



3960
Duct-Mount



3961 Quick 'N' Stall
Duct-Mount



3965
Flanged-to-Duct



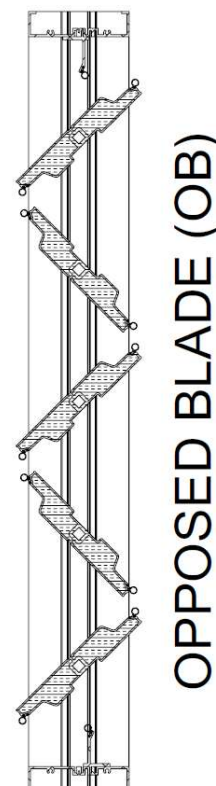
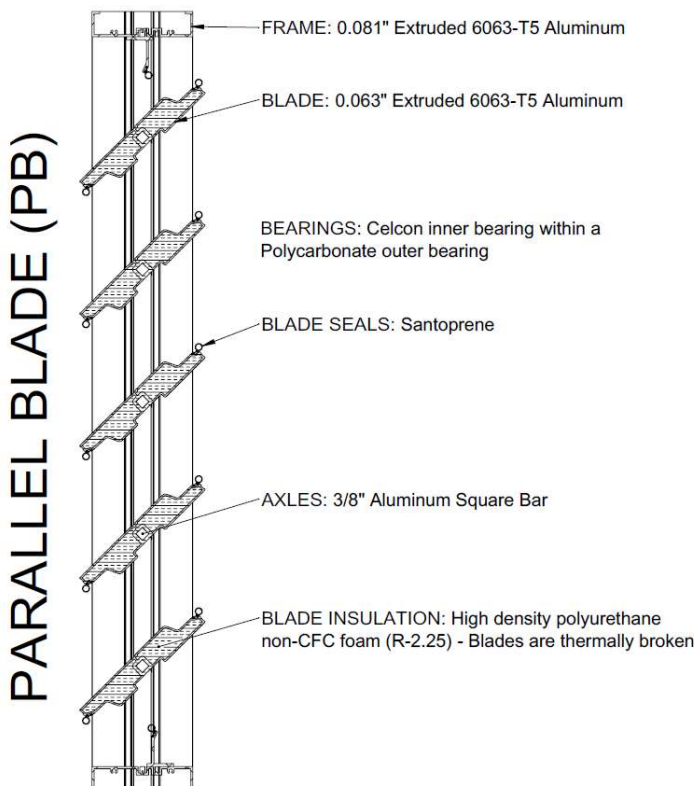
3967
Front Flanged

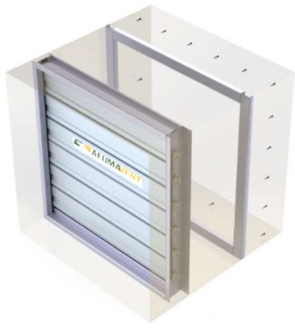
STANDARD CONSTRUCTION

Depth: 4" (102 mm) – 3960/3965/967
5.25" (133 mm) – 3961
Depth with Blades Open: 6.125" (156 mm)
Minimum Height: 6" (152 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 4. Operating
Operating Temperature Range: -40° to +212° F
Thermal Efficiency: 448%
Standard Finish: Mill
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 (3960/3961) Outside of Frame (3965/3967)

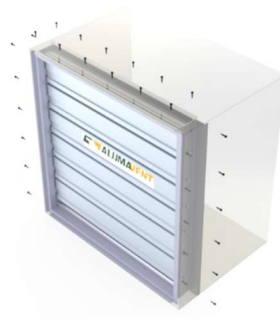
OPTIONS / ACCESSORIES

- Factory Supplied Actuators
- Actuators with end switches for signaling
- Jack Shaft
- Hand Quadrants
- Chain Operation for manual operation spring closed
- Silicone Blade and Jamb Seals – Specify 3900SI
- Salt Water Construction – Specify 3900SW
- Extreme Low Temperature Construction – Specify 3965ELT
- Available finish: Clear Anodized
- Frame Insulation: Polystyrene Insulation

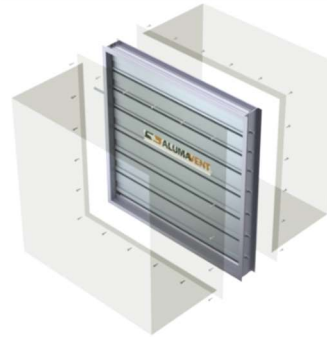




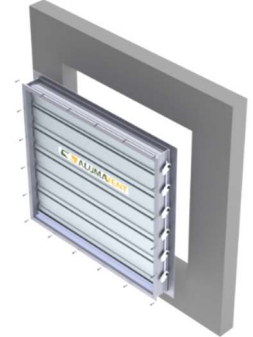
3960
Duct-Mount Requires Mounting Angle



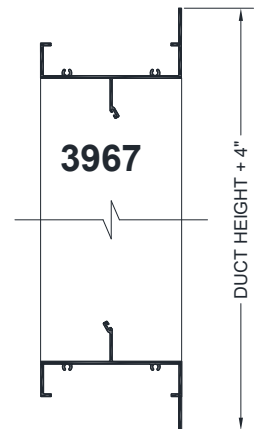
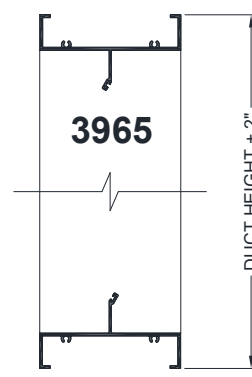
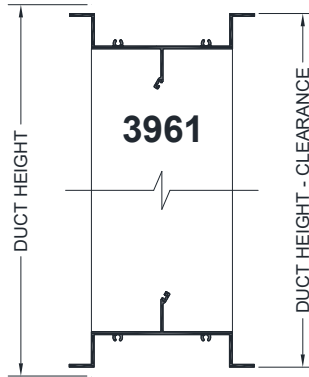
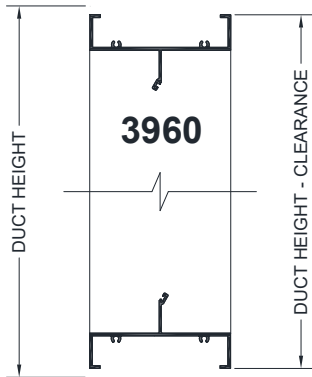
3961 Quick 'N' Stall Duct-Mount



3965
Flanged-to-Duct



3967
Front Flanged



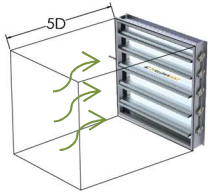
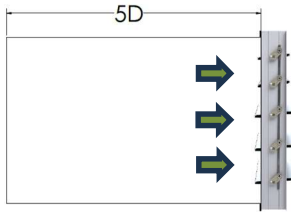
***For Models 3960 and 3961:**
Clearance = 1/4" Overall for Single Panel Construction
Clearance = 1/2" Overall for Multiple Panel Construction

For Duct-Mount Frame specify: 3960 / 3961
For Flanged-to-Duct Frame specify: 3965
For Flanged-to-Wall specify: 3967

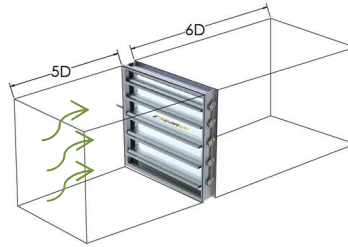
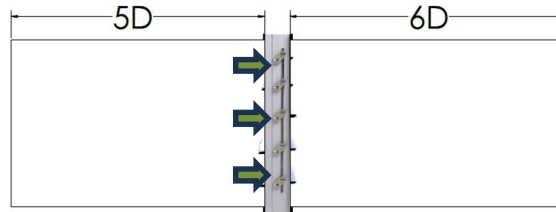
RECOMMENDED SPECIFICATION

Furnish and install control damper models 3960 / 3961 / 3965 / 3967 as manufactured by Alumavent, Alliston Ontario. Dampers must be licensed to bear the AMCA seal. 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. Axles shall be 0.375" (9.53 mm) thick, aluminum square bar. Blade and jamb seals shall be Santoprene. Linkage is concealed in frame for models 3960 / 3961 and outside of frame for model 3965. Air leakage through a 36" x 36" (914 mm x 914 mm) damper shall not exceed 3 CFM/ft² (15.2 L/s/m²) against 1" w.g (0.25 kPa) static pressure at standard air (as per AMCA testing). Operating temperature range shall be -40° to +212° F.

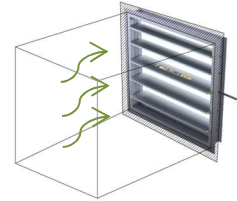
AMCA 5.2



AMCA 5.3



AMCA 5.5



3900 SERIES CONTROL DAMPER PRESSURE DROP

Velocity [FPM]	Pressure Drop [in. w.g]
12x12 (inches)	
500	0.09
1000	0.27
2000	1.03
3000	2.28
4000	3.79
24x24 (inches)	
500	0.02
1000	0.08
2000	0.45
3000	0.82
4000	1.19
36x36 (inches)	
500	0.02
1000	0.07
2000	0.25
3000	0.56
4000	1.06
12x48 (inches)	
500	0.08
1000	0.31
2000	1.37
3000	2.91
4000	4.04
48x12 (inches)	
500	0.04
1000	0.15
2000	0.58
3000	1.23
4000	2.00

3900 SERIES CONTROL DAMPER PRESSURE DROP

Velocity [FPM]	Pressure Drop [in. w.g]
12x12 (inches)	
500	0.03
1000	0.08
2000	0.34
3000	0.74
4000	1.21
24x24 (inches)	
500	0.01
1000	0.03
2000	0.15
3000	0.28
4000	0.40
36x36 (inches)	
500	0.01
1000	0.03
2000	0.10
3000	0.24
4000	0.46
12x48 (inches)	
500	0.03
1000	0.13
2000	0.55
3000	1.27
4000	2.20
48x12 (inches)	
500	0.02
1000	0.06
2000	0.24
3000	0.53
4000	0.88

3900 SERIES CONTROL DAMPER PRESSURE DROP

Velocity [FPM]	Pressure Drop [in. w.g]
12x12 (inches)	
500	0.11
1000	0.26
2000	1.08
3000	2.45
4000	4.10
24x24 (inches)	
500	0.06
1000	0.29
2000	0.87
3000	1.93
4000	3.37
36x36 (inches)	
500	0.05
1000	0.26
2000	0.87
3000	1.90
4000	3.18
12x48 (inches)	
500	0.06
1000	0.33
2000	1.12
3000	2.50
4000	4.18
48x12 (inches)	
500	0.05
1000	0.28
2000	0.97
3000	2.10
4000	3.70

DWG. 3960-3961-3965-3967 JUNE 2026

DEFINITION OF LEAKAGE CLASSIFICATION

CLASS	LEAKAGE ft ³ /min/ft ² (L/s/m ²)			
	1" (0.25 kPa)	4" (1.0 kPa)	8" (2.0 kPa)	12" (3.0 kPa)
1A	3 (15.2)	N/A	N/A	N/A
1	4 (20.3)	8 (40.6)	11 (55.9)	14 (71.1)
2	10 (50.8)	20 (102)	28 (142)	35 (178)
3	40 (203)	80 (406)	112 (569)	140 (711)

3900 SERIES CONTROL DAMPER LEAKAGE RATING

DAMPER SIZE Width x Height	PRESSURE in w.g (kPa)		
	1" (0.25 kPa)	4" (1.0 kPa)	8" (2.0 kPa)
12" x 12" (305x305 mm)	1A	1	1
24" x 24" (610x610 mm)	1A	1	1
36" x 36" (914x914 mm)	1A	1	1
12" x 48" (305x1219 mm)	1A	1	1
48" x 12" (1219x305 mm)	1A	1	1
36" x 48" (914x1219 mm)	1A	1	1

Leakage test was conducted in accordance with AMCA Standard 500-D, Fig.5.4A. Data are based on a torque of 8 in.-lbs./sq.ft (1.3 N·m) to close and seat the damper during the test. Air leakage is based on operation between 0°C-49°C (32°F-120°F). Data corrected to standard air density of 0.075 lbs./ft.³.

AMCA Certified Energy Efficiency Performance

Alumavent Inc. 3900 insulated control Damper has a Thermal Efficiency Ratio of **448.48%**

A damper's Thermal Efficiency Ratio (E) is a comparison of the thermal performance of the tested damper with that of a standard reference damper, which is a 3V blade damper with blade and jamb seals. A damper with the same thermal efficiency as the reference damper would have an E of 0%. A damper that is twice as efficient as the reference damper would have an E of 100%.

Test Information

Testing was conducted on a 36 in. x 36 in. (914mm x 914mm) sample in AMCA 500-D11 Damper Efficiency Test Report figure 5.10 per AMCA standard 500-D's Thermal Efficiency test.

Torque

Data are based on a torque of 72 in.lb./ft² (8.1 N·m) applied to close and seat the damper during the test.



3900 Installation
Instructions



Jack Shaft Assembly
Instructions



Jumper Assembly
Instruction



Certification

CERTIFIED RATINGS

Alumavent Inc. certifies that the 3900 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.

