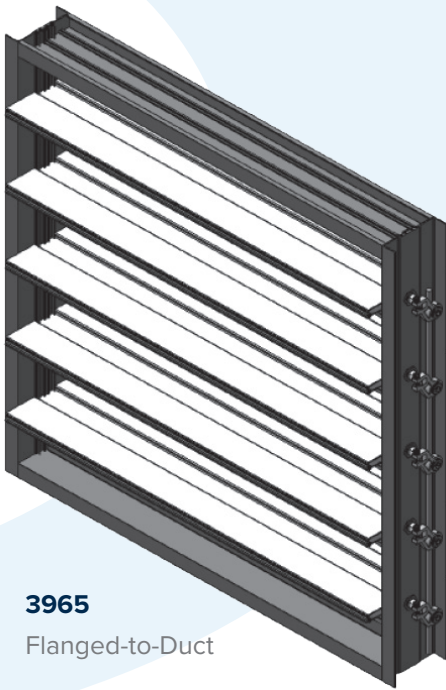


Insulated Control Dampers

Model: 3965



3965

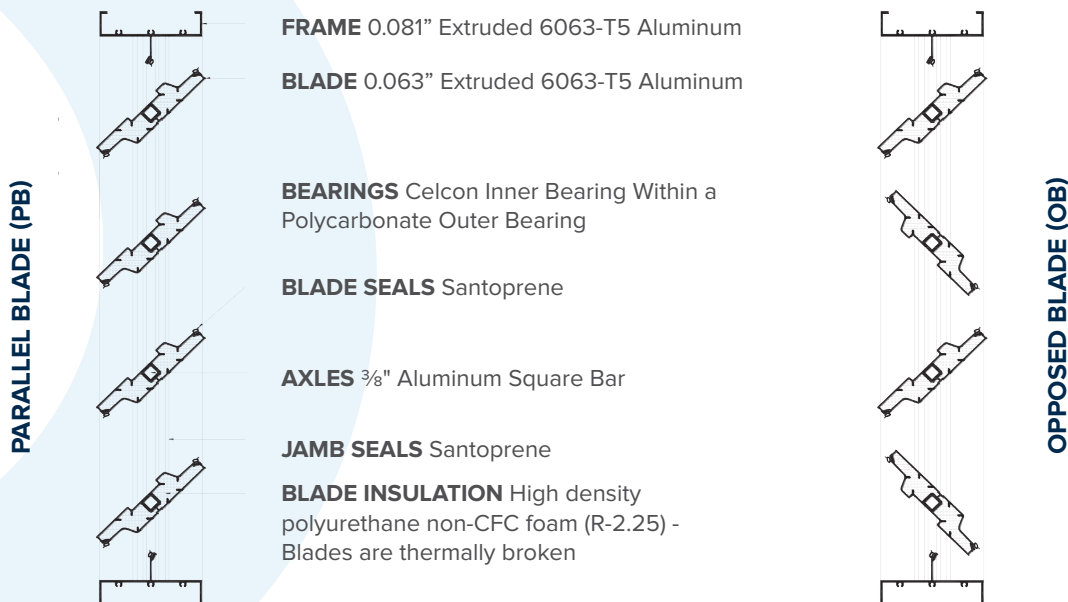
Flanged-to-Duct

STANDARD CONSTRUCTION

| | |
|-----------------------------|---|
| Depth | 4" (101 mm) - 3965 |
| Depth with Blades Open | 6.125" (156 mm) |
| Minimum Height | 8" (203 mm) - Single Blade 15" (381 mm) - Multiple Blade |
| Maximum Panel Width | 48" (1219 mm) |
| Maximum Panel Height | 60" (1524 mm) |
| Maximum Panel Size | 20 sq. ft. |
| Maximum System Pressure | 4" w.g (1 kPa) |
| Operating Temperature Range | -40° to +180°F |
| Standard Finish | Mill |
| Standard Motor Installation | 6" Side Shaft Direct Drive |
| Linkage | Outside of Frame |

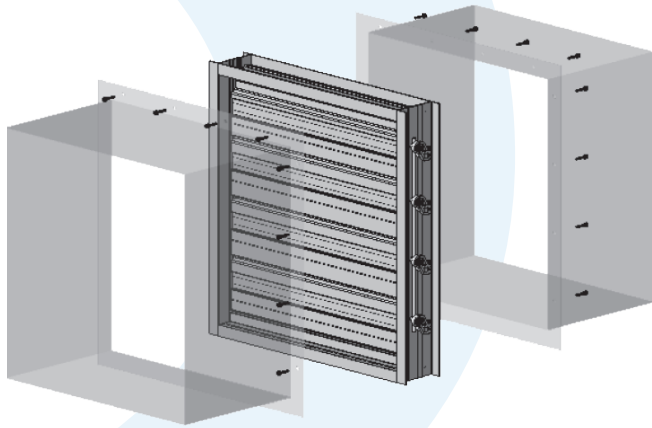
AVAILABLE ACCESSORIES

- Factory supplied/installed actuators
- End switch for signaling peripheral devices
- Jack shaft
- Hand quadrants
- Chain operation for manual operation spring closed
- Silicone blade and jamb seals
- Salt water construction
- Available finish: Clean anodized
- Frame insulation: Polystyrene insulation

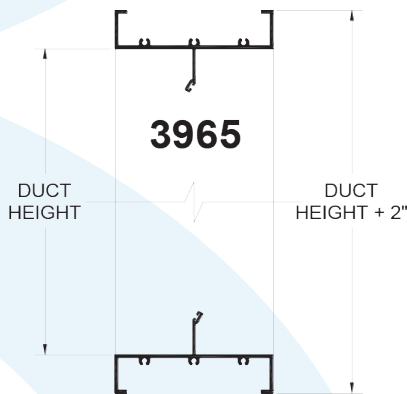


Insulated Control Dampers

Model: 3965



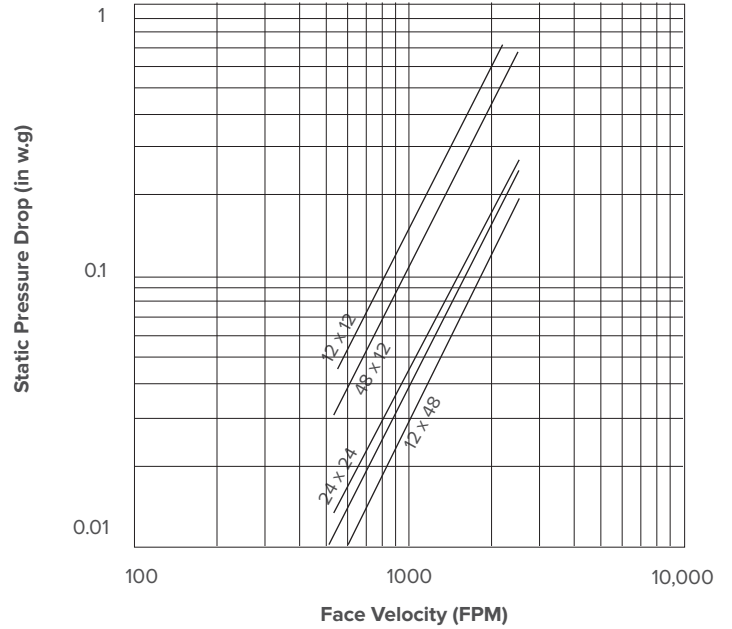
3965
Flanged-to-Duct



RECOMMENDED SPECIFICATION

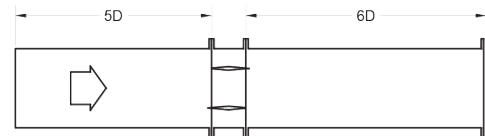
Furnish and install control damper models 3960 / 3961 / 3965 as manufactured by Alumavent, Bolton Ontario. Dampers shall be 4" (101 mm) deep. Blades shall be 0.063" (1.60 mm) thick, thermally broken with high density Polyurethane non-CFC injected foam insulation. Frame shall be 0.081" (2.06 mm) thick, with polystyrene insulation. Axles shall be 0.375" (9.53 mm) thick, Aluminum square bar. Blade and Jamb seals shall be Santoprene. Linkage is concealed outside of frame for model 3965. Air leakage through a 36"x36" (914 mm x 914 mm) damper shall not exceed 3 CFM/ft² (15.2 L/s/m²) against 4" w.g (1.0 kPa) static pressure at standard air (as per AMCA testing). Operating temperature range shall be -40° to +180° F.

PRESSURE DROP

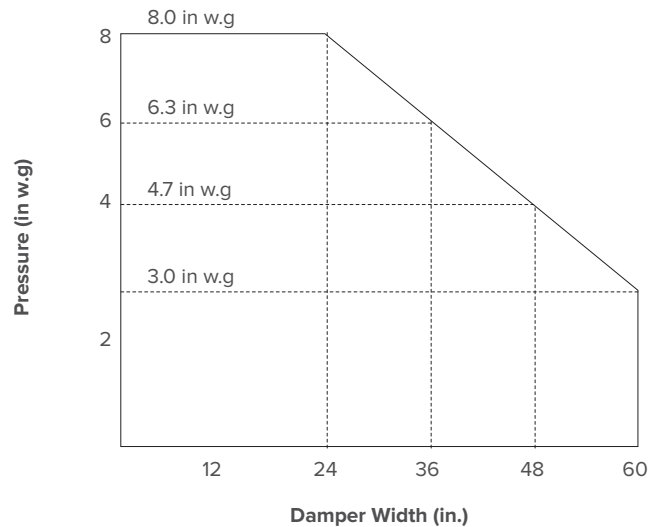


Ratings based on AMCA Standard 500-D Intake Ducted Test

Setup



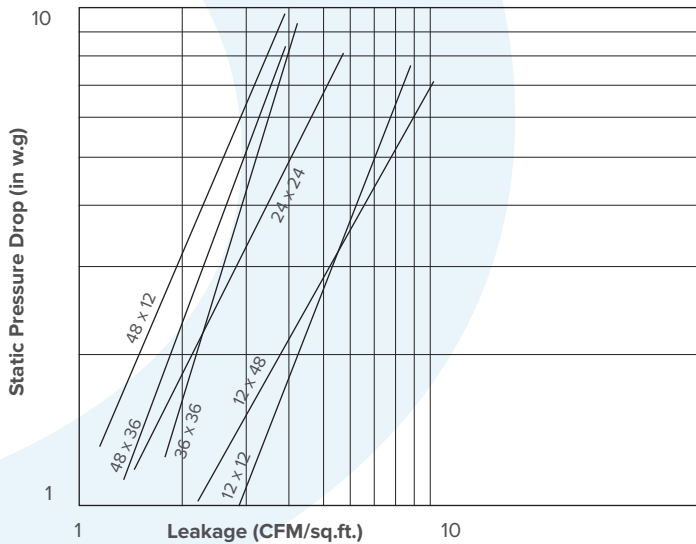
PRESSURE LIMITATIONS



Insulated Control Dampers

Model: 3965

LEAKAGE



Leakage test was conducted in accordance with AMCA Standard 500-D-98. Holding torque applied was 6 in - lbs/sq.ft on parallel blade dampers. AMCA Standard 500-D-98 states that air leakage is based on operation between 10°C - 40°C (50°F - 104°F).

DAMPER LEAKAGE RATING

| Damper Size | Pressure in w.g (kPa) | | |
|------------------------------|-----------------------|--------------|--------------|
| | 1" (0.25 kPa) | 4" (1.0 kPa) | 8" (2.0 kPa) |
| 12" x 12" (305 x 305 mm) | 1A | 1 | 1 |
| 24" x 24" (610 x 610 mm) | 1A | 1 | 1 |
| 36" x 36" (914 x 914 mm) | 1A | 1 | 1 |
| 12" x 48" (305 x 1219 mm) | 1A | 1 | 1 |
| 48" x 12" (1219 x 305 mm) | 1A | 1 | 1 |
| 48" x 36" (1219 x 914 mm) | 1A | 1 | 1 |

DEFINITION OF LEAKAGE CLASSIFICATION

| Class | Leakage ft ² /min/ft ² (L/s/m ²) | | |
|-------|--|--------------|--------------|
| | 1" (0.25 kPa) | 4" (1.0 kPa) | 8" (2.0 kPa) |
| 1A | 3 (15.2) | N/A | N/A |
| 1 | 4 (20.3) | 8 (40.6) | 14 (71.1) |
| 2 | 10 (50.8) | 20 (102) | 35 (178) |
| 3 | 40 (203) | 80 (406) | 140 (711) |

CONTROL DAMPER PRESSURE DROP

| Velocity (FPM) | Pressure Drop (in. w.g) |
|-----------------------|-------------------------|
| 12 x 12 inches | |
| 553.6 | 0.044 |
| 891.4 | 0.119 |
| 1051.9 | 0.161 |
| 2021.4 | 0.554 |
| 2221.7 | 0.740 |
| 24 x 24 inches | |
| 536.8 | 0.014 |
| 776.9 | 0.025 |
| 1101.1 | 0.056 |
| 2066.3 | 0.182 |
| 2530.1 | 0.272 |
| 36 x 36 inches | |
| 500.4 | 0.01 |
| 750.6 | 0.021 |
| 1006.1 | 0.036 |
| 2019.5 | 0.161 |
| 2526.6 | 0.249 |
| 12 x 48 inches | |
| 545 | 0.008 |
| 772.8 | 0.018 |
| 1095.3 | 0.035 |
| 2055.5 | 0.126 |
| 2519.2 | 0.187 |
| 48 x 12 inches | |
| 544.6 | 0.029 |
| 772.2 | 0.064 |
| 1094.1 | 0.1228 |
| 2053.1 | 0.439 |
| 2516 | 0.661 |