



MODEL ACD-56-I (INSULATED) AIRFOIL PARALLEL OR OPPOSED BLADE DAMPER LOW LEAKAGE: TESTED TO AMCA 500

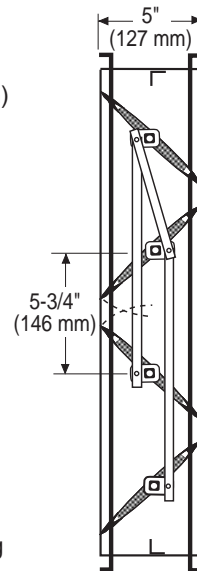
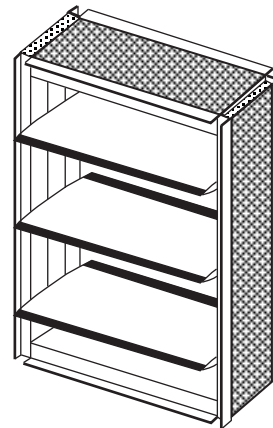
Standard Construction:

- Frame:** Extruded aluminum hat section, heavy gauge 6063-T5.
5"w x 1"h (127 mm x 25 mm) on 3 sides. 5"w x 1-3/4"h (127 mm x 44 mm) on 1 side.
- Blades:** Extruded aluminum 6" (152 mm) wide airfoil profile, heavy gauge 6063-T5 extrusion.
- Insulation:** Lightweight non absorbing.
- Bearings:** Nylon, press fit into frame.
- Axles:** Square plated steel.
- Linkage:** Galvanized steel linkage bar, concealed in frame.
- Extended Shaft:** Removable, 6" long x 1/2" dia. (152 mm x 12.7 mm) plated steel coupled to square axle.
- Blade Seals:** Inflatable, pressure sensitive.
- Jamb Seals:** Flexible metal, pressure sensitive.
- Finish:** Mill.
- Jackshaft:** 1/2" (12.7 mm) diameter standard on multi sections up to 96"w x 72"h (2438 mm x 1829 mm).
- Minimum Damper Size:** Single Blade: 8"w x 10"h (203 mm x 254 mm)
Multi Blade: 8"w x 15"h (203 mm x 381 mm)
- Maximum Damper Size:** Single Section: 60"w x 72"h (1524 mm x 1829 mm)
Multi Section: Unlimited.

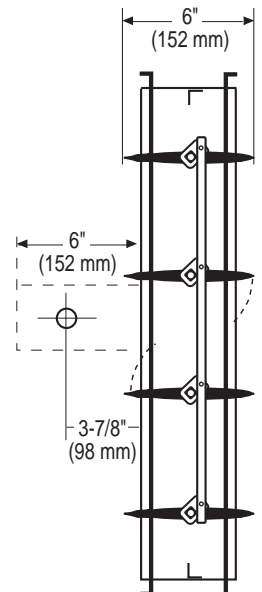
Options:

- Operators:** Motor mounting - Factory furnished or by others.
Manual quadrant or Chain operator
- Finish:** Painted Finishes
Clear Anodize - 204-R1 & 215-R1
Integral Color Anodize
- Face & Bypass:** Right angle and straight line face and bypass
- Jackshaft:** 3/4" (19 mm) Jackshaft reinforcement
- Bearings:** Bronze oilite bearings.

- Notes:**
- Dampers fabricated 1/4" (6.4 mm) under opening size unless otherwise noted
 - All dimensions in () indicate millimeters
 - Specify parallel or opposed blade action.



Opposed
Blade



Parallel
Blade

Features

The ACD-56-I series Control dampers have been designed and tested to provide the ultimate in performance features for sophisticated HVAC systems. Streamlined ("airfoil") blades provide reduced turbulence and noise. Inflatable blade edge and jamb seals allow extremely tight seating without unduly increasing torque requirements. Insulation around the perimeter of the frame and in each blade minimizes energy loss through the closed damper.

Suggested Specification

Low leakage insulated Control dampers shall be Model: ACD-56-I by NCA Manufacturing. Damper blades shall be of aluminum streamline ("airfoil") construction for minimum pressure drop. Both blade edge and jamb seals shall be of the pressure sensitive type for low leakage. Dampers shall be rated for leakage and pressure drop to AMCA Standard 500. Leakage through a 48" x 48" (1219 mm x 1219 mm) shall not exceed 2 cfm/sq/ ft. at 4.0" static pressure. Dampers shall be shall have lightweight non absorbing insulation in each blade and around the perimeter of frame.

Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

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Project:

Contractor:

Location:

Address:

Architect:

P.O. Number:

Engineer:

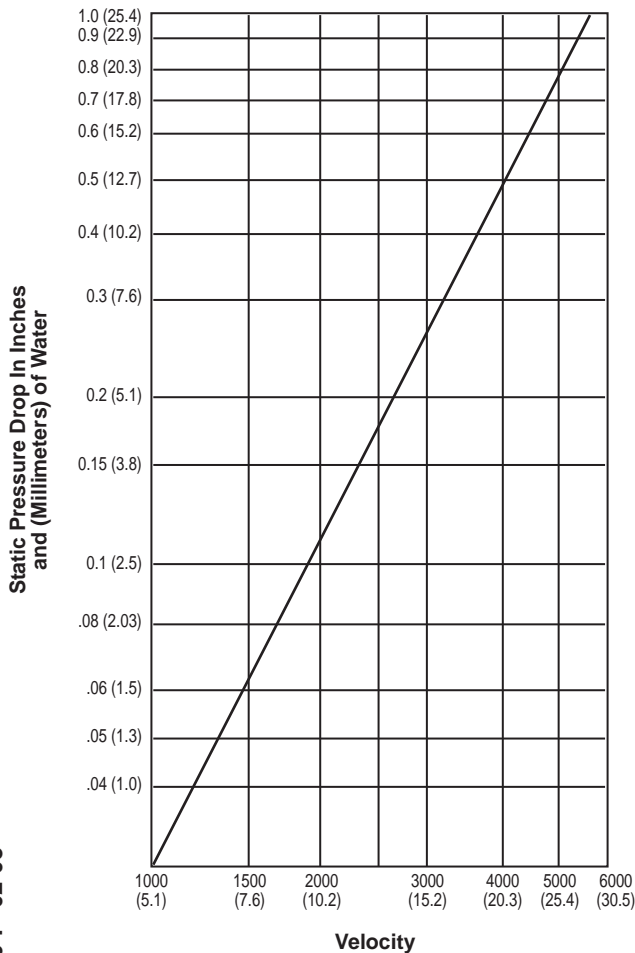
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MODEL ACD-56-I (INSULATED) *AIRFOIL PARALLEL OR OPPOSED BLADE DAMPER* *LOW LEAKAGE: TESTED TO AMCA 500*

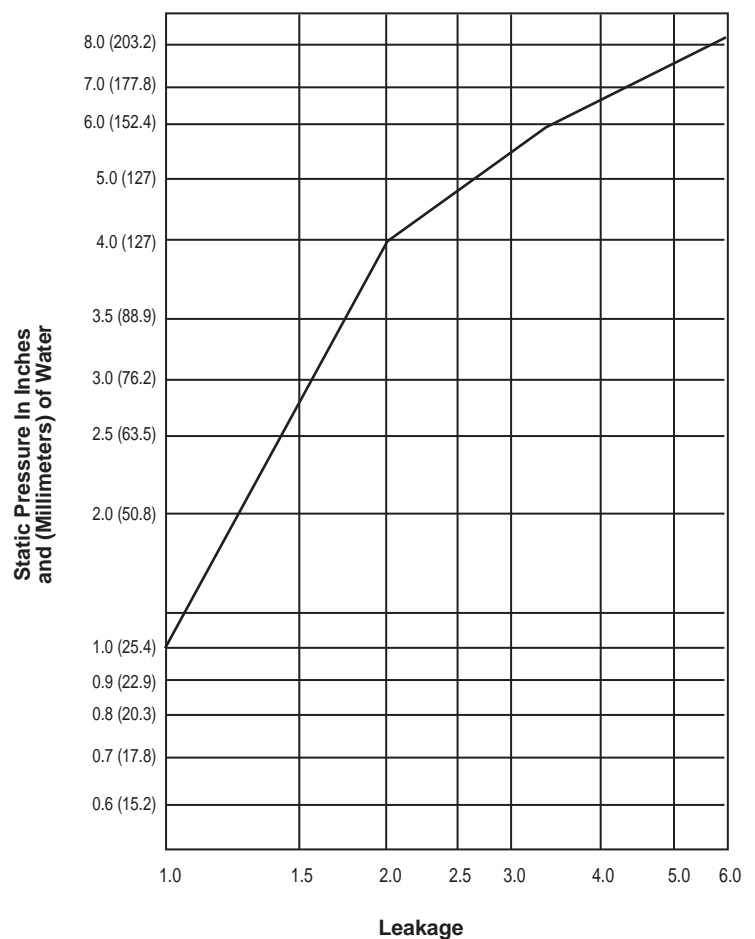
Performance Data Graphs

Pressure Drop – Damper Open 24" x 24" (610 mm x 610 mm)



Tested as per AMCA Std. 500, Fig. 5.3 – Air velocity shown in feet per minute and in () meters per second.

Air Leakage – Damper Closed 48" x 48" (1219 mm x 1219 mm)



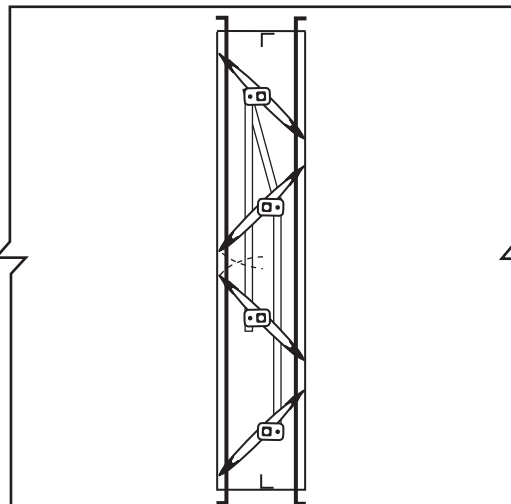
Tested as per AMCA Std. 500, Fig. 5.5 – leakage in CFM per sq. ft.

Typical Model ACD-56-I Installation

The ACD-56-I series is not recommended for vertical blades installation. Always connect motors to power blade and on linkage side.

The NCA frame is designed for easy installation into duct. Simply put sheet metal screws through the duct into the 1/2" (12.7 mm) wide mounting flanges approximately 18" (457 mm) on center.

NCA dampers are designed to be self supporting only in largest single section size. Larger size may require external bracing. Recommended bracing minimum of 8' (2438 mm). The amount and size will depend on unit size and system pressure.



The ACD-56-I is suitable for applications with total pressures up to 4.0" w.g. It may be used in applications exceeding 4.0" w.g. by reducing the damper width. For correct damper sizing consult the factory when exceeding standard design limit of 4.0" w.g.