AIR CONTROL DAMPER
MODEL KVCD-3V10 or 20

FLANGED FRAME AIR CONTROL DAMPER

STANDARD CONSTRUCTION

FRAME:
18 Ga galvanized steel Flanged frame construction with 35mm flanges.
BLADES:
16 Ga galvanized steel 3V type blades
Parallel blades model KVCD-3V10
Opposed blades model KVCD-3V20
BEARINGS:
Nylon bearings
AXLES:
0.47”(12mm) Square zinc plated steel stud
LINKAGE:
Concealed in frame 10Ga (3mm) zinc plated steel
MANUAL HAND-QUADRANT:
Galvanized steel die cast hand-quadrant plated for square or round shaft installed on an elevated bearing bracket
BRACKET:
1” (25mm) elevated hand bracket
FINISH:
Mill galvanized

OPTIONS:

1) FRAME CONSTRUCTION
   a) Aluminum or stainless steel frame construction.
   b) Frame thickness 0.8mm or 1mm or 1.5mm (for 0.8 or 1 mm thickness not available for Aluminum construction)
2) FLANGES:
   Variable size of frame flanges sizes: 20, 25, 30 or 40mm.
3) BLADES CONSTRUCTION
   a) Aluminum or stainless steel blades construction.
   b) Blade Thickness 0.8 or 1 or 1.2 mm
4) Single edge rubber foam blade seals. (-BS)
5) BEARINGS:
   Bronze bearings (std for motorized dampers) or stainless steel bearings.
6) ACTUATORS:
   a) Electric (24,120 & 230V) or pneumatic.
   b) Spring return or non spring return.
   c) With or without auxiliary switch.
7) Blades indicator switch - BIS
8) EXTENDED SHAFT (without Hand Quadrant):
   4.7” (120mm) extended shaft (round or square) beyond the air control frame.
9) 2" Elevated hand bracket.

APPLICATION

KVCD volume dampers series are designed to provide superior air control with high performance and heavy duty construction. KVCD-3V10 or 20 Dampers are specifically designed for manual balancing applications. They are suitable for use in the majority of commercial medium to high pressure and velocity HVAC systems requiring flanged frame.
They are designed and built to provide cost effective and reliable dampers with high free area with a very low pressure drop.

MINIMUM SIZES:

a) SINGLE BLADE TYPE:
4"W(101mm) x 4"H(101mm).
b) MULTI-BLADES :
4"W(101mm) x 10"H(254mm)

MAXIMUM SIZES:

a) SINGLE BLADE TYPE:
48"W(1219mm) x 9"H(229mm)
b) MULTI-BLADES SINGLE SECTION:
48"W(1219mm)x 48"H(1219mm)

MULTI-SECTIONS: UNLIMITED

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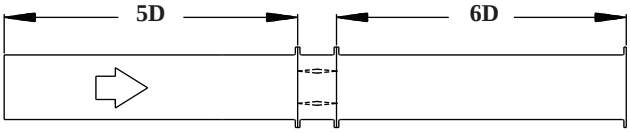
PERFORMANCE DATA

AMCA Test Figures

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



Damper in Fully open position

48"x12" (1219x305mm)

Velocity (Fpm)	Pressure Drop (In.Wg)
500	0.01
1000	0.04
1500	0.09
2000	0.16
3000	0.38

12"x48" (305x1219mm)

Velocity (Fpm)	Pressure Drop (In.Wg)
500	0.005
1000	0.02
1500	0.04
2000	0.07
3000	0.16

12"x12" (305x305mm)

Velocity (Fpm)	Pressure Drop (In.Wg)
1000	0.02
1500	0.04
2000	0.08
2500	0.15
3000	0.24

24"x24" (610x610mm)

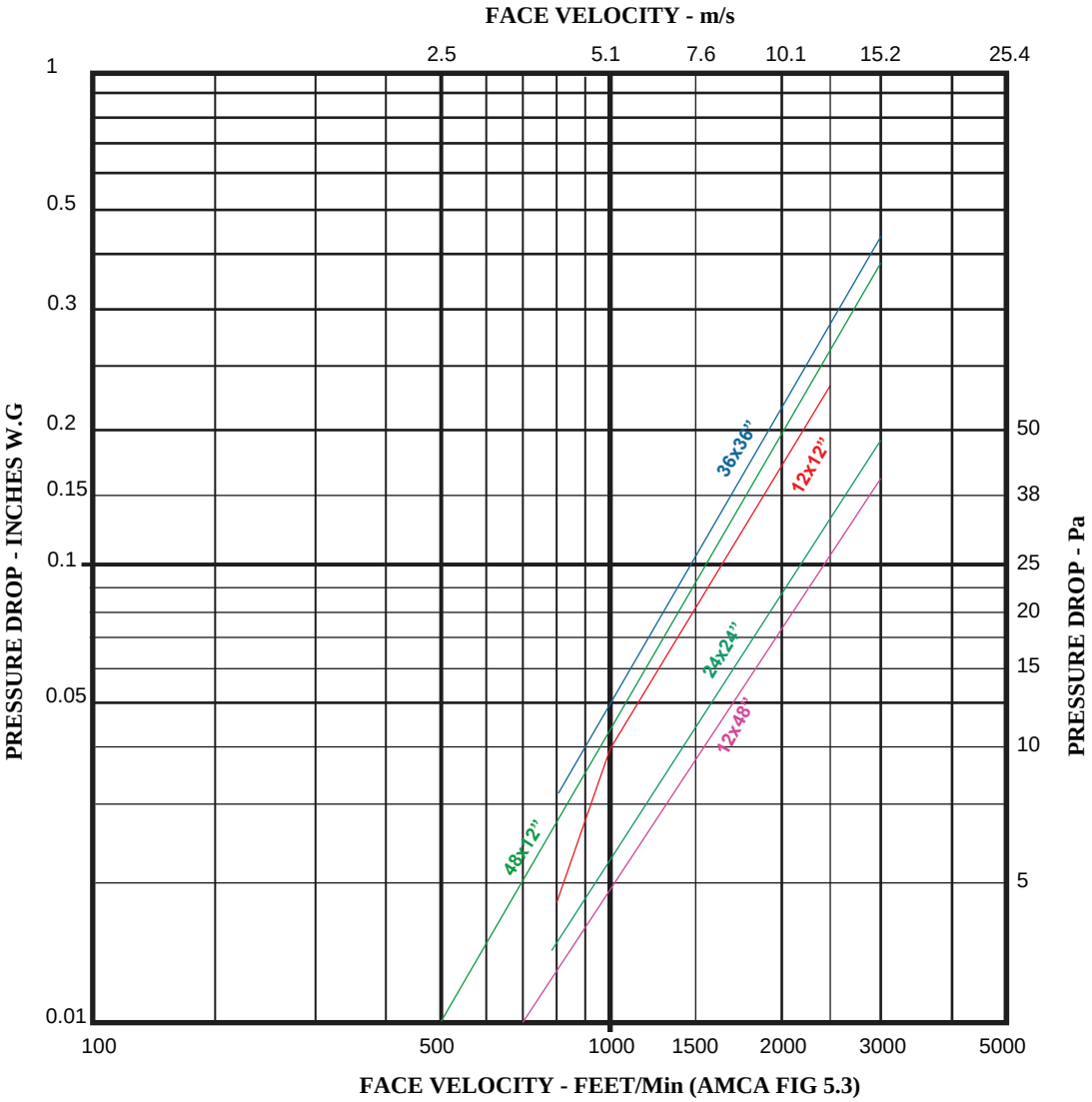
Velocity (Fpm)	Pressure Drop (In.Wg)
800	0.01
1000	0.02
1500	0.05
2000	0.09
3000	0.19

36"x36" (914x914mm)

Velocity (Fpm)	Pressure Drop (In.Wg)
800	0.03
1000	0.05
1500	0.11
2000	0.20
3000	0.46

Tested for Air Performance in accordance with ANSI/AMCA Standard 500-D, Figure 5.3. Air performance testing was conducted using opposed blade dampers; the same results can be applied to parallel blade dampers. All data has been corrected to represent standard air density .075 lb/ft

KBE International certifies that the model KVCD-3V shown herein is 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 Programs. The AMCA Certified Ratings Seal applies to Air Performance ratings.



SAP
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Dated: JAN2025

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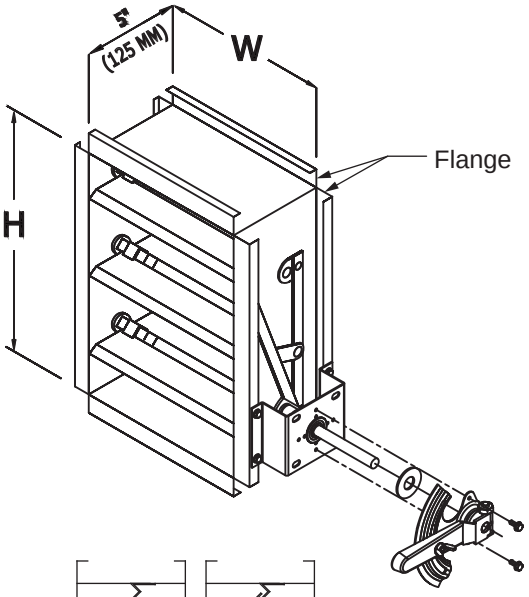
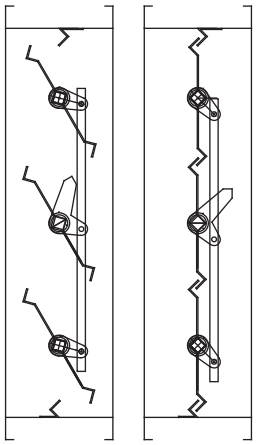
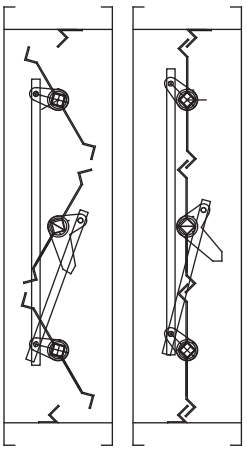
DETAILS

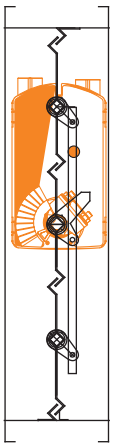




Parallel Blades



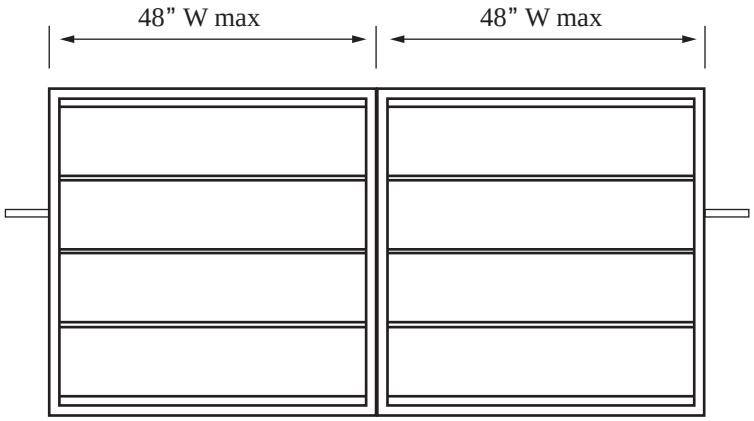
Opposed Blades



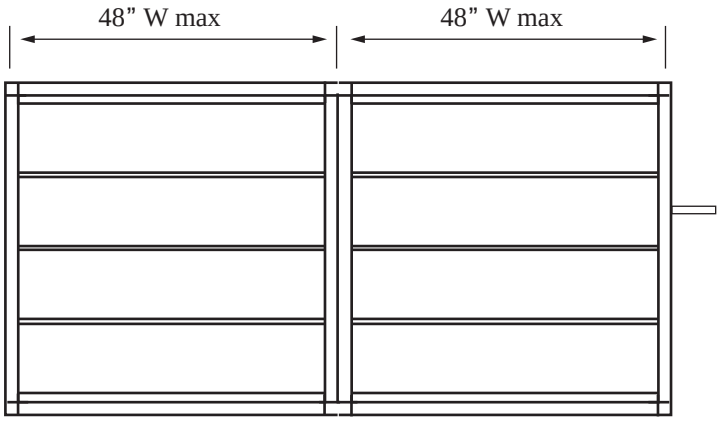
Motorized Damper

Multi-Section Assembly

Dampers larger than maximum single section size, will be made up of multiple equal sections. Sections to be assembled on site (as standard) by sheet metal screw or #10 bolts & nuts with hand-quadrant on each side of the damper.
Damper can be factory assembled with single side hand-quadrant as optional with limited assembly of 2 sections --limitation is required to avoid damage during transportation.



Standard 2 sections assembly with Hand-quadrant (or Motor) on each side



Optional 2 sections assembly with Hand-quadrant (or Motor) on 1 side