

# **MODEL UBRD**

## REMOTE DRIVE UPBLAST PROPELLER ROOF EXHAUSTER



### **MODEL FEATURES**

- Exhaust air up to 72,000 CFM in static pressure applications up to 1/2" w.g.
- Straight-through air flow design results in maximum exhaust efficiency
- · Motor and drives are located outside of the exhaust airstream
- Belt drives permit easy performance adjustments when needed
- cULus 705 Listed

#### **MODEL OVERVIEW**

Model UBRD units are high capacity belt driven roof mounted exhausters rated from 4,500 to 72,000 CFM. The motor and drives are located outside of the exhaust airstream, making these units especially suited for the removal of heated or contaminated air from commercial and industrial buildings or processes where these conditions exist. All models are capable of continuous operation exhausting air to 200°F.

The remote drive construction allows for easy rooftop belt and motor access for maintenance. For increased air performance (in clean conditions) with the same easy maintenance access, the UBRD is available without the belt and bearing enclosures.

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.

1 year fan housing warranty, 1 year motor warranty

# (2°b)

## CONSTRUCTION/SPECIFICATION CHECKLIST

#### **Panel Assembly**

- Heavy-gauge G90 galvanized steel panel, size 24-72.
- One piece venturi for maximum efficiency and strength.
- All welded support structure of schedule 40 galvanized pipe (minimum).
- Motor/bearing plates of minimum 10 gauge galvanized steel.

#### Windband/Butterfly Dampers

- Heavy-gauge galvanized steel windband.
- Steel dampers standard (except on sizes 48-72).
- Translucent fiberglass dampers available on all sizes (standard on sizes 48-72).
- Galvanized rain channel drains water from damper area to roof.
- Galvanized damper shaft rotates in bronze bushing.

#### **Propeller**

- Two, three, four or six airfoil aluminum blades.
- · Steel hub plate with steel taper lock bushing.
- Adjustable pitch for optimum efficiency.
- Die formed steel blades are optional where required.

#### **Drives**

- Shielded from airstream by galvanized steel enclosure.
- Sized for minimum 150% of drive horsepower.
- Single belt adjustable pitch sheaves through 3HP.
- Two belt fixed pitch sheaves through 10HP.
- Adjustable pitch sheaves are optional above 3HP.
- Adjustable tension rods for belt adjustment.
- Nonstatic oil resistant v-belts.
- Keyed, turned, ground and polished shafts.

#### **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**

- Located outside airstream under weather cover.
- Brands are nationally recognized and locally serviced.
- Open drip-proof construction is standard.
- High-efficiency, explosion proof, totally enclosed fan cooled (TEFC) and corrosion duty motors can be specified.

#### Certifications

cULus 705 listed power roof ventilator assures electrical reliability (optional).



## **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.

**Disconnect Switch:** Nonfused safety disconnects are available for all motor sizes in rain-tight or open enclosures.

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

**Heat/Smoke Vent:** Opens damper doors when temperature exceeds 165°F. Allows heat and smoke to escape building without use of fan power.

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

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

**Aluminum Construction:** Optional aluminum construction available on windbands, curb caps, panel and blades.

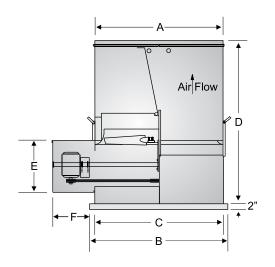
**Special Coatings:** Powered roof exhausters often require special coatings for protective and decorative purposes. Available coatings include: Synthetic Resin, Epoxy, and Heresite (air-dried phenolic). Contact your representative or the factory for more information on available coatings and colors.



# **PERFORMANCE**

Model	CFM @ Static Pressure						DDM	Blades	Max	Sones @
UBRD	0	1/8	1/4	3/8	1/2	HP	RPM	/ Pitch	BHP	5 ft.
24	6605	5980	5262	4416	-	3/4	1210	3	0.82	20
	7286	6715	6081	5410	-	1	1335	3	1.11	23
	8353	7866	7323	6752	6127	1-1/2	1525	3	1.65	30
	9200	8740	8280	7774	7268	2	1680	3	2.21	35
30	10230	9114	7812	_	-	1	960	3	1.15	23
	11625	10602	9579	8370	-	1-1/2	1090	3	1.69	31
	12741	11904	10881	9858	8742	2	1200	3	2.25	37
	14508	13764	12927	12090	11160	3	1370	3	3.35	44
36	12861	10752	-	-	-	1	700	3	1.10	19
	14688	12768	10656	-	-	1-1/2	795	3	1.57	25
	16512	14880	12960	10848	-	2	895	3	2.30	30
	18816	17280	15744	14112	12192	3	1020	3	3.48	35
42	18414	15624	-	-	-	1-1/2	640	3	1.68	23
	20553	17949	14880	-	-	2	710	3	2.30	28
	23250	21018	18414	15624	-	3	805	3	3.35	35
	27261	25668	23529	21390	18879	5	950	3	5.51	43
48	24196	20700	16192	-	-	2	575	3	2.31	23
	27784	24564	20884	16376	-	3	655	3	3.41	32
	32660	29900	27048	23736	19780	5	770	3	5.54	43
	37352	34960	32476	29992	26956	7-1/2	880	3	8.27	52
	41216	39100	36892	34500	32016	10	970	3	11.07	58
54	33250	28690	22990	-	-	3	545	3	3.39	26
	39140	35055	30875	25650	-	5	640	3	5.49	38
	44840	41515	37810	33915	29335	7-1/2	735	3	8.32	48
	49210	46075	42750	39235	35530	10	805	3	10.92	56
60	44826	39618	33480	25854	-	5	550	3	5.50	36
	51336	46779	41850	36084	-	7-1/2	630	3	8.27	49
	56730	52638	48267	43431	37851	10	695	3	11.10	58
72	57381	48267	37665	-	-	5	410	3	5.47	29
	65751	57939	49476	-	-	7-1/2	470	3	8.24	40
	72726	65844	58404	49569	-	10	520	3	11.15	48

# **DIMENSIONS**



Model	Dimensions (Inches)								
UBRD	Α	В	С	D	E	F	G		
24	30	32	30	50	22	16	31		
30	36	38	36	54	22	16	37		
36	42	44	42	56	22	16	43		
42	48	50	48	59	22	16	49		
48	54	56	54	68	22	22	55		
54	60	62	60	70	22	22	61		
60	66	68	66	74	22	22	67		
72	80	82	80	86	22	22	81		

- A Outside dimension of windband.
  B Inside dimension of square curb cap.
  C Inside dimension of square fan base.
  B Outside dimension of factory built prefab curb.
- **D** Height of unit above curb.