set Point in w.c. (Pa)  |
|                                                                                                                                                                                                                                                                                                                           | 0.08 to 1.20 (20-300)                                 | 0.04 (10)                                         | 0.05 (12)                                         |
|                                                                                                                                                                                                                                                                                                                           | 0.12 to 1.60 (30-400)<br>0.20 to 2.00 (50-500)        | 0.06 (15)<br>0.08 (20)                            | 0.09 (23)<br>0.09 (23)                            |
|                                                                                                                                                                                                                                                                                                                           |                                                       | 0.4 (100)                                         | 0.5 (130)                                         |
| ADPS-06-2-N                                                                                                                                                                                                                                                                                                               | 2.00 to 10.00 (500-2500)                              |                                                   | 0.8 (200)                                         |
|                                                                                                                                                                                                                                                                                                                           | 4.00 to 20.00 (1000-5000)                             |                                                   | 1.4 (350)                                         |
| <b>Note:</b> For optional 1/2" NPT conduit connection, change -2-N to-1-N. Models that include installer kit add -C to the end of the model number (-2-N cable gland models only). Installer kit includes two static tips and 7 ft of PVC tubing. Order installer kit separately with 1/2" NPT conduit connection models. |                                                       |                                                   |                                                   |
| See A-481 in the accessories list. Consult factory for bulk packaging option.                                                                                                                                                                                                                                             |                                                       |                                                   |                                                   |
| MODEL CHART - EDPS                                                                                                                                                                                                                                                                                                        |                                                       |                                                   |                                                   |
| Model                                                                                                                                                                                                                                                                                                                     | Set Point Range<br>in w.c. (Pa)                       | Approx. Dead Band @<br>Min Set Point in w.c. (Pa) | Approx. Dead Band @<br>Max Set Point in w.c. (Pa) |
| EDPS-08-1-N<br>EDPS-04-1-N                                                                                                                                                                                                                                                                                                | 0.08 to 1.20 (20-300)<br>0.12 to 1.60 (30-400)        | 0.04 (10)<br>0.06 (15)                            | 0.05 (12)<br>0.09 (23)                            |
| EDPS-03-1-N                                                                                                                                                                                                                                                                                                               | 0.20 to 2.00 (50-500)                                 | 0.08 (20)                                         | 0.09 (23)                                         |
|                                                                                                                                                                                                                                                                                                                           |                                                       | 0.4 (100)                                         | 0.5 (130)                                         |
| EDPS-06-1-N                                                                                                                                                                                                                                                                                                               | 2.00 to 10.00 (500-2500)<br>4.00 to 20.00 (1000-5000) | 0.6 (150)                                         | 0.8 (200)                                         |
|                                                                                                                                                                                                                                                                                                                           |                                                       | - ( )                                             | 1.4 (350)                                         |
| Note: For optional M20 cable gland connection, change -1-N to-2-N.                                                                                                                                                                                                                                                        |                                                       |                                                   |                                                   |
| MODEL CHART - BDPA                                                                                                                                                                                                                                                                                                        |                                                       |                                                   |                                                   |
| Model                                                                                                                                                                                                                                                                                                                     | Set Point Range<br>in w.c. (Pa)                       | Approx. Dead Band @<br>Min Set Point in w.c. (F   |                                                   |
|                                                                                                                                                                                                                                                                                                                           | 0.08 to 1.20 (20 to 300)<br>0.12 to 1.60 (30 to 400)  | 0.04 (10)<br>0.06 (15)                            | 0.05 (12)<br>0.09 (23)                            |
|                                                                                                                                                                                                                                                                                                                           | 0.20 to 2.00 (50 to 500)                              | 0.08 (20)                                         | 0.09 (23)                                         |
| BDPA-05-2-N                                                                                                                                                                                                                                                                                                               | 0.80 to 4.00 (200 to 1000)                            | 0.4 (100)                                         | 0.5 (130)                                         |
| BDPA-06-2-N                                                                                                                                                                                                                                                                                                               | 2.00 to 10.00 (500 to 2500                            | ) 0.6 (150)                                       | 0.8 (200)                                         |
| BDPA-07-2-N                                                                                                                                                                                                                                                                                                               | 4.00 to 20.00 (1000 to 500                            | 0)   1.0 (250)                                    | 1.4 (350)                                         |

### SPECIFICATIONS

Service: Air and non-combustible, compatible gases. Wetted Materials: ADPS: Diaphragm wetted Materials: ADPS: Diapnrag material: Silicone; Housing material: POM; Switch body: PA 6.6; Cover: Polystyrene; EDPS: Diaphragm material: Silicone; Housing material: Switch body: PA 6.6; Cover: Polystyrene; Materials UL 94 V-0 rated. Temperature Limits: Process and ambient temperature from -4 to 185°F (-20 to 85°C). Storage: -40 to 185°F (-40 to 85°C). Pressure Limits: Max. operating pressure: 40 in w.c. (10 kPa) for all

Switch Type: Single-pole double-throw (SPDT).

Electrical Rating: Max. 1.5 A res./0.4 A ind./250 VAC, 50/60 Hz; Max. switching rate: 6 cycles/min. Electrical Connections: Push-on screw terminals. M20x1.5 with cable strain relief or optional 1/2" NPT. Process Connections: 5/16" (7.94 mm) outside diameter tubing, 1/4" (6.0 mm) inside diameter tubing. Enclosure Rating: NEMA 13 (IP54). Mounting Orientation: Vertically, with pressure connections pointing downwards. Mechanical Working Life: Over 106 Weight: 4.4 oz (125 g). Agency Approvals: ETL approved to UL508 and CSA C22.2#14 (EDPS only).

### ACCESSORIES Model Description

- Model
   Description

   A-288
   "L" type metal mounting bracket with screws

   A-289
   "S" type metal mounting bracket with screws

   A-480
   Plastic static pressure tip

   A-481
   Installer kit, includes 2 plastic static pressure tips & 7' (2.1 m) of PVC tubing

   A-489
   4" straight static pressure tip with flange



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# Process Tubing Options: See page 455 (Gage Tubing Accessories)

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PRESSURE