



3160
Duct-Mount



3161
Quick 'N' Stall Duct-Mount



3165
Flanged-to-Duct



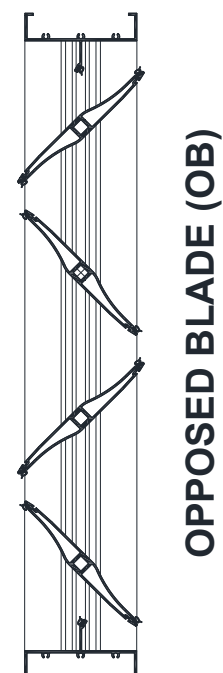
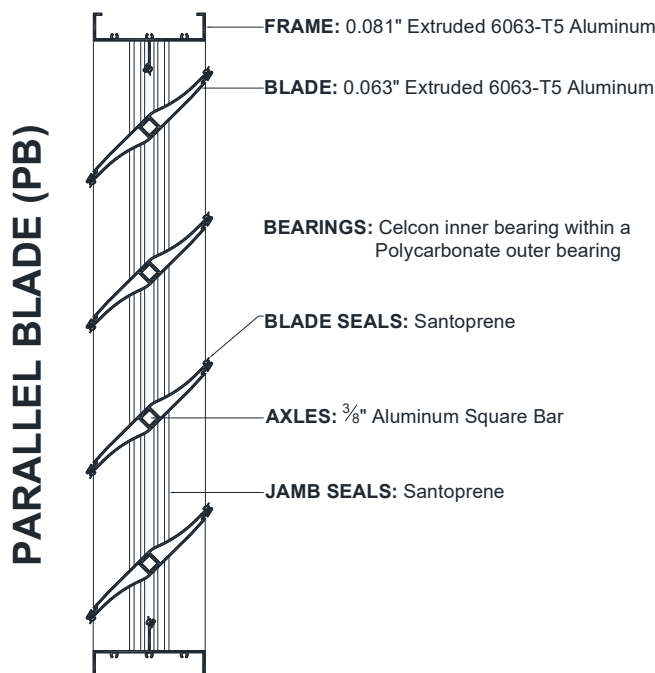
3167
Flange One side

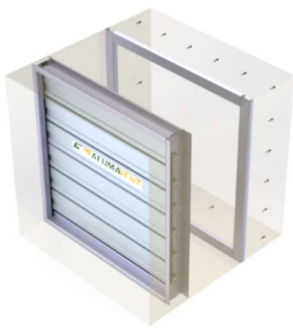
STANDARD CONSTRUCTION

Frame Depth: 4" (102 mm) – 3160/3165
5.25" (133 mm) – 3161
Overall 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: See chart on page 2.
Operating Temperature Range: -40° to +180° F
Standard Finish: Mill extruded aluminum.
Standard Motor Installation: 6" Side Shaft Direct Drive
Linkage: Zinc Alloy 7 Crankarms with Polycarbonate bushings and Corrosion proof Zinc plated Steel clamped with cup-point trunnion screws
Concealed in Frame (3160/3161) **Outside of Frame (3165)**
Blade End Cap: Nylon

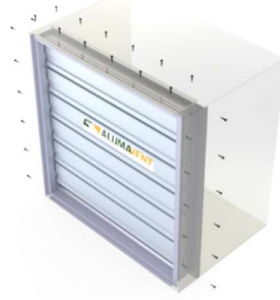
AVAILABLE ACCESSORIES

- Factory Supplied Actuators
- End Switch for signaling peripheral devices
- Jack Shaft
- Hand Quadrants
- Chain Operation for manual operation spring closed
- Silicone Blade and Jamb Seals – Specify 3100SI
- Salt Water Construction – Specify 3100SW
- Clear Anodized finish
- 4" Blade Construction

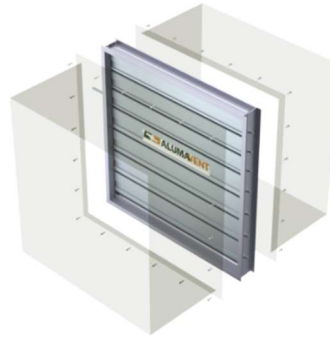




3160 – Duct-Mount



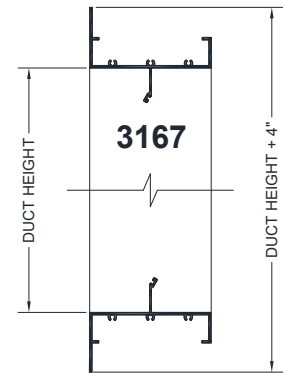
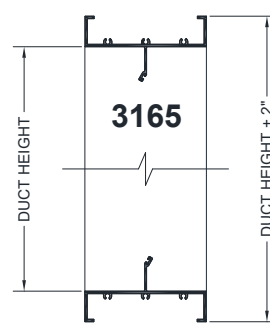
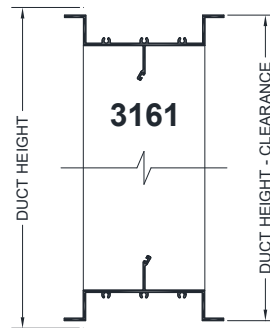
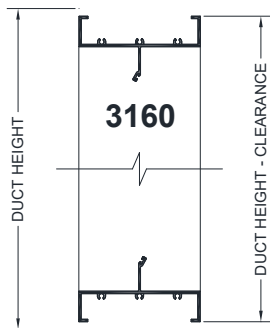
3161 – Duct-Mount



3165 – Flanged-to-Duct



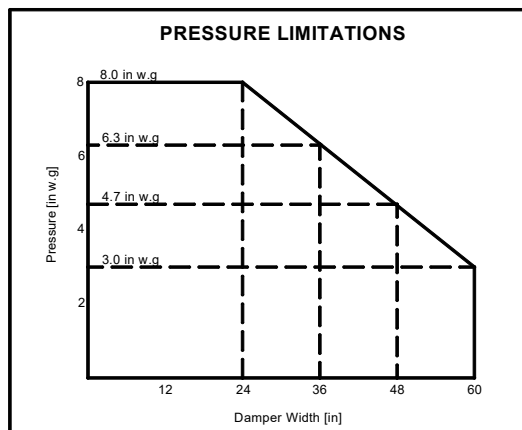
3167 – Front Flanged



For Duct-Mount Frame specify: 3160 / 3161
For Flanged-to-Duct Frame specify: 3165
For Flanged-to-Wall specify: 3167

*For Models 3160 and 3161:
Clearance = 1/4" Overall for Single Panel Construction
Clearance = 1/2" Overall for Multiple Panel Construction

PRESSURE LIMITATIONS:



LEAKAGE DATA:

MAXIMUM DAMPER WIDTH	LEAKAGE CLASS (Opposed Blade Only)		
	@1" w.g. (0.25 kPa)	@4" w.g. (1 kPa)	@8" w.g. (2 kPa)
48" (1219 mm)	1A	1	1

Leakage Class definitions:

The maximum permitted leakage for Class ratings is as follows:

Class 1A: 3 cfm/ft² @ 1" w.g. (Class 1A is only tested at 1" w.g. per AMCA).

Class 1: 4 cfm/ft² @ 1" w.g.

8 cfm/ft² @ 4" w.g.

11 cfm/ft² @ 8" w.g.

Air leakage is based on operations between 0°C-49°C (32°F-120°F).

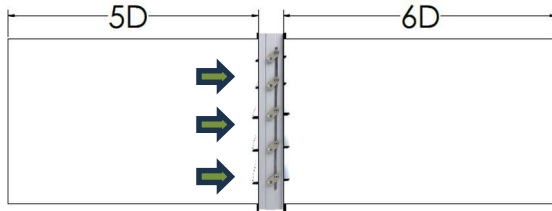
Data corrected to standard air density of 0.075 lbs./ft³.

Leakage tested in accordance with AMCA Standard 500-D, Fig.5.4A.

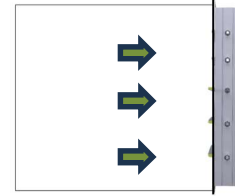
Data are based on a torque of 16 in.-lbs./ft² (1.81 N·m/m²) to close and seat the damper during the test.

PRESSURE DROP:

AMCA 5.3



AMCA 5.5



3100 SERIES CONTROL DAMPER PRESSURE DROP	
Velocity [FPM]	Pressure Drop [in. w.g.]
12x12 (inches)	
505	0.011
1001	0.040
1463	0.091
1958	0.174
3004	0.422
24x24 (inches)	
518	0.008
990	0.028
1497	0.061
2010	0.103
3016	0.237
36x36 (inches)	
496	0.004
1004	0.020
1495	0.043
1994	0.070
3001	0.165
12x48 (inches)	
499	0.007
1003	0.027
1498	0.062
2002	0.116
3003	0.267
48x12 (inches)	
499	0.005
1004	0.021
1504	0.048
2006	0.086
3001	0.197

3100 SERIES CONTROL DAMPER PRESSURE DROP	
Velocity [FPM]	Pressure Drop [in. w.g.]
12x12 (inches)	
489	0.051
996	0.196
1495	0.435
1986	0.767
3036	1.805
24x24 (inches)	
531	0.055
1013	0.205
1513	0.467
2019	0.846
3004	1.887
36x36 (inches)	
496	0.045
1004	0.185
1497	0.411
1999	0.741
3005	1.681
12x48 (inches)	
499	0.007
1003	0.027
1498	0.062
2002	0.116
3003	0.267
48x12 (inches)	
499	0.005
1004	0.021
1504	0.048
2006	0.086
3001	0.197

Pressure drop tested per AMCA 500-D per set-up figures as indicated above. Data corrected to standard air density of 0.075 lbs/ft³.

RECOMMENDED SPECIFICATION:

Furnish and install control damper model 3160 / 3161 / 3165 as manufactured by Alumavent Inc., Alliston Ontario. Blades shall be 0.063" (1.60 mm) thick extruded aluminum, hollow airfoil shape. Frames shall be 0.081" (2.06 mm) thick extruded aluminum. Axles shall be 0.375" (9.53 mm) aluminum square bar. Blade and Jamb seals shall be Santoprene (or optional Silicone). Linkage is concealed in frame for models 3160 / 3161 and outside of frame for model 3165. Operating temperature range shall be -40° to +180°F. Leakage and pressure drop performance data submitted to be based on tests in accordance with AMCA Standard 500-D. Dampers must comply with the requirements of AMCA 511 Certified Ratings Program and be qualified to bear the AMCA Seal for Air Performance and Air Leakage. Damper widths from 12" (305 mm) to 48" (1219 mm) must meet leakage Class 1A criteria of maximum 3 cfm/ft² (15.2 L/s/m²) at 1" w.g. (.25 kPa).

CERTIFIED RATINGS

Alumavent Inc. certifies that the 3100 Series Insulated Control Dampers shown here are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and air leakage ratings and efficiency ratings.



Certification

DWG. 3160-3161-3165-3167 MARCH 2025