

MODEL UBS

BELT DRIVE UPBLAST PROPELLER ROOF EXHAUSTER



MODEL FEATURES

- Exhaust air up to 51,000 CFM in static pressure applications up to 1/2" w.g.
- Straight-through air flow design results in maximum exhaust efficiency
- Belt drives permit easy performance adjustments when needed
- cULus 705 Listed

MODEL OVERVIEW

Model UBS is a high capacity roof mounted exhauster rated from 7,000 to 51,000 CFM. They are general ventilation units designed to economically remove large volumes of air, fumes and vapors from commercial and industrial buildings such as warehouses, manufacturing and assembly plants, chemical plants, foundries and paper mills.

Straight-through air flow design results in maximum exhaust efficiency. During operation, high air flow velocity opens butterfly dampers and prevents rain or snow from entering. Dampers close and cover the venturi opening when unit is not in use.

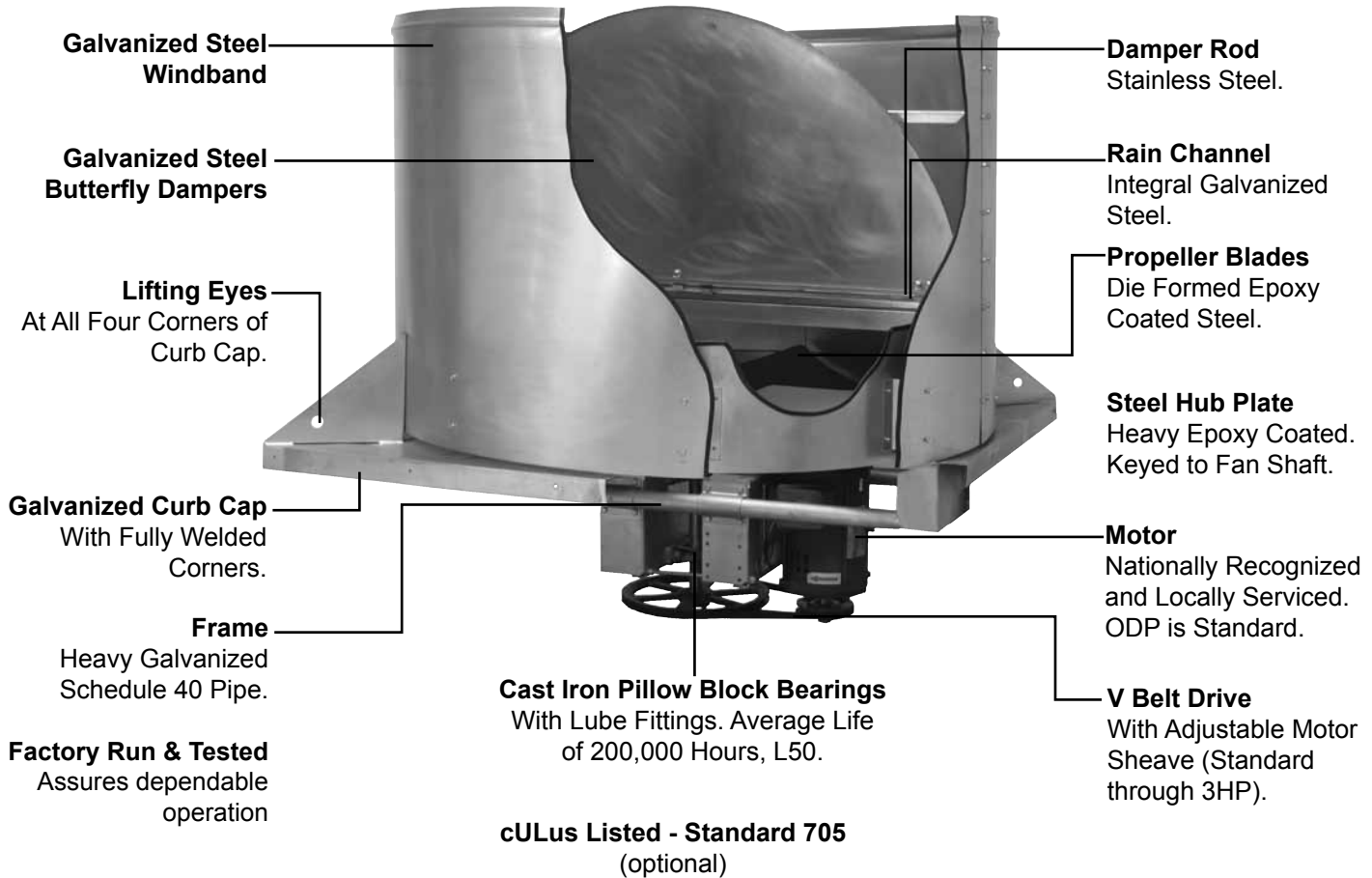
The roof mounted location eliminates interference with processes and equipment inside the building. It also permits locating the exhauster over a source of heated or contaminated air, allowing direct upward venting to the outside, unlike wall mounted exhausters which may move contaminated air through adjacent work spaces.

Belt drive units usually operate more quietly and afford easier performance adjustments, while direct drive models require less maintenance.

1 year fan housing warranty, 1 year motor warranty



CONSTRUCTION FEATURES AND OPTIONS





CONSTRUCTION/SPECIFICATION CHECKLIST

Panel Assembly

- Heavy-gauge G90 galvanized steel panel on all sizes.
- One piece venturi for maximum efficiency.
- Welded and bolted support structure of schedule 40 galvanized pipe.
- Motor/bearing plates of heavy-gauge galvanized steel.
- Lifting eyes standard for ease of installation.

Windband/Butterfly Dampers

- Heavy-gauge galvanized steel windband.
- Galvanized steel butterfly dampers standard.
- Galvanized rain channel drains water from damper area to roof.
- Corrosion resistant.

Propeller

- Steel hub plate with steel taper lock bushing.
- Die formed, heavy-gauge, epoxy coated, steel blades.

Drives

- Sized for minimum 150% of drive horsepower.
- Single belt adjustable pitch sheaves through 3HP.
- Two belt fixed pitch sheaves on 5HP and 7 1/2HP units.
- Adjustable tension rods for belt adjustment.
- Nonstatic oil resistant V belts.
- Keyed, turned, ground and polished shafts coated with an anti-rust compound to resist corrosion.

Bearings

- Bearings designed for minimum 200,000 hour life, L50.
- Cast iron self-aligning pillow block ball bearings.
- Bearings are sealed, prelubricated with relube fittings.

Motors

- Brands are nationally recognized and locally serviced.
- Open drip-proof construction is standard.

OPTIONS/ACCESSORIES

Roof Curb: Prefabricated heavy-gauge galvanized steel, Clip Lock, 14" high with 1 - 1/2" wood nailer. Options include burglar bars, single and double pitch construction, and additional curb heights. Welded & custom curbs available.

Outlet Guard: 1/2" x 1" wire mesh guard will prevent birds and other objects from entering fan.

Disconnect Switch: Nonfused safety disconnects are available for all motor sizes in rain-tight or open enclosures. Explosion proof, Nema4 and 4X are also available.

Magnetic Latches: Help reduce butterfly damper chatter when the units are not in operation.

Cushion Close: Allows butterfly damper doors to close quietly.

Safety Basket Guard: 1/2 x 1" galvanized wire. Guard extends into roof curb. **Important:** For all nonducted applications, the manufacturer recommends that a safety basket guard must be installed as a safety precaution for personnel below unit.

Extended Grease Lines: Extended nylon grease lines allow fan bearings to be relubricated from the exterior of the fan housing.



PERFORMANCE AND DIMENSIONS

Performance Data

| MODEL UBS | CFM @ STATIC PRESSURE | | | | | HP | RPM | Max. BHP | Sones @ .375 |
|-----------|-----------------------|-------|-------|-------|-------|-------|------|----------|--------------|
| | 0 | 1/8 | 1/4 | 3/8 | 1/2 | | | | |
| 24 | 7079 | 6599 | 6023 | 5284 | 3732 | 3/4 | 1070 | 0.82 | 22 |
| | 7939 | 7511 | 7068 | 6461 | 5718 | 1 | 1200 | 1.10 | 27 |
| 30 | 10546 | 9463 | 7865 | 5230 | 3906 | 1 | 871 | 1.10 | 16.8 |
| | 12781 | 11952 | 10895 | 9435 | 7270 | 1-1/2 | 1055 | 1.65 | 23 |
| 36 | 14388 | 13700 | 12782 | 11745 | 10346 | 2 | 1188 | 2.20 | 29 |
| | 11872 | 10354 | 8064 | 5301 | 3522 | 1 | 575 | 1.15 | 14.6 |
| 42 | 14557 | 13389 | 11962 | 9903 | 6871 | 1-1/2 | 705 | 1.65 | 21 |
| | 16415 | 15416 | 14200 | 12722 | 10776 | 2 | 795 | 2.20 | 24 |
| 48 | 19087 | 18221 | 17299 | 16291 | 15181 | 3 | 950 | 3.30 | 36 |
| | 16307 | 14087 | 11400 | 7270 | 5386 | 1-1/2 | 510 | 1.65 | 16.4 |
| 54 | 19184 | 17283 | 15281 | 12804 | 8980 | 2 | 600 | 2.20 | 22 |
| | 22382 | 20749 | 19150 | 17245 | 15170 | 3 | 700 | 3.30 | 31 |
| 60 | 25259 | 23813 | 22382 | 20885 | 19127 | 5 | 790 | 5.50 | 42 |
| | 22656 | 20052 | 16506 | 10504 | 7559 | 2 | 475 | 2.20 | 19.7 |
| 60 | 27187 | 25018 | 25563 | 19410 | 14113 | 3 | 570 | 3.30 | 26 |
| | 31480 | 29606 | 27732 | 25319 | 22538 | 5 | 660 | 5.50 | 33 |
| 60 | 29460 | 25454 | 20962 | 14718 | 11910 | 3 | 485 | 3.30 | 19 |
| | 36456 | 33013 | 30586 | 26237 | 19623 | 5 | 600 | 5.50 | 29 |
| 60 | 44555 | 40707 | 36545 | 27962 | 22834 | 5 | 495 | 5.50 | 26 |
| | 50996 | 47635 | 44150 | 39164 | 31620 | 7-1/2 | 555 | 8.62 | 35 |

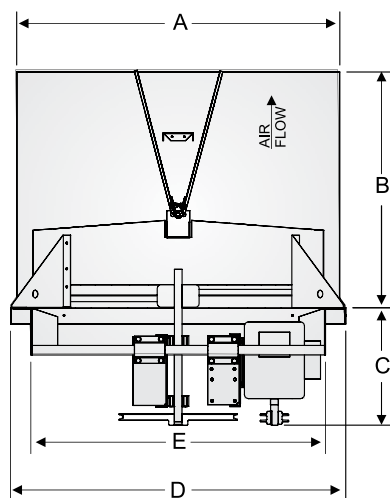


Performance shown is for roof ventilators for installation type A: Free inlet, Free outlet. The power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

Sound ratings are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: Free inlet fan sone levels. For additional sound data and for selections at other static pressures, please refer to the Optimizer Selection Program.

Due to air stream cooling, the motor loading into the service factor shown does not overheat the motor and is within NEMA recommended limits. BHP at most static pressure points is less than the maximum power shown - in many cases substantially less. Use Optimizer to see the exact BHP for your selection.

Dimensional Data



| MODEL UBS | A | B | C | D | E | F | METAL GAUGES | | Average Wt. Lbs. |
|-----------|----|----|----|----|----|----|--------------|-----------|------------------|
| | | | | | | | WIND SHROUD | FAN PANEL | |
| 24 | 30 | 26 | 20 | 32 | 28 | 31 | 18 | 16 | 250 |
| 30 | 36 | 29 | 21 | 38 | 34 | 37 | 18 | 16 | 325 |
| 36 | 42 | 31 | 21 | 44 | 40 | 43 | 18 | 16 | 350 |
| 42 | 48 | 34 | 22 | 50 | 46 | 49 | 18 | 16 | 425 |
| 48 | 54 | 37 | 26 | 56 | 52 | 55 | 18 | 16 | 450 |
| 54 | 60 | 40 | 26 | 62 | 58 | 61 | 18 | 14 | 575 |
| 60 | 66 | 43 | 26 | 68 | 64 | 67 | 18 | 14 | 750 |

- A - Outside Diameter of Windband.
- B - Height of Unit Above Curb Cap.
- C - Maximum Depth of Unit Below Top of Curb, Actual Depth Varies with Motor Size.
- D - Inside Dimension of Square Curb Cap.
- E - Minimum Inside Dimension of Curb Opening Required for Adequate Clearance of Fan Frame.
- F - Outside Dimension of Factory Built Prefab Curb.