## PRESSURE | DIFFERENTIAL PRESSURE | AFS-460-DSS



## AFS-460-DSS

## **Differential Pressure Switches (Metal)**

The Model AFS-460–DSS is a general purpose airflow proving switch designed for 120 VAC HVAC and Energy Management applications where dual manual reset switches with SPST contacts are  $needed.\ It\ may\ be\ used\ to\ sense\ positive,\ negative,\ or\ differential\ air\ pressure.\ The\ plated\ housing$ contains a diaphragm, a calibration spring, and 2 snap-acting switches with a single manual reset button. An enclosure cover guards against accidental contact with the live switch terminal screws and the set point adjusting screw. The enclosure cover accepts two 0.5" (12.7 mm) conduit connections. The manual reset button is located on the top surface of the enclosure cover.

Applications: Monitoring Filter Blockage, Proof of Flow, Prove Excessive or Insufficient Flow, Alarms and Control

The AFS-460-DSS Series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

| Input Pressure Range:                  | 1.25 ± 0.06"w.c. to 12.0"w.c. (31.8mm ±1.52mm w.c. to 305 mm w.c.)                                 |  |  |  |
|--|--|--|--|--|
| Set Point Range, Input Pressure Range: |  |  |  |  |
| Field Adjustable "Operate" Range:      | 1.31"w.c. to 12.0" w.c.  |  |  |  |
| Contact (Load) Rating:                 | @ 60 Hz.,15 amp 125, 250, or 277 v AC   ¼ hp 125 v AC, ½Hp 250 VAC                                 |  |  |  |
|  | ½ amp 125 v DC, ¼ amp 250 v DC   0.5 VA @ 24 v AC, 50/60 Hz  |  |  |  |
| Contact Arrangement:                   | 2 SPST–NC Lead/Lag (manual reset)  |  |  |  |
| Measured Media:                        | Air, or combustion by-products that will not degrade silicone                                      |  |  |  |
| Maximum Pressure:                      | ½ psi (0.03 bar; 3.45 kPa)   |  |  |  |
| Life Expectancy:                       | Exceeds UL-recognized mechanical endurance test of 6,000 cycles minimum at 0.5 psi (0.03 bar, 3.45 |  |  |  |
|  | kPa) maximum pressure each cycle and at maximum electrical load                                    |  |  |  |
| Operating Temperature Range:           | -40 to 180°F (-40 to 82°C)   |  |  |  |
| Operating Humidity Range:              | 10 to 95% RH, non-condensing   |  |  |  |
| Mounting Direction:                    | Mount with the diaphragm in any vertical plane   |  |  |  |
| Enclosure Material:                    | Galvanized Steel   |  |  |  |
| Sample Line Connections:               | Connectors will accept ¼" (6.35mm) OD rigid or semi-rigid tubing                                   |  |  |  |
| Electrical Connections:                | Screw top terminals with cup washers   |  |  |  |
| Conduit Opening:                       | 7/8" diameter opening accepts ½" conduit   |  |  |  |
| Agency Approvals:                      | UL & CSA approved; CE pending  |  |  |  |
| Product Dimensions (H x W x D):        | 6.13" x 3.88" x 3.56" (155.702 mm x 98.552 mm x 90.424 mm)   |  |  |  |
| Product Weight:                        | 1.2 lbs (0.544 kg)   |  |  |  |

| RELAY FUNCTION                                   |                          |  |  |  |  |
|--|--------------------------|--|--|--|--|
| Lead Switch A Set Point                          | Lag Switch B Set Point   |  |  |  |  |
| <b>1.25" - 3.00" w.c.</b> (31.8 - 76.2 mm w.c.)  | Up to 5% After Switch A  |  |  |  |  |
| <b>3.00" - 6.00" w.c.</b> (76.2 - 152.4 mm w.c.) | Up to 10% After Switch A |  |  |  |  |
| <b>6.00" - 9.00" w.c.</b> (152.4 - 229 mm w.c.)  | Up to 15% After Switch A |  |  |  |  |
| <b>9.00 - 12.00" w.c.</b> (229 - 305 mm w.c.)    | Up to 35% After Switch A |  |  |  |  |



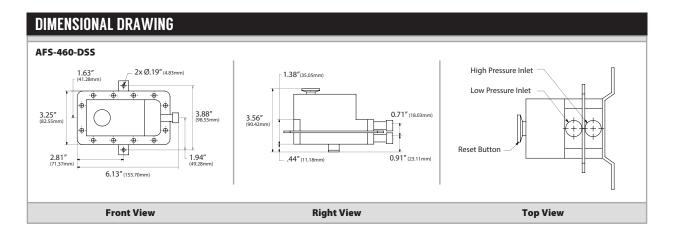






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| STANDARD ORDERING  Model # Example: AFS-460-DSS -OR- 101792 |        |                  |               |             |                     |  |
|---|--------|------------------|---------------|-------------|---------------------|--|
| Model #   | Item # | Pressure Range   | Contact Style | Reset Style | Compression Fitting |  |
| AFS-460-DSS   | 101792 | 1.25 to 12.0" wc | 2 SPST-N/C    | Manual      | •                   |  |





