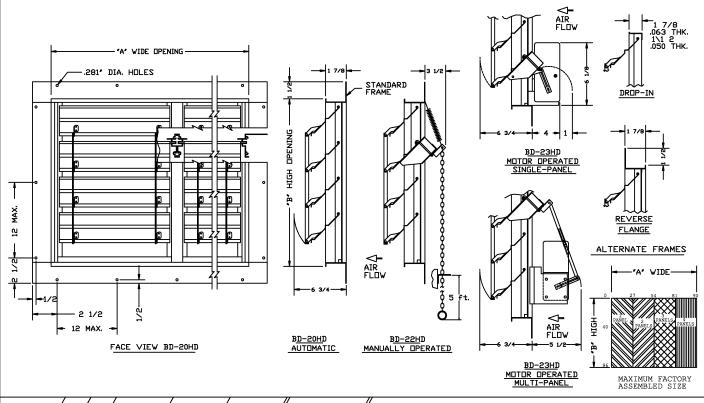
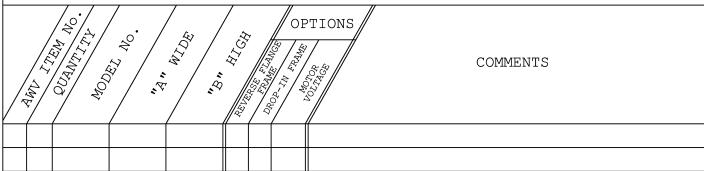
HEAVY DUTY BACKDRAFT DAMPER, SINGLE THICKNESS BLADES, ALUMINUM CONSTRUCTION





STANDARD SPECIFICATIONS

STANDARD AND REVERSE FLANGE: .063" 6063-T6 EXTRUDED ALUMINUM ALLOY. DROP-IN FLANGE: .050" 6063-T6 EXTRUDED ALUMINUM ALLOY THRU 16 SQ. FT. & .063" 6063-T6 EXTRUDED ALUMINUM ALLOY ABOVE 16 SQUARE FEET. 22 GAUGE ALUMINUM WITH DOUBLE STIFFENING BRAKES, MAX. 27" WIDE PANELS. FRAME:

AXLES:

BEARINGS: LINKAGE:

3/16" DIAMETER FULL LENGTH PLATED STEEL ROD.
SELF-LUBRICATING HEAVY DUTY NYLON.
PLATED STEEL BRACKETS, STAINLESS STEEL SHOULDER RIVETS AND ALUMINUM LINKAGE BARS. PANELS 16" WIDE AND ABOVE HAVE DOUBLE LINKAGE.
POLYURETHANE SPONGE ON THE SILL AND FELT BETWEEN ADJACENT BLADES.
MILL.
MILL.
MANNING. SERRING GLOSING CHAIN OPERATION.

ACTUATOR: MANUAL - SPRING CLOSING CHAIN OPERATOR

ELECTRIC - SPRING RETURN ACTUATOR AVAILABLE IN 24, 110/220, 440 OR 550
VOLT, SINGLE PHASE 60 HZ. WHEN DAMPER EXCEEDS TWO PANELS
WIDE, MULTIPLE ACTUATORS WILL BE SUPPLIED ACTUATORS MAY BE
LINE VOLTAGE OR FURNISHED WITH A TRANSFORMER. OPTIONS:

NOTES

1. DESIGN CRITERIA:

MAXIMUM VELOCITY: 3000 FPM/15.2 m/s

MAXIMUM DIFFERENTIAL PRESSURE: 1" W.G./250 Pa.

MAX. TEMP.: 200°F/95°C; WITHOUT ELECTRIC OPERATOR.

130°F/55°C; WITH FACTORY SUPPLIED STANDARD ELECTRIC ACTUATOR.

2. MAXIMUM PANEL SIZES - SEE SIZING CHART.

MINIMUM PANEL SIZE - 6"W x 6"H.

3. "A" AND "B" DIMENSIONS ARE EXACT FRAME DIMENSIONS. WHEN DAMPERS ARE SUPPLIED WITH ALTERNATE FRAMES, THEY WILL BE FABRICATED WITH THE OUTSIDE FRAME DIMENSIONS APPROXIMATELY 1/8" UNDERSIZE.

4. ANY VARIATIONS TO THE ABOVE STANDARD SPECIFICATIONS MUST BE FACTORY APPROVED IN ADVANCE.

5. DRAWINGS ARE SUBJECT TO CHANGE WITHOUT NOTICE ADDITIONAL TO THE ABOVE STANDARD SPECIFICATIONS MUST BE FACTORY APPROVED.

IN ADVANCE.

5. DRAWINGS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC INFORMATION FOR ANY COMPONENT OR CONSTRUCTION DETAIL WILL BE FURNISHED UPON REQUEST.

6. DAMPERS ARE FOR VERTICAL MOUNT, HORIZONTAL AIR FLOW ONLY.

7. USE OF OTHER THAN STANDARD ELECTRIC ACTUATORS MAY EFFECT MAXIMUM TEMPERATURE.

8. DAMPER SHOULD BE MOUNTED A MINIMUM OF 1/3 FAN DIAMETER FROM FAN HOUSING.

| REV. | DESCRIPTION | DATE | BY | APPD |
|------|-------------|------|----|------|

DATE:

AWV PROD. No. :

PROJECT :

CUSTOMER / ORDER No. :

ARCH. / ENGR. :

AGENT / ORDER No. :

american warming and ventilating A MESTEK COMPANY

7301 INTERNATIONAL DRIVE

HOLLAND, OHIO

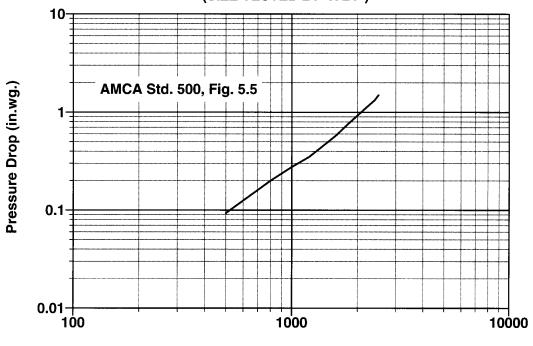
BD-20HD, 22HD & 23HD BACKDRAFT DAMPER

| DRN. BY PRE | DWG. NO. | REV. |
|--------------|-----------|------|
| DATE 4-14-08 | BD-20HD-1 | |

PERFORMANCE DATA FOR MODEL BD-20HD

PRESSURE DROP CURVE

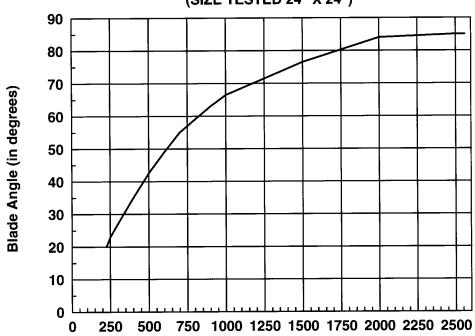
(SIZE TESTED 24" X 24")



BLADE ANGLE CURVE

(SIZE TESTED 24" X 24")

Face Velocity (fpm)



Face Velocity (fpm)



A Mestek Company

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