



REPRESENTED BY:

TODD AIR SOLUTIONS  
101 E FISHER ST, 3rd FLOOR  
SALISBURY NC 28144  
Phone: 704 630-1101  
Fax: 704 630-0528

DRAWING SUBMITTAL

CUSTOMER:

AVANI ENVIRONMENTAL  
PO BOX 1279  
YOUNGSVILLE, NC 27596

DATE: 8/1/13

ATTENTION: Mr. Bill Boisvert  
P.O. # 6510  
CFV # 1309425  
REPRESENTATIVE ORDER # CFQ# 245434

  x   REFERENCE             APPROVAL             CORRECTION

| QTY. | DRAWING NO. | DESCRIPTION         |
|------|-------------|---------------------|
|      | - - - -     | SPECIFICATION SHEET |
|      | 1309425     | MODEL HDBI-330      |
|      | 17110-330   | DISCHARGE DAMPER    |
|      | 27205       | INLET FLANGE        |
|      |             |                     |
|      |             |                     |
|      |             |                     |

REMARKS: 2D CAD FILE ALSO INCLUDED.

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**SPECIFICATION SHEET**

|                           |   |   |                                       |
|---------------------------|---|---|---------------------------------------|
| CFV NO.<br><b>1309425</b> | CUSTOMER ID NUMBER<br><b>3566220</b>                        | PAGE<br><b>1</b>                            | SCHEDULED SHIP DATE<br><b>8/23/13</b> |
| S<br>O<br>L<br>D          | AVANI ENVIRONMENTAL<br>PO BOX 1279<br>YOUNGSVILLE, NC 27596 | CUSTOMER P.O. NUMBER<br><b>6510</b>         | BUYER<br><b>Mr. Bill Boisvert</b>     |
|                           |   | REPRESENTATIVE<br><b>TODD AIR SOLUTIONS</b> | REP. ORDER NO.<br><b>CFQ# 245434</b>  |
| T<br>O                    |   |   |                                       |

MARKS

**6510**

| QTY.                      | DESCRIPTION                             |               |          |              | MODEL                              | ROT         | DISCH         | ARR          | WHEEL/PROP      | INLET        |
|---------------------------|---|---------------|----------|--------------|------------------------------------|-------------|---------------|--------------|-----------------|--------------|
| <b>1</b>                  | <b>HEAVY DUTY BI BLOWER</b>             |               |          |              | <b>HDBI-330</b>                    | <b>CCW</b>  | <b>UB</b>     | <b>4</b>     | <b>HDBI 95%</b> |              |
| MOTOR DATA                | HP                                      | RPM           | PH       | CYCLE        | VOLTAGE                            |             | FRAME         | ENCLOSURE    | SUPPLIED BY     | INSTALLED BY |
|                           | <b>60</b>                               | <b>1750</b>   | <b>3</b> | <b>60</b>    | <b>190/380/50 &amp; 230/460/60</b> |             | <b>364T</b>   | <b>TEFC</b>  | <b>CFV</b>      | <b>CFV</b>   |
|                           | CFV MOTOR PART NUMBER<br><b>377447T</b> |               |          |              |                                    |             |               | GROOVES      | FXD/ADJ         | BELT         |
| FAN DATA                  | DENSITY                                 | TEMP.         | ALTITUDE | CFM          | SP                                 | RPM         | BHP           | MOTOR SHEAVE |                 | BUSHING      |
| AT OPERATING CONDITIONS   | <b>.075</b>                             | <b>70 °F.</b> |          | <b>25000</b> | <b>10.000</b>                      | <b>1770</b> | <b>56.300</b> | FAN SHEAVE   |                 | BUSHING      |
| MOTOR VENDOR MODEL NUMBER | <b>NP0604</b>                           |               |          |              |                                    |             |               |              |                 |              |

Record Print, 2D CAD Drawings

Complete Motor Description:

MTR, 60 HP, 1425/1750 RPM, 3PH, 50/60Hz, 190/380/50 & 230/460/60, TEFC, Prem Eff, FM, 364T, 1.15 SF, F Insul., 40C Amb., Relube with zerk fittings, F1 Box, Conduit box ground screw, Stainless Nameplate, Cast Iron Frame, CE, 60 HP & 1.00 SF ON 50 HZ., IE2 ON 50 HZ., MAX-PE TYPE, TECO

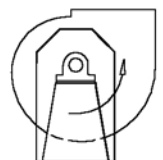
Maximum allowable wheel speed at 70°F is 2300 RPM

Estimated Shipping Weight: 2402 pounds

- CLASS II/III/IV WHEEL CONSTRUCTION
- PAINT DAMPER WITH SAME SPECIAL COATING AS FAN
- MANUAL CONTROLLED OPPOSED BLADE DISCHARGE DAMPER
- DRILL DISCHARGE FLANGE STANDARD
- DRILL INLET FLANGE STANDARD BOLT CIRCLE ON-CENTERS
- BOLTED INSPECTION DOOR AT 9 O'CLOCK
- DRAIN
- TEFLON SHAFT SEAL

FAN TO BE PAINTED AVANI BLUE

Submittal Email: [cbendiksby@avanienvironmental.com](mailto:cbendiksby@avanienvironmental.com)

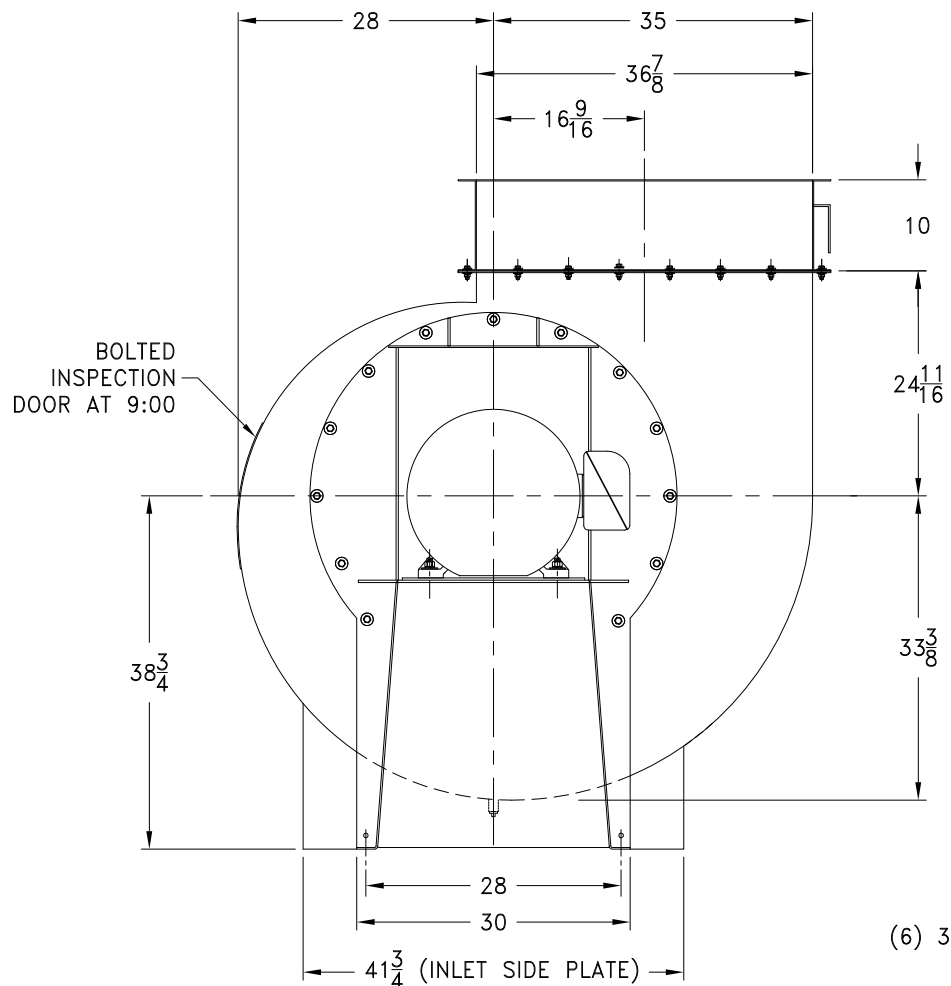


CCW UB

DR. BY                      LG

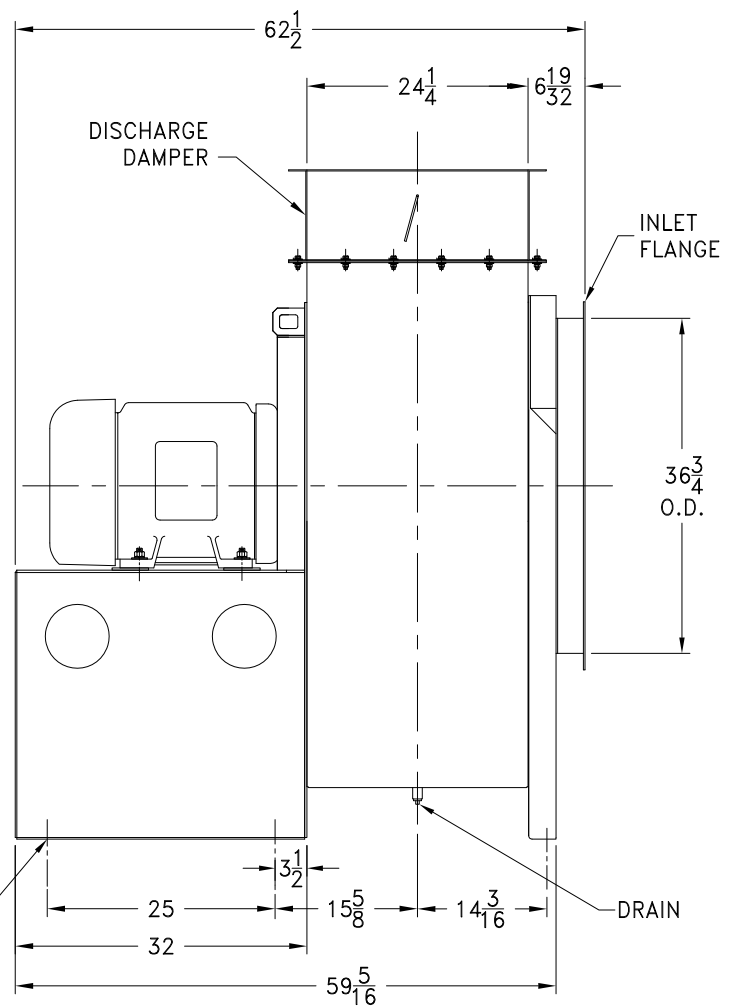
DATE: 8/1/2013

CERTIFIED



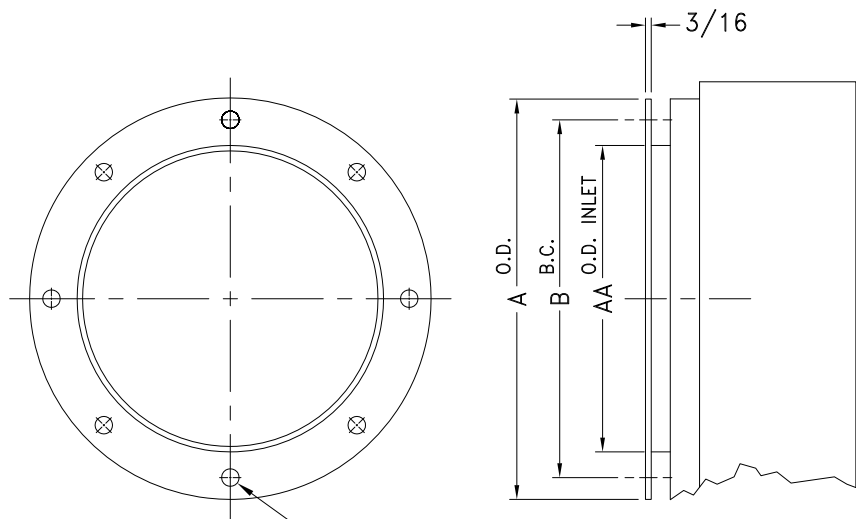
CCW UP BLAST DISCHARGE SHOWN

±1/16  
(6) 3/4 DIA. HOLES

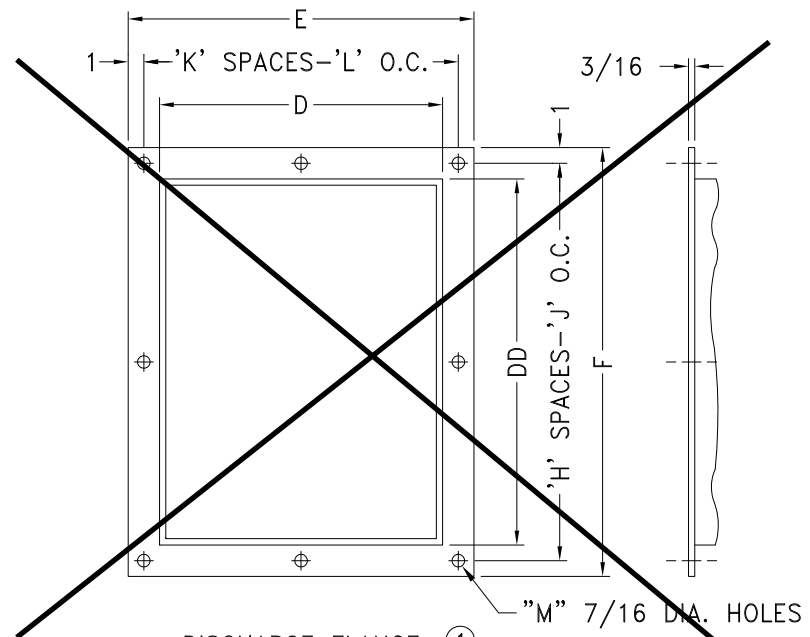


- NOTES:
1. MOTOR: 60 HP, 1750 RPM, 364T FRAME, TEFC.
  2. SEE DRAWING A27205 FOR INLET FLANGE.
  3. SEE DRAWING A17110-330 FOR DISCHARGE DAMPER.
  4. CLASS II/III/IV WHEEL CONSTRUCTION.
  5. TEFLON SHAFT SEAL.

|           |             |      |          |             |  |   |  |                    |  |   |  |
|-----------|-------------|------|----------|-------------|--|---|--|--------------------|--|---|--|
|           |             |      |          | SUPERSEDES: |  | TOLERANCES:<br>FRACTIONS ± 1/8<br>ANGLES: ± 1°<br>DECIMALS: X.XXX = ±0.005<br>X.XX = ±0.060<br>X.X = ±0.120 |  | SCALE: FULL IN CAD |  | <b>cincinnati fan</b><br>7697 SNIDER ROAD MASON, OHIO 45040 |  |
|           |             |      |          | SIMILAR TO: |  | ALL DIMENSIONS IN INCHES<br>UNLESS OTHERWISE SPECIFIED  |  | DATE: 08/01/13     |  |   |  |
|           |             |      |          |             |  |   |  | DR. BY: LG         |  |   |  |
|           |             |      |          |             |  |   |  | CHK. BY:           |  |   |  |
| NO.       | DESCRIPTION | DATE | INITIALS | CERTIFIED   |  | MATERIAL:   |  | ASSEMBLY           |  | DRAWING NO. <b>A</b> 1309425                                |  |
| REVISIONS |             |      |          |             |  |   |  |                    |  | SHEET 1 of 1 REV.   |  |



INLET FLANGE  
"N" HOLES, "P" DIA.

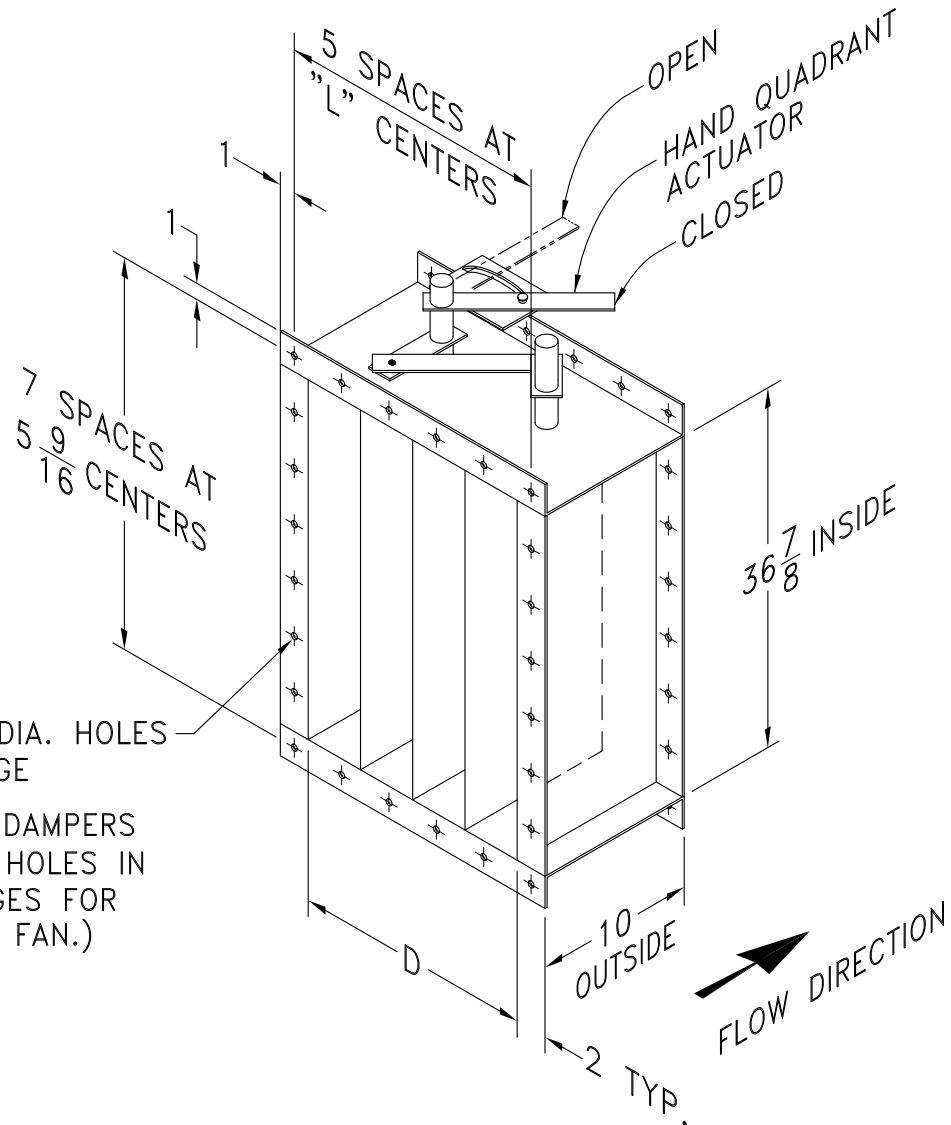


DISCHARGE FLANGE ①  
"M" 7/16 DIA. HOLES

| INLET |        |          |    |         |      |
|-------|--------|----------|----|---------|------|
| SIZE  | A O.D. | B B.C.   | N  | AA DIA. | P    |
| 120   | 16     | 14-3/8   | 8  | 13-1/4  | 7/16 |
| 130   | 17-3/4 | 15-15/16 | 8  | 14-5/8  | 7/16 |
| 150   | 19-1/4 | 17-1/2   | 8  | 16-1/8  | 7/16 |
| 160   | 21-1/8 | 19-3/8   | 8  | 18      | 7/16 |
| 180   | 23-1/2 | 21-1/2   | 12 | 20      | 7/16 |
| 200   | 25-1/2 | 23-1/2   | 12 | 22      | 7/16 |
| 220   | 28-1/8 | 26-1/8   | 12 | 24-5/8  | 7/16 |
| 240   | 30-3/4 | 28-3/4   | 16 | 27      | 7/16 |
| 270   | 33-3/4 | 31-5/8   | 16 | 30      | 7/16 |
| 300   | 37-1/4 | 35-1/4   | 16 | 33-1/2  | 7/16 |
| X 330 | 40-3/8 | 38-3/4   | 16 | 36-3/4  | 1/2  |
| 360   | 43-5/8 | 42       | 16 | 40      | 1/2  |

| DISCHARGE |          |          |   |         |   |         |    |          |  |
|-----------|----------|----------|---|---------|---|---------|----|----------|--|
| D         | E        | F        | H | J       | K | L       | M  | DD       |  |
| 9-3/8     | 13-3/8   | 17-11/16 | 2 | 7-27/32 | 2 | 5-11/16 | 8  | 13-3/4   |  |
| 10-3/8    | 14-3/8   | 19-3/16  | 2 | 8-19/32 | 2 | 6-5/16  | 8  | 15-1/4   |  |
| 11-3/8    | 15-3/8   | 20-3/4   | 3 | 6-1/4   | 2 | 6-11/16 | 10 | 16-13/16 |  |
| 12-1/2    | 16-1/2   | 22-7/16  | 3 | 6-13/16 | 2 | 7-1/4   | 10 | 18-7/16  |  |
| 13-7/8    | 17-7/8   | 24-1/2   | 3 | 7-1/2   | 2 | 7-15/16 | 10 | 20-3/8   |  |
| 15-1/4    | 19-1/4   | 26-3/8   | 3 | 8-1/8   | 3 | 5-3/4   | 12 | 22-3/8   |  |
| 16-7/8    | 20-15/16 | 28-7/8   | 4 | 6-23/32 | 3 | 6-5/16  | 14 | 24-7/8   |  |
| 18-9/16   | 22-5/8   | 31-3/8   | 4 | 7-11/32 | 3 | 6-7/8   | 14 | 27-3/8   |  |
| 20-7/16   | 24-1/2   | 34-1/8   | 4 | 8-1/32  | 3 | 7-1/2   | 14 | 30-1/16  |  |
| 22-3/4    | 26-3/4   | 37-5/8   | 5 | 7-1/8   | 3 | 8-1/4   | 16 | 33-9/16  |  |
| 24-7/8    | 28-7/8   | 40-7/8   | 7 | 5-9/16  | 5 | 5-3/8   | 24 | 36-3/4   |  |
| 27-1/4    | 31-1/4   | 44-1/4   | 7 | 6-1/32  | 5 | 5-27/32 | 24 | 40-1/4   |  |

NOTE:  
① NOT AVAILABLE ON ANY MODEL FOR DOWNBLAST, BOTTOM ANGULAR DOWN OR TOP ANGULAR DOWN DISCHARGE POSITIONS.  
DISCHARGE FLANGE IS STANDARD ON SIZES -270 THRU -360.



(24) 7/16 DIA. HOLES EACH FLANGE

(STANDARD DAMPERS HAVE BOLT HOLES IN BOTH FLANGES FOR BOLTING TO FAN.)

NOTES:

1. OPPOSED BLADE IS STANDARD.  PARALLEL BLADE IS OPTIONAL.
2. DAMPER BLADES WILL BE PERPENDICULAR TO FAN SHAFT.
3. STANDARD MATERIAL IS CARBON STEEL WITH RUST INHIBITING PRIMER.  OPTIONAL MATERIAL \_\_\_\_\_.
4. STANDARD CONSTRUCTION MAX. TEMPERATURE: 300° F.  
 OPTIONAL HIGH TEMPERATURE CONSTRUCTION MAX. TEMPERATURE: 800° F.

|                                     | % WIDTH | D        | L       |
|-------------------------------------|---------|----------|---------|
|                                     | 100     | 24-7/8   | 5-3/8   |
| <input checked="" type="checkbox"/> | 95      | 24-1/4   | 5-1/4   |
|                                     | 90      | 23-9/16  | 5-1/8   |
|                                     | 85      | 22-15/16 | 5       |
|                                     | 80      | 22-1/4   | 4-27/32 |
|                                     | 75      | 21-5/8   | 4-23/32 |
|                                     | 70      | 20-15/16 | 4-19/32 |
|                                     | 65      | 20-5/16  | 4-15/32 |
|                                     | 60      | 19-5/8   | 4-5/16  |
|                                     | 55      | 19       | 4-3/16  |
|                                     | 50      | 18-5/16  | 4-1/16  |
|                                     | 45      | 17-11/16 | 3-15/16 |
|                                     | 40      | 17-1/16  | 3-13/16 |

