



**DESICCANT ROTORS INTERNATIONAL PVT. LTD.**

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## TECHNICAL SPECIFICATION

Bulletin : DRI-UVS-020-00  
 Effective : November 7<sup>th</sup>, 2009  
 Supersedes :  
 Dated :

### DEDICATED OUTDOOR AIR SYSTEM (Ultima VENTILATION SYSTEM) Ultima SERIES (UVS-2500 to 50000)



VENTILATION SYSTEM THE COMPLETE FRESH AIR MANAGEMENT SYSTEM COMES WITH FOLLOWING OUTSTANDING FEATURES

#### CASING

- DOUBLE SKIN CASING (43mm) MADE OF 0.8mm THK INNER & OUTER PRE POWDER COATED & PLASTICISED SHEETS.
- CASING/PANELS INSULATED WITH FIBER GLASS INSULATION CROWN-300 HAVING DENSITY OF 48 kg/cubic meter.
- THE CASING MEETS THE EUROVENT TIGHTNESS CLASS B AS PER EN 1886.
- CASING STRENGTH 1A (NEW D2).
- FILTER LEAKAGE CLASS F8
- THERMAL TRANSMITTANCE T2
- THERMAL BRIDGING FACTOR TB2
- UNITIZED SYSTEM COMPLETE WITH NECESSARY COMPONENTS SUCH AS FANS, HEAT RECOVERY WHEEL, PDHC WHEEL, FILTERS (COARSE FILTER -G3), COOLING COIL, SUPPLY AIR & RETURN AIR VOLUME CONTROL DAMPERS.
- AVAILABLE IN 11 SIZES, WITH AIR FLOW RANGE OF 2500-50000 CMH
- HIGH EFFICIENCY PLENUM FANS FOR SUPPLY & EXHAUST AIR STREAMS.
- HIGH EFFICIENCY MOTORS (EFF1)
- DUCT CONNECTION FRAME.

#### PDHC WHEEL

- PDHC WHEEL IS DESIGNED FOR MOISTURE REMOVAL FRESH AIR STREAM WITHOUT HEAT/THERMAL REGENERATION
- HIGH PERFORMANCE IN SITU SYNTHESIZED DESICCANT.
- NO WASHING AWAY OF DESICCANT ON CONTINUED EXPOSURE TO SATURATED/WET AIR.
- FULLY WATER WASHABLE.
- 100% NON FLAMMABLE.
- UNIQUE SEAL ARRANGEMENT ENSURES NEARLY ZERO CARRYOVER/ LEAKAGE BETWEEN THE TWO AIR STREAMS.
- PDHC WHEEL DEPTH 200mm.
- EXTERMLY LOW ROTATIONAL SPEED.

#### ENTHALPY WHEEL

- MOLECULAR SIEVE COATED ALUMINIUM "EcoFresh" TOTAL ENERGY RECOVERY WHEEL.
- EQUAL SENSIBLE AND LATENT RECOVERY.
- THE ROTOR IS MADE OF ALTERNATE FLAT AND CORRUGATED ALUMINIUM FOIL OF VERY UNIFORM PITCH AND HEIGHT.
- THE MEDIA IS CLEANABLE WITH COMPRESSED AIR.
- THE SURFACE OF THE WHEEL IS HIGHLY POLISHED TO ENSURE THAT THE VERTICAL RUNOUT DOES NOT EXCEED ±1mm FOR EVERY METER DIAMETER.
- ENTHALPY WHEEL DEPTH 270mm.
- LOWER ROTATIONAL SPEED.
- THE FACE AND RADIAL SEALS ARE BRUSH (upto 2000mm)
- THE FACE AND RADIAL SEALS ARE FOUR (4) PASS NON CONTACT LABYRINTH SEALS (ABOVE 2200mm) FOR EFFECTIVE SEALING BETWEEN THE TWO AIR STREAM.
- ROTOR FACE EDGES ARE HARDENED WHICH ENSURES LONG LIFE OF THE MEDIA.

#### DRI SMART EMS (Energy Management Systems)

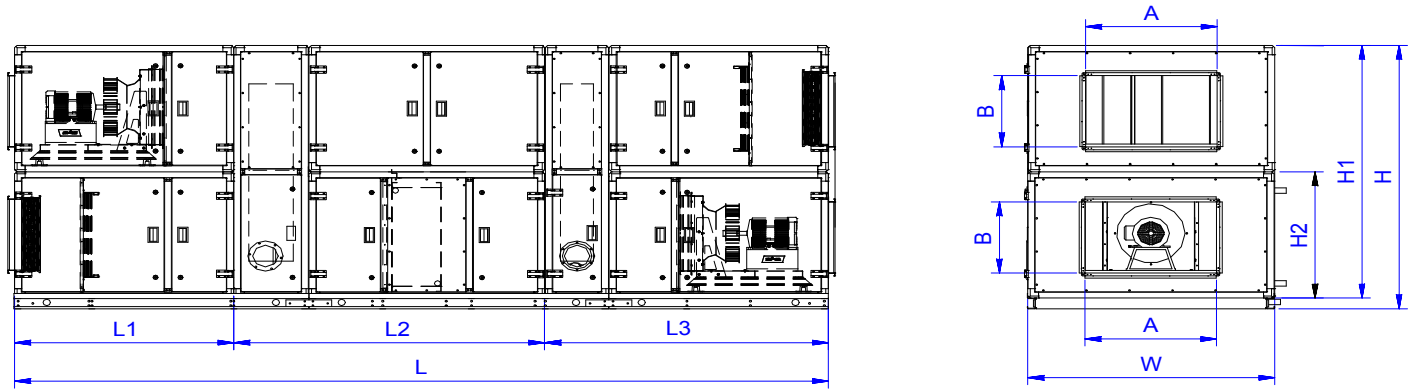
- FULLY AUTOMATIC MICRO PROCESSOR CONTROLLED OPERATION.
- INBUILT CO2 DEMAND CONTROL VENTILATION (DCV) OPTION.
- INBUILT DUAL SENSORS.
- CAN BE CONNECTED WITH THE BUILDING MANAGEMENT SYSTEM (BMS) THROUGH SUITABLE COMMUNICATION PROTOCOL.

ULTIMA VENTILATON SYSTEM UNITS CONSISTS OF A NUMBER OF COMPLETE FUNCTIONAL SECTIONS. A STANDARD UNIT COMES WITH 11 MODULES.



ALL DATA SUBJECT TO CHANGE WITHOUT NOTICE

**Ultima** DOAS . . . Ultimate Ventilation System . . . UVS series . . . Technical Data\*



S No.	Unit Model	Air Volume			Dimensions in mm										Weight in Kgs.	Power Requirement
		CMH	m3/s	CFM	L	L1	L2	L3	W	H	H1	H2	A	B		
1	UVS-2500	2500	0.69	1471	4525	1115	1890	1500	1070	1515	1440	720	500	300	1220	415V/3Ph/50Hz
2	UVS-3500	3500	0.97	2060	4735	1220	1890	1605	1200	1675	1600	800	700	300	1456	415V/3Ph/50Hz
3	UVS-6000	6000	1.67	3531	4965	1335	1890	1720	1500	1855	1780	890	800	500	1970	415V/3Ph/50Hz
4	UVS-8000	8000	2.22	4708	5235	1470	1890	1855	1700	2055	1980	990	1000	500	2512	415V/3Ph/50Hz
5	UVS-10000	10000	2.78	5885	5525	1615	1890	2000	1850	2270	2170	1085	1200	600	3242	415V/3Ph/50Hz
6	UVS-15000	15000	4.17	8828	5835	1770	1890	2155	2240	2510	2410	1205	1400	800	4042	415V/3Ph/50Hz
7	UVS-20000	20000	5.56	11770	6955	2165	2055	2715	2650	3110	3010	1505	1600	800	6415	415V/3Ph/50Hz
8	UVS-25000	25000	6.94	14713	7425	2400	2055	2950	2900	3520	3370	1685	1800	900	7905	415V/3Ph/50Hz
9	UVS-30000	30000	8.33	17655	7955	2665	2055	3215	3150	3920	3770	1885	2000	1000	9620	415V/3Ph/50Hz
10	UVS-40000	40000	11.11	23540	8595	2930	2110	3535	3550	4320	4170	2085	2200	1200	12643	415V/3Ph/50Hz
11	UVS-50000	50000	13.89	29425	9265	3265	2110	3870	3950	4800	4650	2325	2400	1400	15343	415V/3Ph/50Hz

\*Because of our policy of continuous product improvements, specifications are subject to change without notice.