

### Application

Adjustable Pressure Controller (APC) allows field setting of relief pressure on all EM series dampers. Use one per panel. Maximum recommended pressure set limitations are as follows:

- EM series damper must be equipped with counterbalance
- One per section is required

| Area               |                   | Maximum Set Pressure |      |
|--------------------|-------------------|----------------------|------|
| (ft <sup>2</sup> ) | (m <sup>2</sup> ) | (in. wg)             | (Pa) |
| 4                  | 0.37              | 0.75                 | 187  |
| 6                  | 0.58              | 0.50                 | 125  |
| 8                  | 0.74              | 0.40                 | 100  |
| 10                 | 0.93              | 0.30                 | 75   |
| 15                 | 1.40              | 0.20                 | 50   |
| 20                 | 1.86              | 0.15                 | 37   |
| 24                 | 2.23              | 0.125                | 31   |



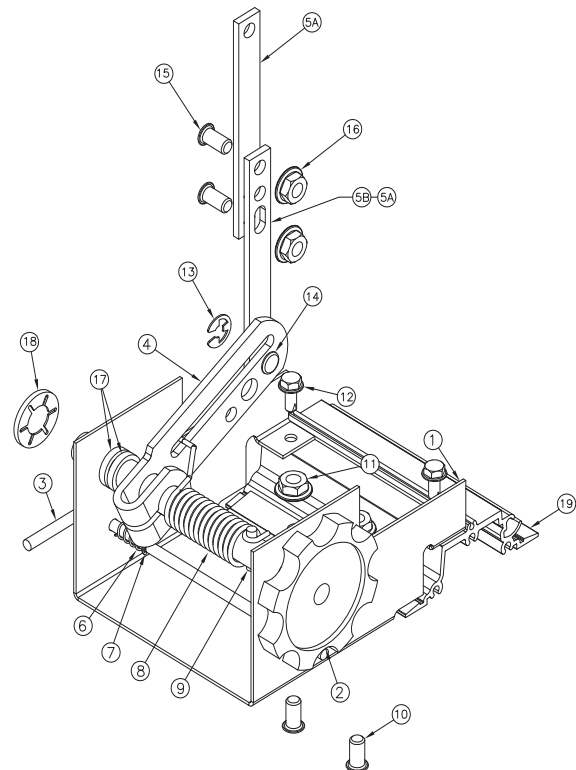
EM-10, Horizontal Mount, Vertical Airflow Up

EM-30, Vertical Mount, Horizontal Airflow

EM-40, Horizontal Mount, Vertical Airflow Down

| Item # | Part # | Description                     | Qty |
|--------|--------|---------------------------------|-----|
| 1      | 705238 | Mounting Bracket                | 1   |
| 2      | 823936 | Control Knob Sub-Assembly       | 1   |
| 3      | 705241 | Release Rod                     | 1   |
| 4      | 653631 | 1/2 in. Non-Knurled Crankarm    | 1   |
| 5A     | 705239 | Connecting Bar (4 1/8 in. long) | *   |
| 5B     | 705240 | Connecting Bar (3 in. long)     | *   |
| 6      | 457803 | Spring                          | 2   |
| 7      | 457806 | 3/16 in. E-Clip                 | 1   |
| 8      | 463906 | Link Separator Spring -SS       | 1   |
| 9      | 454092 | 5/32 in. x 1.5 Roll Pin - SS    | 1   |
| 10     | 416052 | #10-32 x 5/8 in. SS Threadstud  | 2   |
| 11     | 415991 | #10-32 Keps Nut -SS             | 2   |
| 12     | 415555 | #10 x 1/2 in. Tek Screw - ZP    | 2   |
| 13     | 451588 | 1/4 in. E-clip- ZP              | 1   |
| 14     | 451820 | 1/4 x 0.360 in. Knurl Pin - ZP  | 1   |
| 15     | 415609 | 1/4 - 20 x 1/2 in. Threadstud   | 2   |
| 16     | 415455 | 1/4 - 20 Spinlock Nut-ZP        | 2   |
| 17     | 415482 | 3/16 x 1/2 in. nylon washer     | 2   |
| 18     | 416179 | 1/2 in. Push-On Retainer-ZP     | 1   |
| 19     |        | Frame sill of damper            |     |

\* See installation instructions for correct connecting bar



## AMCA Test Figure 5.3

Figure 5.3 illustrates a fully ducted damper. This configuration has low pressure drop because entrance and exit losses are minimized by straight duct runs upstream and downstream of the damper.

### Pressure Drop Data

This pressure drop data was conducted in accordance with AMCA Standard 500-D using Test Figure 5.3. All data has been corrected to represent standard air at a density of  $0.075 \text{ lb/ft}^3$  ( $1.2 \text{ kg/m}^3$ ).

Actual pressure drop found in any HVAC system is a combination of many factors. This pressure drop information along with an analysis of other system influences should be used to estimate actual pressure losses for a damper installed in a given HVAC system.

AMCA Test Figure 5.3

