

# UBS Upblast Propeller Roof Exhauster

Belt Drive

Catalog UBS01-July 2007



# The World's Leading Producer of Air Movement Products



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## Model UBS Belt Drive Upblast Propeller Roof Exhausters

#### **Application**

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, the high air flow velocity opens butterfly dampers and helps prevent 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.

# **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 minimum 10 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 I/2HP units.
- 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.
- 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, welded construction, I2" high with I - I / 2" treated wood nailer. Options include burglar bars, single and double pitch construction, and additional curb heights.

**Disconnect Switch:** Nonfused safety disconnects are available for all motor sizes in rain-tight or open enclosures. Explosion Proof, Nema 4 and Nema 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.

**cULus Standard 705 Listing:** Assures electrical safety and reliability. Optional.

**Safety Basket Guard:** 1/2" x 1" galvanized welded wire. Recommended as a safety precaution for personnel below unit. Guard extends into roof curb.

**Extended Grease Lines:** Extended nylon grease lines allow motor and /or fan bearings to be relubricated from the exterior of the fan housing.

#### Quickship Program

Many UBS Models and optional accessories are available on the Soler & Palau USA Quickship Program. This program provides rapid delivery of standard products so that tight project deadlines can be met and downtime on replacement work can be held to a minimum.

#### **Optisizer Fan Selection Program**

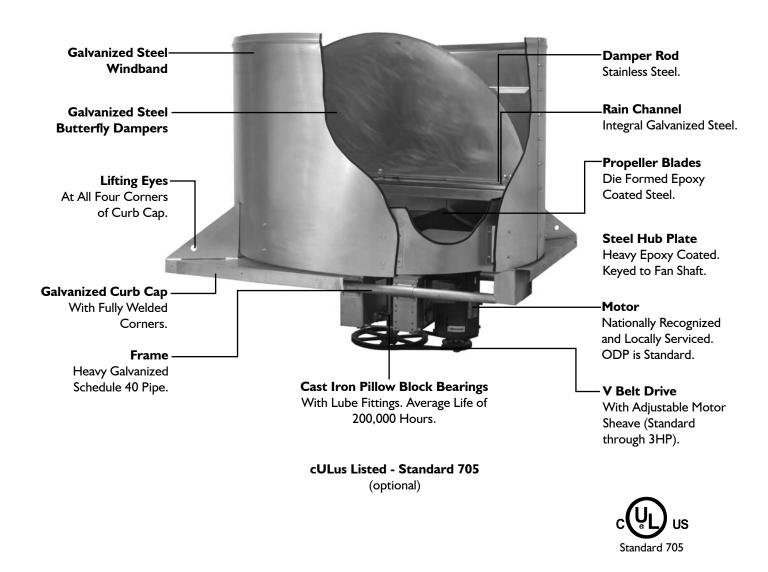
Please refer to Soler & Palau USA's Optisizer fan selection program for fan curve, submittal information and other details of the UBS series and other Soler & Palau USA products. Download your copy from www.solerpalau-usa.com.

All specifications are subject to change without notice unless approved in submittal by Soler & Palau USA.



# Sap

#### Model UBS



#### **SOLER & PALAU USA LIMITED WARRANTY**

Soler & Palau USA (manufacturer), 6393 Powers Avenue, Jacksonville, Florida 32217, warrants the UBS to be free from defects in design, materials and workmanship (exclusive of abrasion, corrosion or erosion) for one (1) year from the date of shipment to the original purchaser or the date of notification of readiness to ship. Motor warranty is one (1) year. In order to claim the benefit of this warranty, buyer must notify manufacturer in writing of the claimed defect within ten (10) days after discovering it and return this equipment or parts to the factory with transportation prepaid. In the event of onsite repair, no service technician will be dispatched until manufacturer receives your written purchase order. If any of the following conditions exist, the warranty will be null and void: (1) Buyer has permitted other persons not approved or authorized by manufacturer to alter, adjust, replace or repair the equipment or any part there of. (2) Buyer has not followed instructions or other directions given in the contract documents or our maintenance manual. (3) When breakage or other loss or damage is the result of any negligence, misuse or fault on the part of any operator or other person not under our supervision or control. (4) The defect is the result of designs or drawings made, furnished or specified by others. (5) In the case of goods not manufactured but supplied by the manufacturer as part of a contract, manufacturer shall only be liable to the same extent that our supplier is to manufacturer, not to exceed any liability manufacturer would have for warranty on our own equipment. (6) Buyer has not paid in full any invoices submitted to buyer which are due for payment. (7) Unusual wear and tear of the equipment. Statements relating to the product, its use or installation made prior to the execution of the agreement, are not warranties except to the extent that the contrary is expressly set forth herein. It is understood that such statements were not intended to, and did not, form a part of the agreement; they were merely made in the course of negotiations of the parties. This warranty is IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. OUR SOLE AND EXCLUSIVE OBLIGATION UNDER THIS WARRANTY IS TO REPAIR OR REPLACE DEFECTIVE EQUIPMENT OR PARTS OR, AT OUR OPTION, TO PAY THE REASONABLE COST OF REPAIR OR REPLACEMENT. BUYER AGREES THAT NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES, DAMAGES FOR LOST PROFITS OR SALES, OR DAMAGES FOR INJURIES TO PERSON OR PROPERTY) SHALL BE AVAILABLE. NOTWITHSTANDING THE ABOVE, THE TOTAL AMOUNT THAT MAY IN ANY EVENT BE PAYABLE IN SETTLEMENT OF LIABILITY, HOWEVER INCURRED, SHALL NOT EXCEED THE CONTRACT PRICE.

### Performance Data

MODEL UBS	CF	TATIC F	PRESSU			Max.	Sones		
	0	1/8	1/4	3/8	1/2	£	RPM	ВНР	@ .375
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	I	755	1.10	16.8
	12781	11952	10895	9435	7270	1-1/2	915	1.65	23
	14388	13700	12782	11745	10346	2	1030	2.20	29
36	11872	10354	8064	5301	3522	I	575	1.15	14.6
	14557	13389	11962	9903	687 I	1-1/2	705	1.65	21
	16415	15416	14200	12722	10776	2	795	2.20	24
	19087	18221	17299	16291	15181	3	950	3.30	36
42	16307	14087	11400	7270	5386	1-1/2	510	1.65	16.4
	19184	17283	15281	12804	8980	2	600	2.20	22
	22382	20749	19150	17245	15170	3	700	3.30	31
	25259	23813	22382	20885	19127	5	790	5.50	42
48	22656	20052	16506	10504	7559	2	475	2.20	19.7
	27187	25018	25563	19410	14113	3	570	3.30	26
	31480	29606	27732	25319	22538	5	660	5.50	33
54	29460	25454	20962	14718	11910	3	400	3.30	19
	36456	33013	30586	26237	19623	5	495	5.50	29
60	44555	40707	36545	27962	22834	5	415	5.50	26
	50996	47635	44150	39164	31620	7-1/2	475	8.62	35

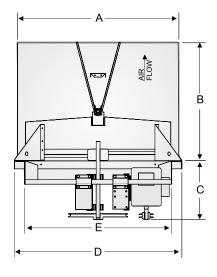
Performance shown is for roof ventilators for installation type A: Free inlet, Free outlet. The power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

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 Optisizer 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 Optisizer to see the exact BHP for your selection.



## **Dimensional Data**



MODEL		В	n	D	Е	F	METAL G	Average	
UBS	A						WIND SHROUD	FAN PANEL	Wt. Lbs.
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.

DUE TO CONTINUING RESEARCH SOLER & PALAU USA RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE

#### **Distributed By:**



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