# We Care for Your Needs

# CEILING & CABINET EXHAUST FANS

**CF Series** 







# **TABLE OF CONTENTS**

GENERAL INFORMATION	03-04
CONSTRUCTION FEATURES	05
OPTIONS & ACCEESSORIES	06
CEILING & CABINET FANS DATA	07-14



# **CEILING & CABINET EXHAUST FANS**

CF Series

#### **OVERVIEW**

Twin City CF Ceiling and Inline cabinet Ventilators are designed for commercial applications requiring quiet, continuous, reliable operation. Exhausters are constructed with a low profile grille and are easy to duct horizontally, vertically or inline, with many models offering round duct connectors as standard.

#### TYPICAL APPLICATIONS INCLUDE

Suitable for indoor and outdoor applications, light commercial and industrial applications such as schools, shops, sports complexes, offices, restaurants, Bathroom Exhaust, HVAC, Home Ventilation

#### **CONFIGURATIONS**

Horizontal Ceiling or base Mount

### **Ceiling Units**

Available in 05 sizes

- ➤ CF140L ➤ CF140M ➤ CF133DI
- > CF140H > CF160L

#### **Cabinet Units**

Available in 08 sizes

- ➤ CF140L-I ➤ CF133DI-I
- ➤ CF140M-I ➤ CF140DI-I
- ➤ CF140H-I
  ➤ CF175DI-I
- ➤ CF160L-I ➤ CF225DI-I

#### **FAN PERFORMANCE**

The high performance, low noise level motor, combined with a cabinet material makes CF units particularly suitable where low sound operating levels are critical.

#### **FEATURES & BENEFITS**

- High performance pressure developing Inline/Ceiling fan suitable for extract or input applications using circular ductwork
- ➤ Insulation class B & F
- Motors Direct drive, Single and double inlet, forward curved centrifugal fan / scroll assembly
- ➤ Continuously rated capacitor start and run motor with sealed for life bearings and safety thermal overload protection
- Metal impeller balanced to ISO 1940- G 2.5
- > IP54/55 terminal box
- Fans are easily disconnected from a mounting plate for cleaning
- Supply voltage: 230-240V 50/60Hz

#### **CERTIFICATIONS**

AMCA Sound and Air, CE & IEC for Electrical and RoHS



Twin City Fan & Blower certifies that the Models CF140L, CF140M, CF140H, CF160L & CF133DI shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

#### Low Voltage Directive



IEC 60335-2-80:2015 in conjunction with IEC 60335-1:2010, COR1:2010, COR2:2011, AMD1:2013, AMD2:2016.

#### **EMC Directive**

EN 55014-1: 2017+A11: 2020; EN IEC 61000-3-2: 2019;EN 61000-3-3: 2013+A1:2019; EN 55014-2: 2015(IEC 61000-4-2; IEC 61000-4-4; IEC 61000-4-5; IEC 61000-4-11).



#### **RoHS Directive**

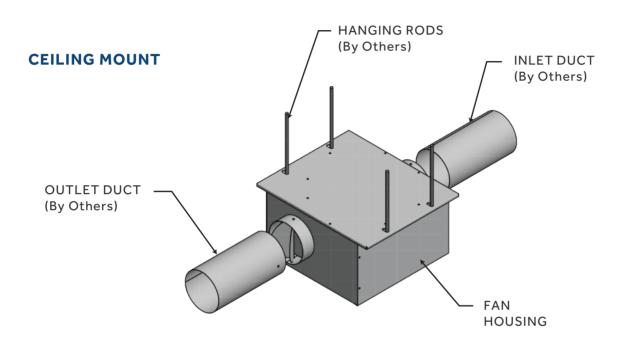
Restriction of Hazardous substances in Electrical and Electronic Equipments.

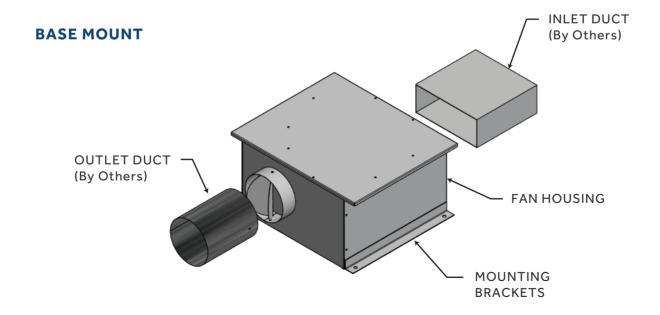
### **EASY INSTALLATION**

The compact design of the range allows the fans to easily be accommodated above a suspended ceiling or floor void using the mounting points provided.

#### **INTERNAL WIRING**

TEAO motors are factory-wired between the motor and junction box. For either Ceiling or Cabinet models, an electric disconnect is available.





#### **CASING**

A low profile for height-restricted areas, Unit casings is manufactured from best quality grade galvanized steel for weather proof IP65, with mounting brackets.

> Aluminum casing is optional.

# SINGLE/DOUBLE-WIDTH FORWARD-CURVED

Single-inlet, single width, or double-inlet, double width, Centrifugal type with high efficiency, low noise, forwardcurved, galvanized sheet steel impellers housed within galvanized steel/plastic scrolls.

Motor/impeller assemblies are statically and dynamically balanced, in two planes, in accordance with ISO 1940 G2.5.

Fans are mounted individually on to fan decks to facilitate easy removal.





#### **TERMINAL BOX**

Electrical connections are wired via an external IP 55/65/66 terminal box, with removable cover.

#### **GRILLE**

Aluminum, Powder Coated, Concealed attachment screws securely fasten the grille to the housing for quiet operation.







> LED light is optional

#### **MOTORS**

Motors are totally enclosed, high-efficiency, external rotor type Max. ambient operating temp. at least 60°C. Bearings are sealed-for-life, maintenance-free, ball bearing type with a minimum life expectancy of 50,000 hours under design operating conditions. Thermal contactors are incorporated into the windings to ensure overload protection.

Insulation is Class F with IP44 enclosure.

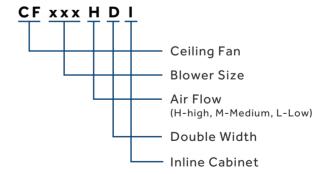
#### INLET/OUTLET

Round - For quick and easy connections Rectangle - For quick and easy connections.

#### **BACKDRAFT DAMPER**

Built in Aluminum damper to reduce back drafts.

#### **ORDER CODE**





#### **Variable Speed Control**

Variable Speed Control is an optional accessory; allow the adjustment of airflow for system balancing. Variable speed controllers are solid-state design, Variable speed controls can be shipped separately.

**Discharge Wall Cap - Aluminum** 





#### **Disconnect Switch**

NEMA 1 type disconnect switch mounted in the motor compartment when ODP or TEFC motors used. When explosion proof motors are specified, a NEMA7/9 disconnect switch will be shipped loose for field mounting and wiring.

Spring Isolators - Hunger Type





Floor Mounting Brackets

Rubber Isolators - Hunger Type





**Discharge Louver - Aluminum** 

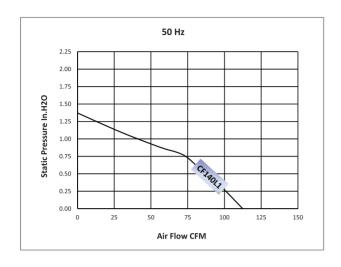
Decorative Grilles with LED Light

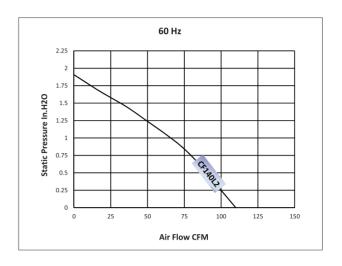




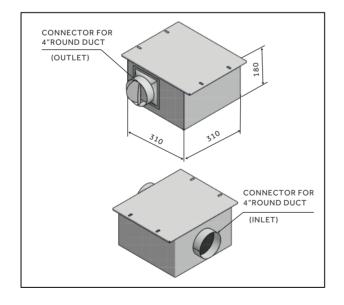


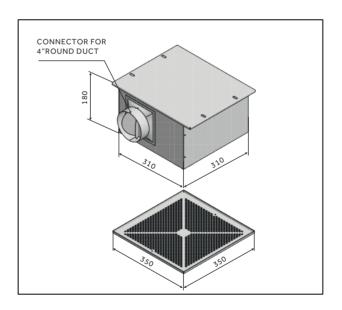
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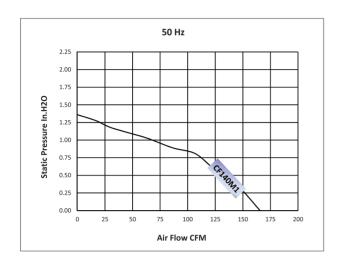


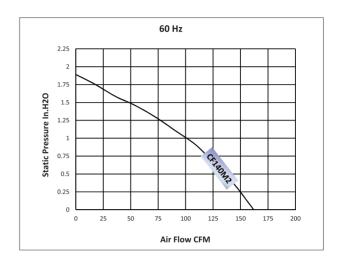
Hz KW			RPM	0.00" Pst	0.125"Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst
	KW	A		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF140L1	0.070	0.17	7 820	112	107	101	94	87	80	74	-
CF140L1-I	0.039 0.1	0.17		9.4	9.4	8.9	8.9	9	9	9	-
CF140L2	0.044	0.10 700	110	105	100	95	90	85	79	66	
CF140L2-I	0.041	0.18	780	9	9	8.9	8.9	9	9	9	9



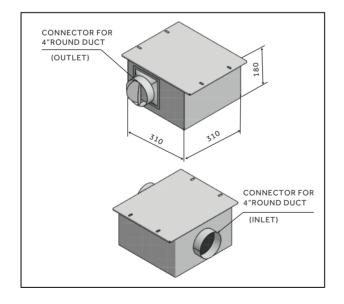


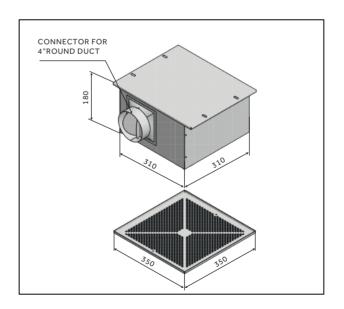
## > CF140M / CF140M-I - 230V 1 ~ - 50/60Hz



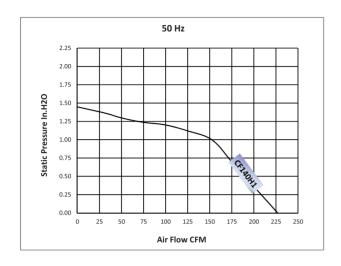


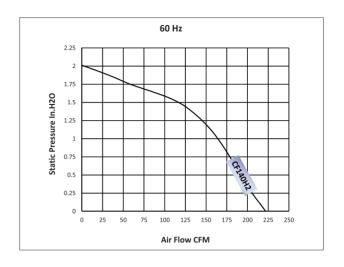
Hz KW			RPM	0.00" Pst	0.125"Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst
	KW	A		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF140M1	0.063	0.3	1305	165	158	152	144	133	121	113	-
CF140M1-I	0.063	0.3	1305	5.7	5.7	5.2	5.2	5.2	5.9	5.9	-
CF140M2	0.055	0.20	28 1480	162	156	150	143	136	127	120	101
CF140M2-I	0.065	0.28		5.4	5.2	5.2	5.2	5.2	5.9	5.9	5.9



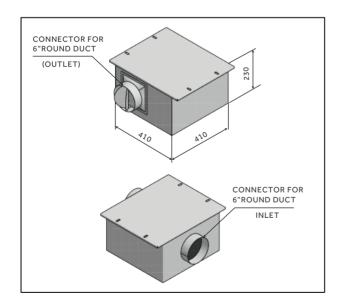


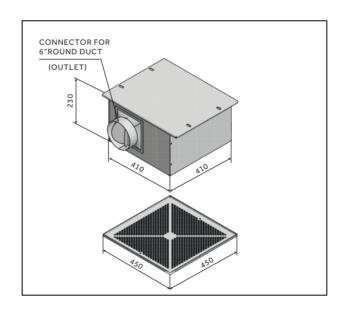
# > CF140H / CF140H-I - 230V 1 ~ - 50/60Hz



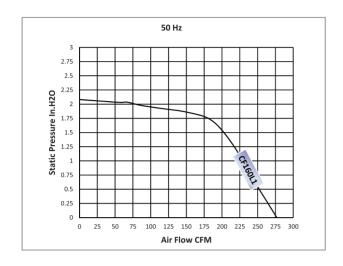


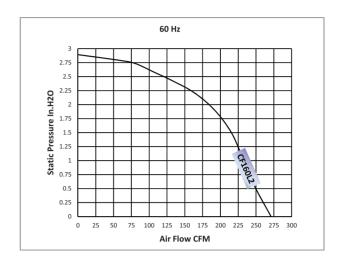
Hz KW			RPM	0.00" Pst	0.125"Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst
	KW	A		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF140H1	0 112	0.50	1580	227	217	208	199	190	180	172	152
CF140H1-I	0.112 0	0.50	50 1580	8	8	7.9	7.9	7.8	7.8	7.8	7.5
CF140H2	0.125	0.55	0.55 1550	222	214	205	197	192	185	179	164
CF140H2-I	0.125			7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.7



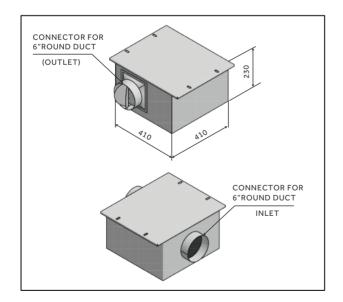


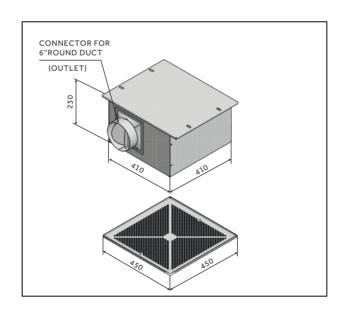
# > CF160L / CF160L-I - 230V 1 ~ - 50/60Hz



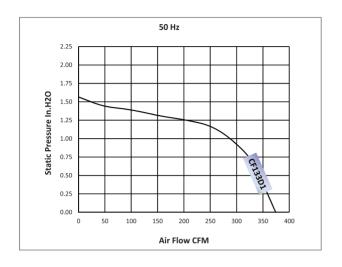


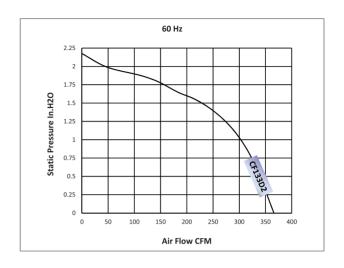
			RPM	0.00" Pst	0.125"Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst
Hz	KW	A		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF160L1	0.210	0.95	2000	277	270	265	258	252	246	240	229
CF160L1-I	0.219 0.9	0.95	2000	10	10	9.3	9.3	9.5	9.5	9.5	9.8
CF160L2	0.244	1.00	1.08 1820	271	266	260	255	250	246	240	232
CF160L2-I	0.244	1.08		9.5	9.5	9.3	9.3	9.5	9.5	9.5	9.8



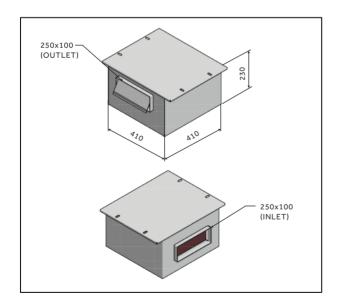


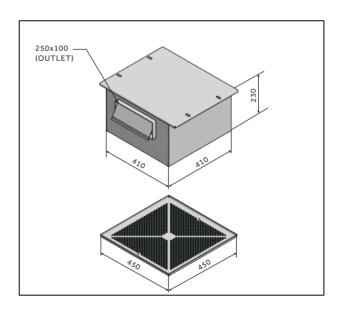
# > CF133D / CF133D-I - 230V 1 ~ - 50/60Hz



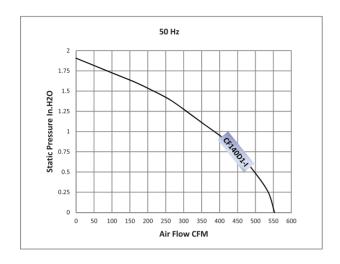


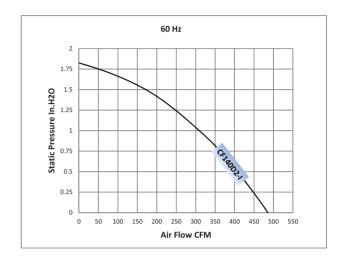
Hz KW				0.00" Pst	0.125"Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst
	KW	A	RPM	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF133DI1	0.197	0.04	.84 1780	374	366	359	344	335	324	307	288
CF133D1-I		0.64		7.1	7.1	6.5	6.5	6.7	7.5	7.5	7.5
CF133D2	0.000	0.80	1500	366	360	353	346	332	324	315	303
CF133D2-I	0.209	0.89	1590	7.1	7.1	6.5	6.5	6.7	7.5	7.5	7.5



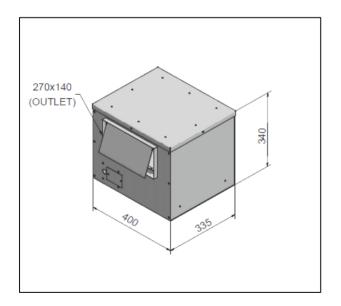


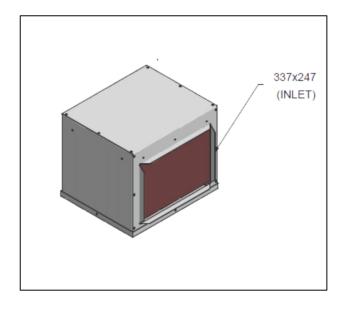
# > CF140D-I - 230V 1 ~ - 50/60Hz



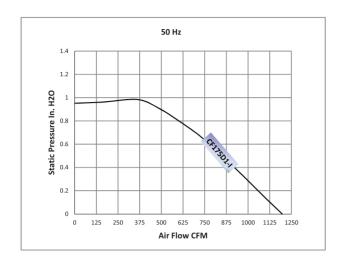


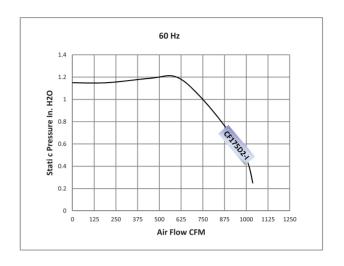
Hz KW			RPM	0.00" Pst	0.125"Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst
	KW	A		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF140D1-I	0.704	1 7	3 1900	553	545	535	518	497	475	452	385
CF140D1-1	0.304 1.3	1.5	1900	10	10	9.3	9.3	9.5	9.5	9.5	9.5
CE140D2 I	D2-I 0.370	1.4	1730	485	467	447	427	406	386	364	315
CF140D2-I				9.5	9.5	9.3	9.3	9.2	9.2	9	9



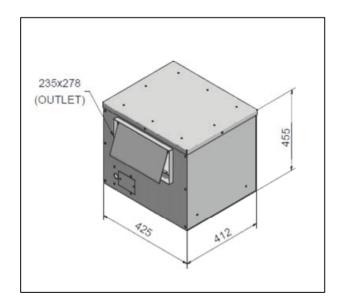


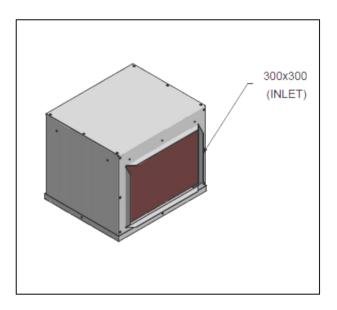
# > CF175D-I - 230V 1 ~ - 50/60Hz



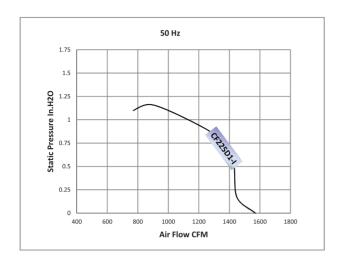


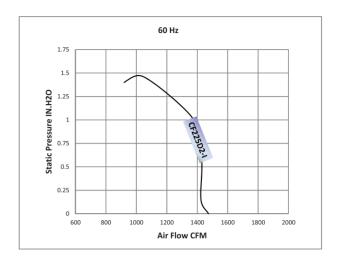
Hz KW			RPM	0.00" Pst	0.125"Pst	0.250" Pst	0.375" Pst	0.500" Pst	0.625" Pst	0.750" Pst	1.000" Pst
	KW	A		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF175D1-I	0.300	2.4	2.4 1391	1197	1110	1023	939	846	757	650	-
CF1/3D1-1	0.300	300 2.4		9.4	9.4	8.9	8.9	9	9	9	-
CF175D2-I	0.300	2.0	1502	-	-	1037	1022	988	940	880	750
CF1/5D2-I	0.300	2.8	1582	-	-	10.5	10.5	10.5	10	10	10



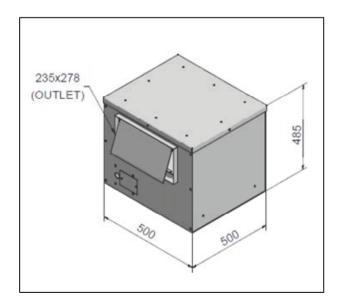


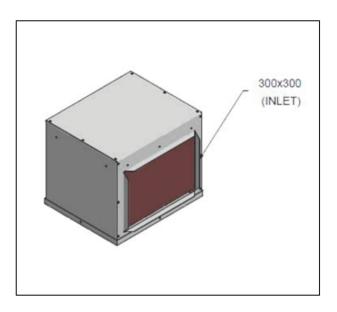
# > CF225D-I - 230V 1 ~ - 50/60Hz





Hz KV				0.00" Pst	0.125"Pst	0.250" Pst	0.500" Pst	0.750" Pst	1.000" Pst	1.250" Pst	1.375" Pst
	KW	A	RPM	CFM	CFM	CFM	CFM	CFM	СҒМ	CFM	CFM
				Sones	Sones	Sones	Sones	Sones	Sones	Sones	Sones
CF225D1-I	0.550	1 27	.23 1321	1567	1465	1439	1430	1357	1130	-	-
CF223D1-1	0.550 4.7	4.23		11	10.8	10.8	10.2	9.5	9.5	9.2	9.2
CF225D2-I	0.550		77 1445	1472	1426	1423	1430	1420	1372	1225	1130
CF225D2-I	0.550	4.77		12.2	11.5	11.5	11.5	11.5	10.8	10.8	10.5





# INDUSTRIAL PROCESS AND COMMERCIAL VENTILATION SYSTEMS

CENTRIFUGAL FANS | UTILITY SETS | PLENUM & PLUG FANS | INLINE CENTRIFUGAL FANS | MIXED FLOW FANS | TUBEAXIAL & VANEAXIAL FANS | PROPELLER WALL FANS | PROPELLER ROOF VENTILATORS CENTRIFUGAL ROOF & WALL EXHAUSTERS | CEILING VENTILATORS | GRAVITY VENTILATORS | DUCT BLOWERS RADIAL BLADED FANS | RADIAL TIP FANS | HIGH EFFICIENCY INDUSTRIAL FANS | PRESSURE BLOWERS LABORATORY EXHAUST FANS | FILTERED SUPPLY FANS | MANCOOLERS | FIBERGLASS FANS | CUSTOM FANS

