

RCU Upblast Roof Fan

(UL705 And UL762 Test Grant)



For EU, AU&NZ, Middle East, Southeast Asia and Africa

Cks Fan Upblast Roof Fans Are Designed To Provide Efficient And Reliable Operation For Commercial And Kitchen Exhaust Purpose. Our Products Are Manufactured With State Of The Art Laser, Forming, Spinning And Welding Equipment And Ensure Our Quality Control Testing To Ensure Trouble Free Start-up. Our Roof Blowers Are Including Industry Leading Design Features To Ensure Your Ventilation Equipment Has The Latest Technologies Available

EVERY RCU HAS BEEN TEST FOR THREE DIFFERENT PLANES BEFORE PACKAGE.

Typical application includes:

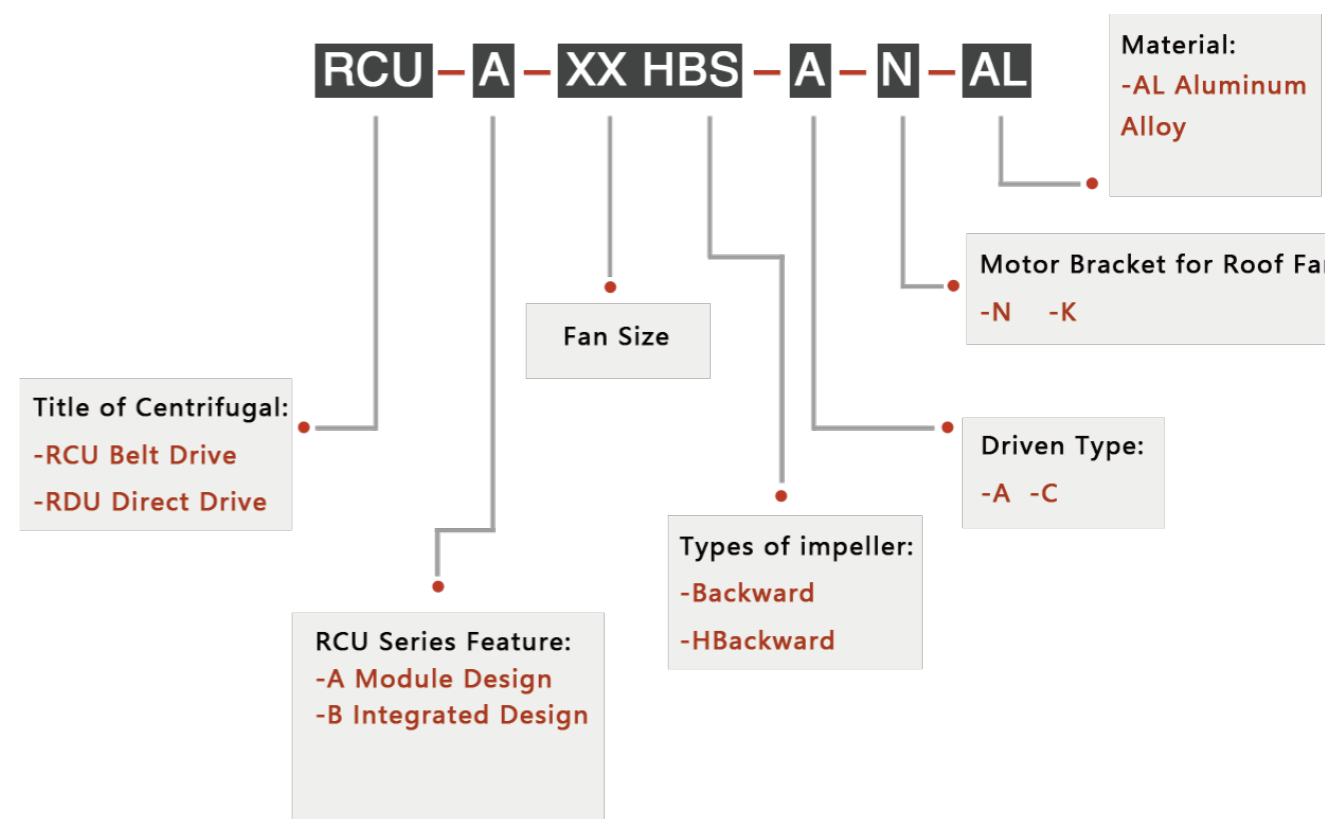
Engineers In Guangzhou AoZhong Fan Equipment Co.,LTD Can Assist You In Improving The Operational Efficiency Of The Air Movement In Your System.



Main Features With RCU Series

- This Fan Can Be Used As Smoke Fan
- Working In High Temperature Environment
- Full Mold, Aluminum Alloy Structure
- Most Advanced Motor Cooling Of Blower In Its Class
- Direct Drive And Belt Drive Are Available
- Anti-explored Type Is Available
- IEC 60335 Report
- ISO9001:2018 Controllable Standard
- The Highest Working Environment Temperature Is 320F improve The Configuration, The Maximum Working Environment Temperature Can Reach To 572F.

Mixed Fan Model Number Code



RCU Structure

Rcu Series: The Product Is Made In Aluminum Alloy, Which Is Cutting, By Laser To Ensure High-precision Mold Line. The Base Is Aluminum Alloy For One-time Stretch. Driven Cavity Cover Adopt Galvanized Material, Which Can Open With Hands, And Convenient To Daily Cleaning Maintenance. Different Ways Of Motor With Different Transmission Need To Select Different Motor Bracket. The Impeller Adopts Laser Cutting Technology And Die Stretch Forming. A Different Work Environment Needs To Adopt Different Impeller Material. Carbon Steel, Stainless Steel And Aluminum Alloy Impeller Are Optional. The Surface Of The Impeller Adopts Industrial Spraying. Impeller Balance Test Grades Are In Strict Accordance With The G4.0 ISO1940, And Meet Its Requirements. In This Series, Roof Blower Use Aluminum Alloy Wheel.

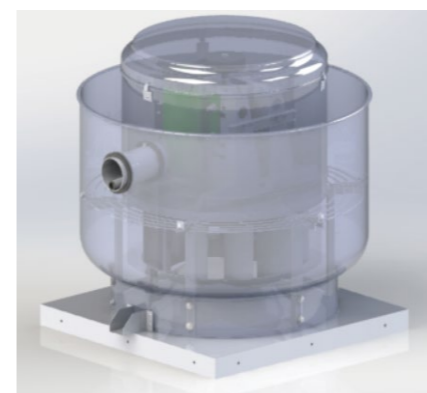


Figure 1 Module Design

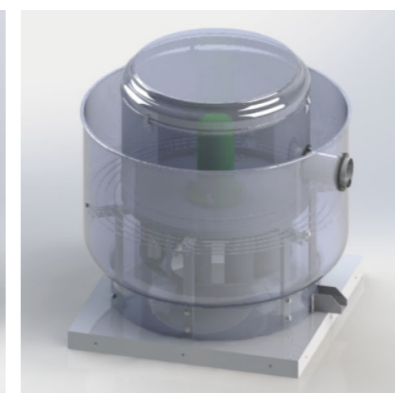
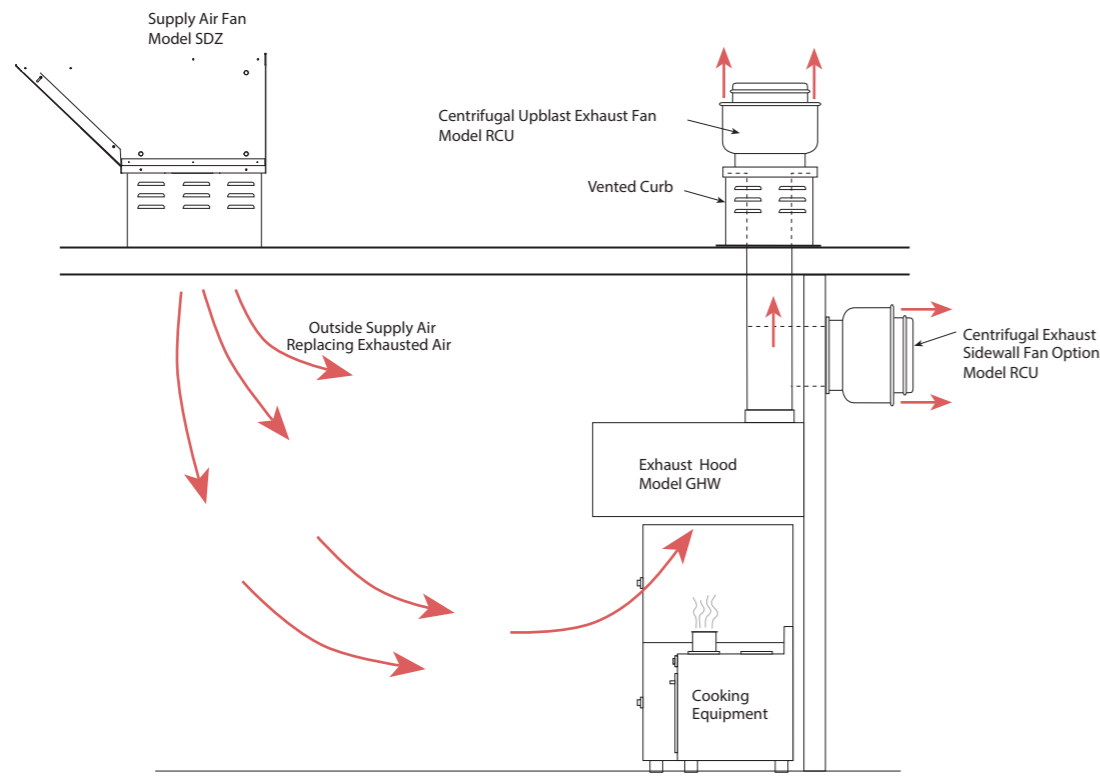


Figure 2 Integrated Design

This Drawing Shows A Typical Commercial Kitchen Ventilation System That Consists Of A Roof Mounted Upblast Exhaust Fan And A Supply Fan.Exhaust Fan Variations Include Sidewall Exhaust Fan (Also Shown) When Penetrating The Roof Is Not Practical. A Utility Blower Is Recommended When Higher Static Pressure Capability Is Required To Pull Exhaust Through Long Duct Runs (Typically 3 Stories Or More)



Fan Sizing

Exhaust

When Not Specified By Local Codes,the Following Guidelines May Be Usedto Determine The Minimum Kitchen Hood Exhaust Cfm. Some Local Codes Require100 CFM/ft 2 Of Hood Area For Wall Style Hoods.

Supply

Recommended Supply Airflow Is 80% Of Exhaust Cfm. The Remaining 20% Of Supply Air Will Be Drawn From Areas Adjacent To The Kitchen, Which Helps Prevent Undesirable Kitchen Odors From Drifting Into Areas Such As The Dining Room.

Duty Level	Type of Cooking Equipment	CFM/ft ² of Hood
Light	Oven, Range, Kettle	50
Medium	Fryer, Griddle	75
Heavy	Charbroiler, Electric Broiler	100
Static pressure typically ranges from 0.625 to 1.0 in. for one story buildings.		

NFPA Considerations

The National Fire Protection Association Specifies Minimum Distance Criteria For Restaurant Exhaust And Supply Fans:

Option A

1. Roof Deck To Top Of Exhaust Fan Windband:

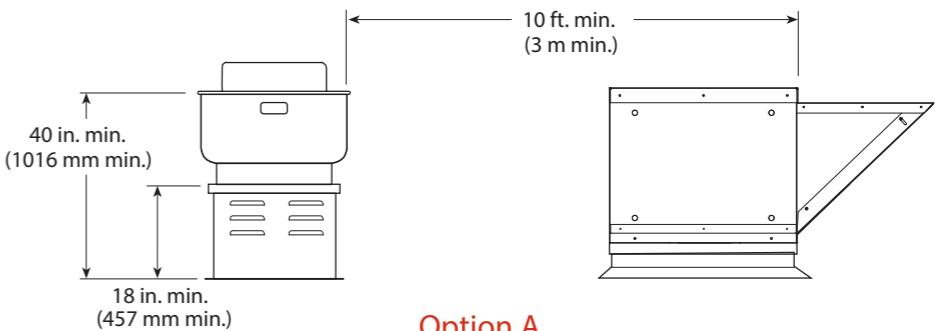
40 inches (1016 Mm) minimum

2. Roof Deck To Top Of Curb:

18 Inches (457 mm) minimum

3. Supply Fan Intake:

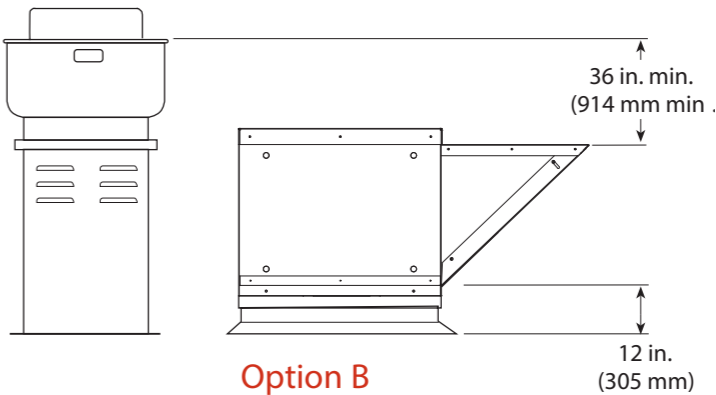
10 Feet (3048 Mm) Minimum From All Exhaust Fans



Option A

Option B

For Applications Where The 10 Feet (3048 Mm) Horizontal Distance Cannot Be Met, Vertical Separation Between Exhaust And Supply Must Be At Least 36 Inches (914 Mm)



Option B

Grease Collector

Prevent Blockage Of The Drainage System Effectively Separate And Remove Grease From Abandoned Kitchens Or Other Oily Water



Hinge Kit

Convenient Cleaning And Maintenance,strong Corrosion Resistance.

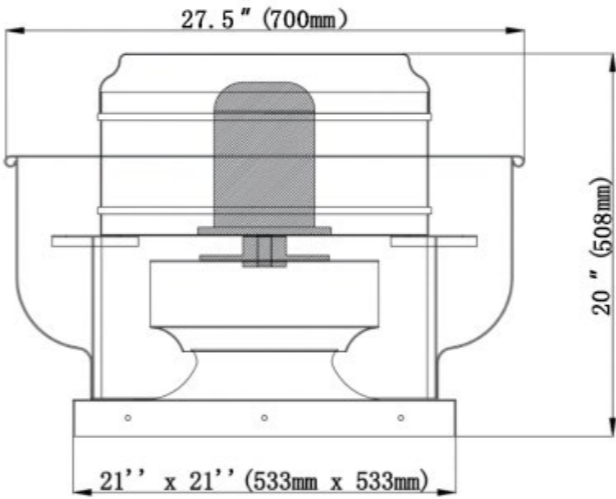


Baffle Hood Filter

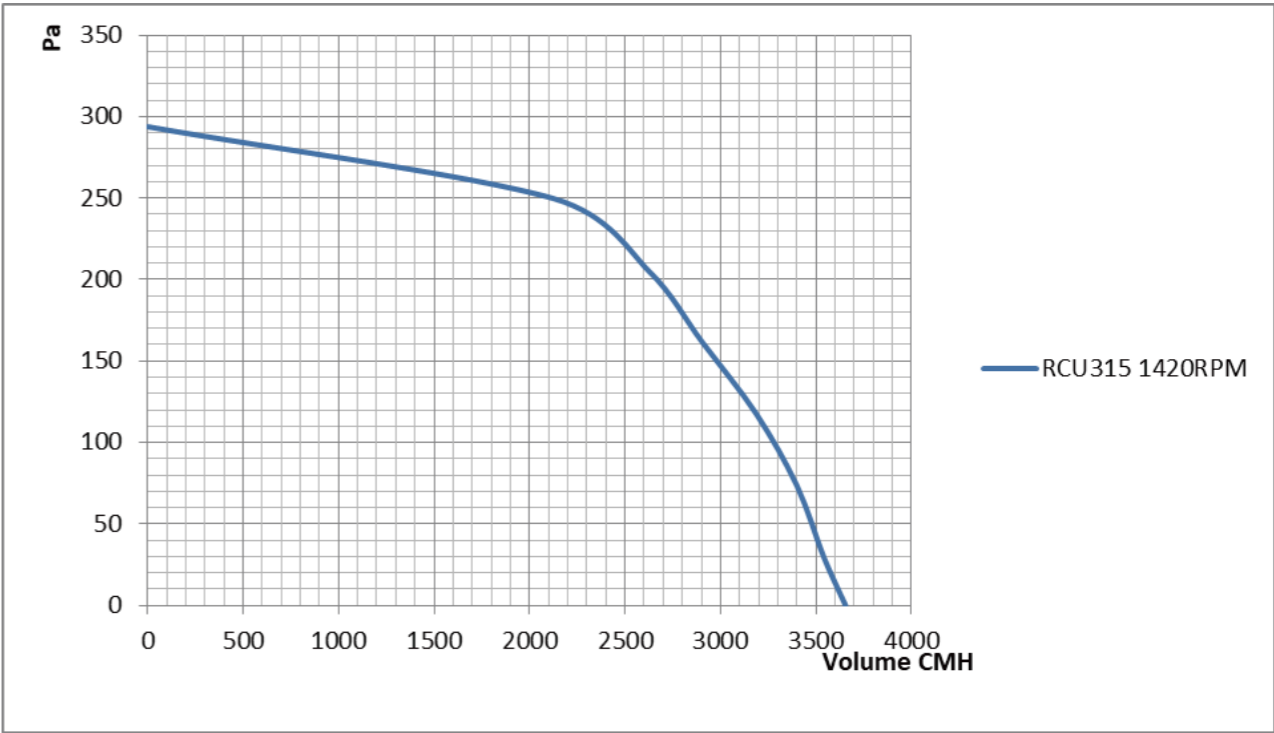
Multi-angle Cleaning For Easy Maintenance



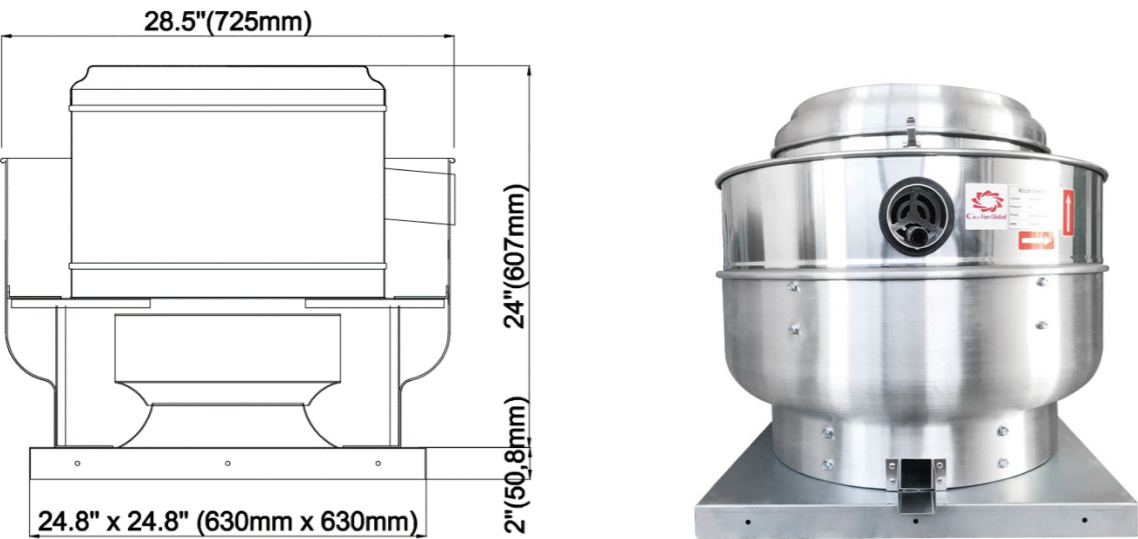
RCU315 (CCU-AF2) Technical Data



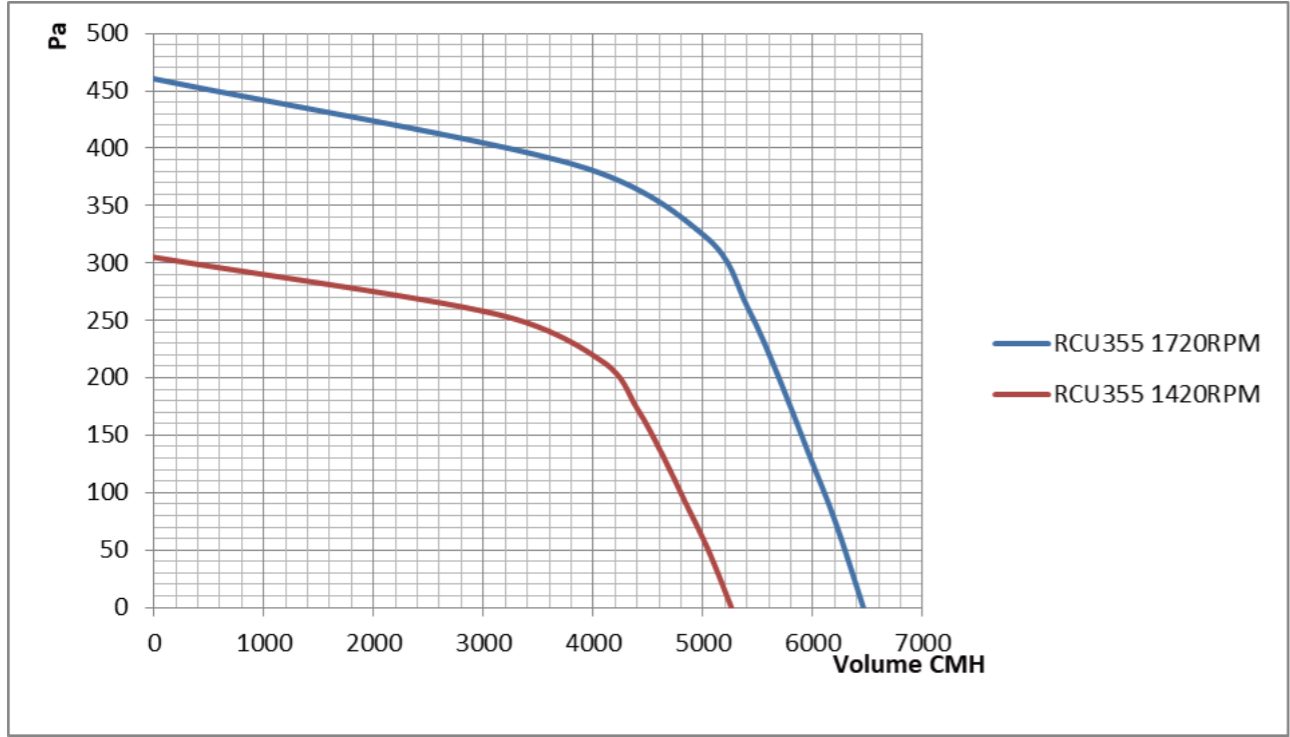
Model	Power	AC Motor 1Ø	Fan Speed	Impeller Dia
RCU315	250W	220V-240V/50Hz	1420RPM	12.5inch



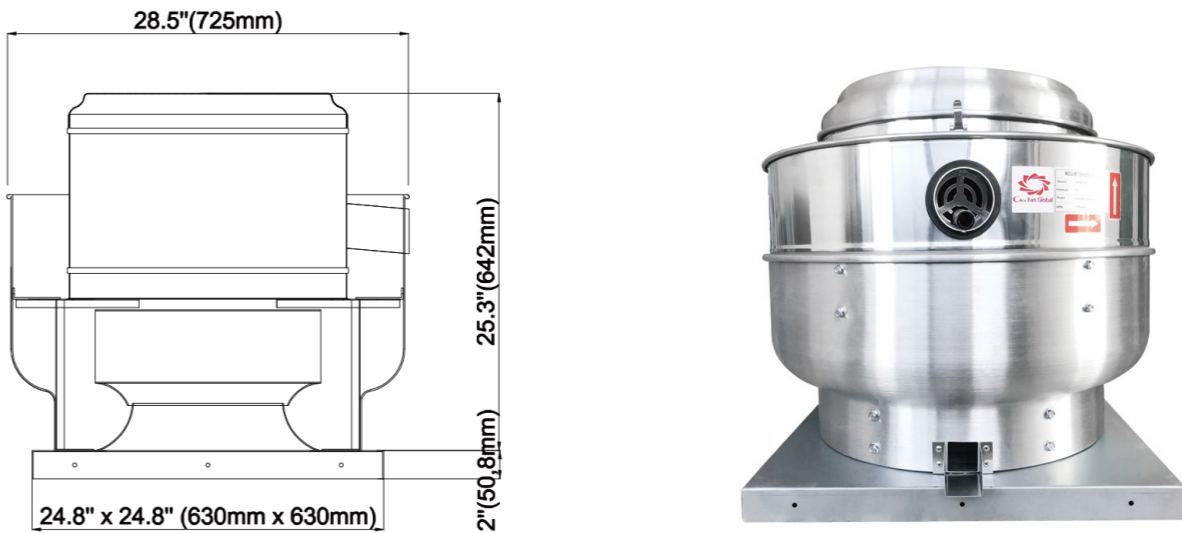
RCU355 (CCU-AF2)Technical Data



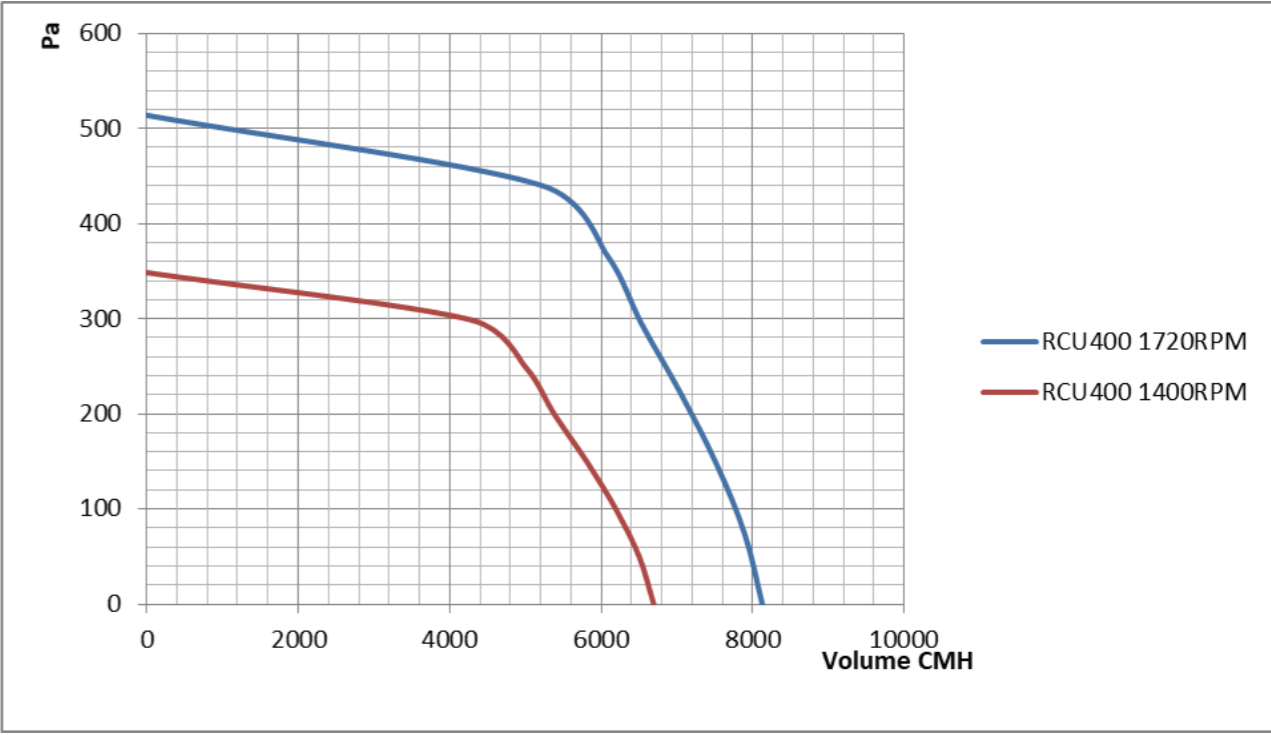
Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU355	550W	220V/-240V/50Hz	380V or 415V/50Hz	1400RPM (Direct Drive)	14inch
	750w	220V/-240V/50Hz	380V or 415V/50Hz	1720RPM (Belt Drive)	



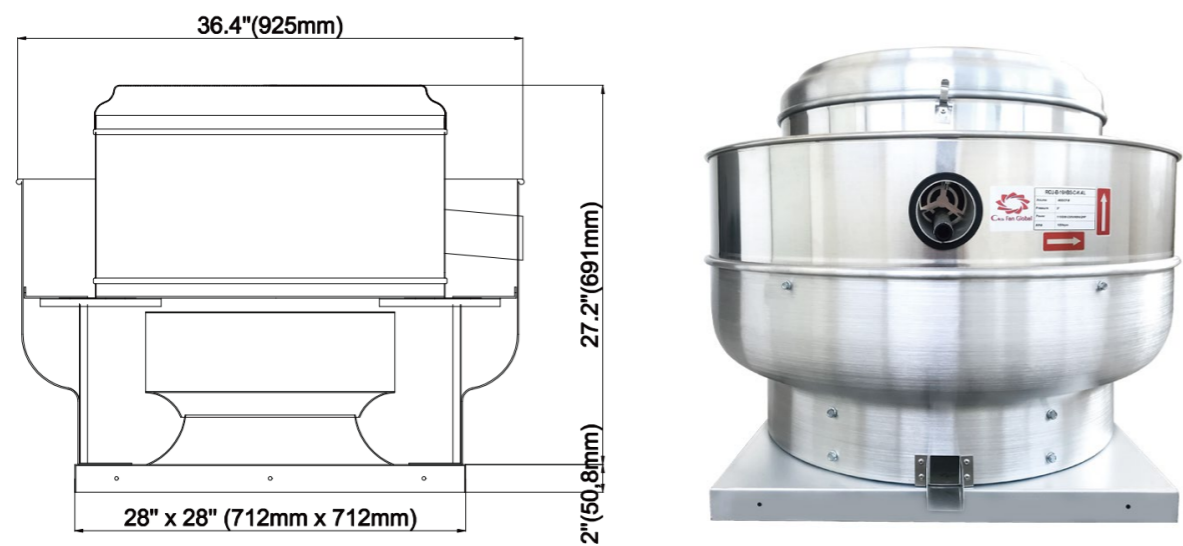
RCU400 (CCU-AF2) Technical Data



Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU400	750W	220V/-240V/50Hz	380V or 415V/50Hz	1400RPM (Direct Drive)	16inch
	1.1Kw	220V/-240V/50Hz	380V or 415V/50Hz	1720RPM (Belt Drive)	

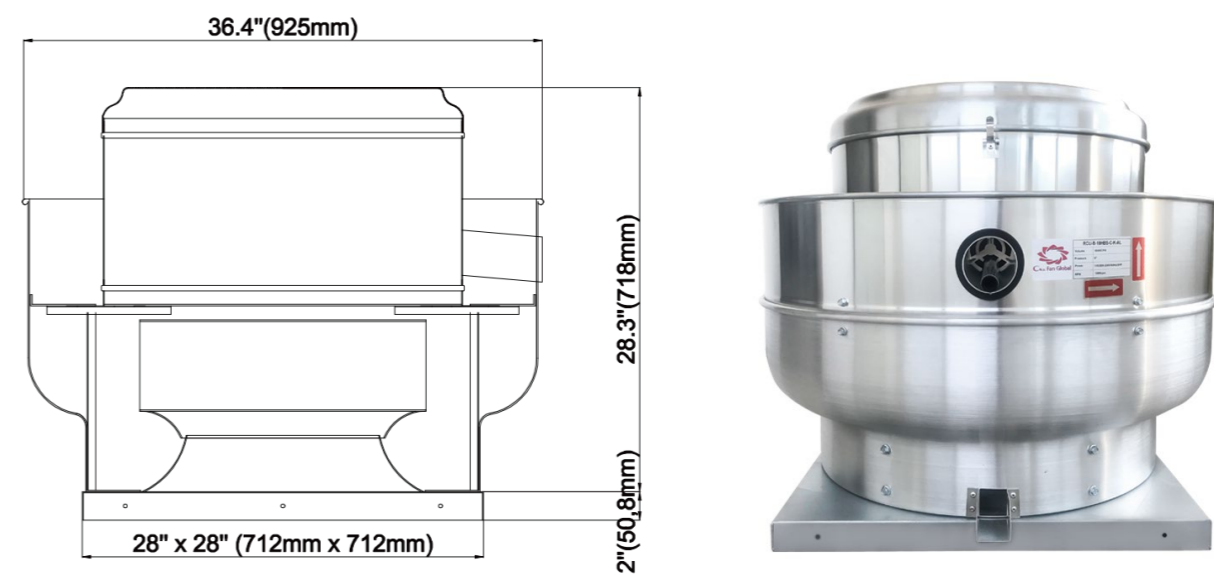


RCU450 (CCU-AE2) Technical Data

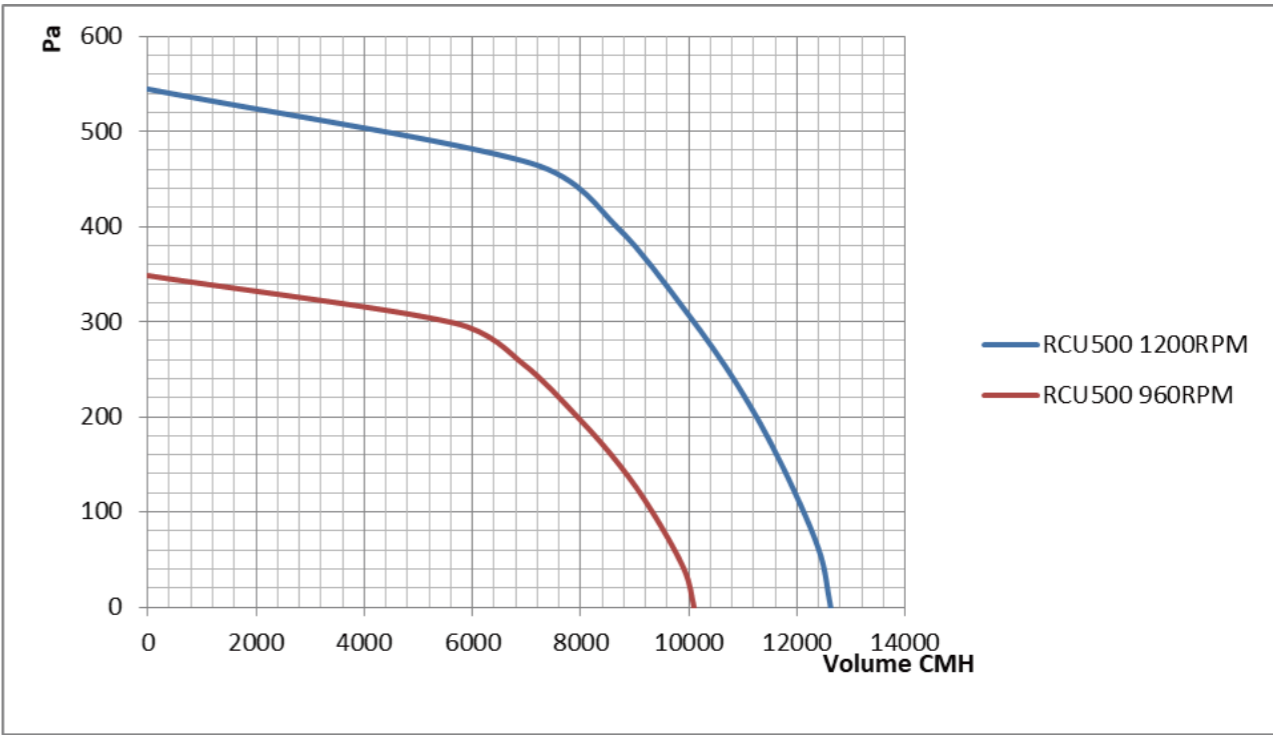
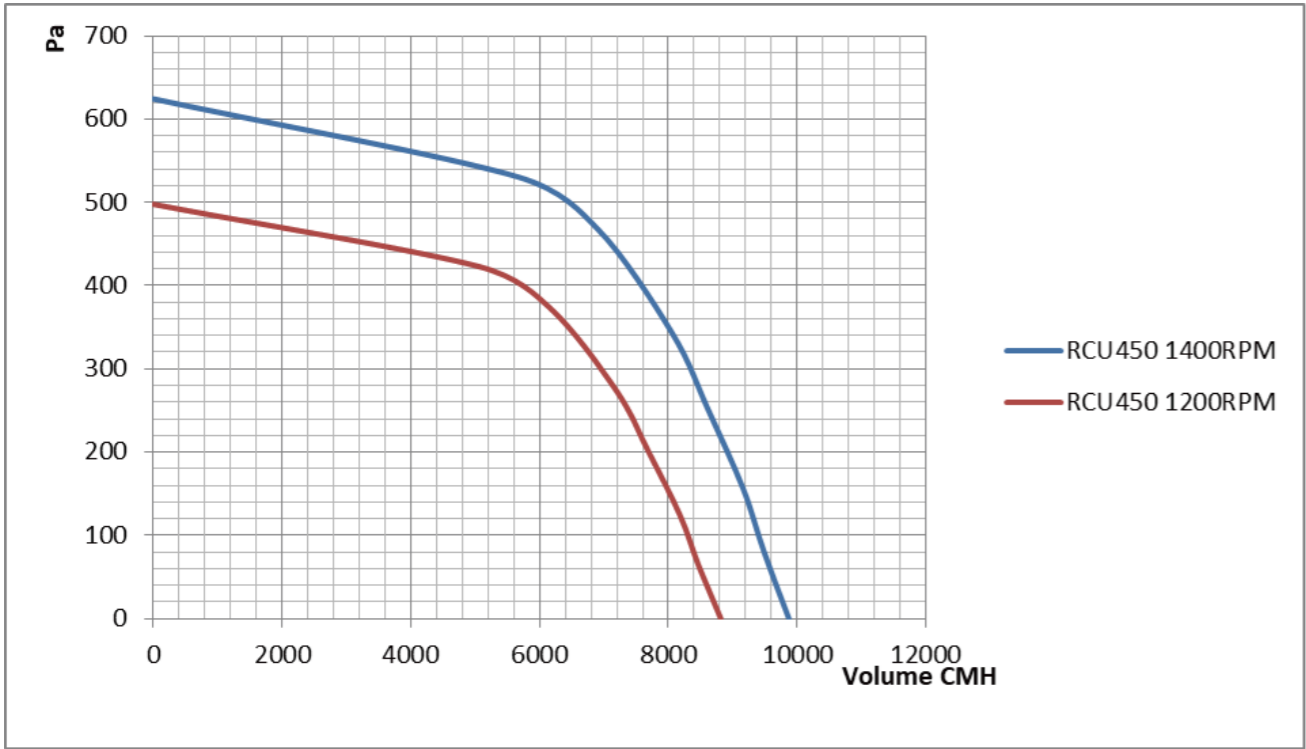


Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU450	0.75KW	220V/-240V/50Hz	380V or 415V/50Hz	1200RPM (Belt Drive)	18inch
	1.1Kw	220V/-240V/50Hz	380V or 415V/50Hz	1400RPM (Direct Drive)	

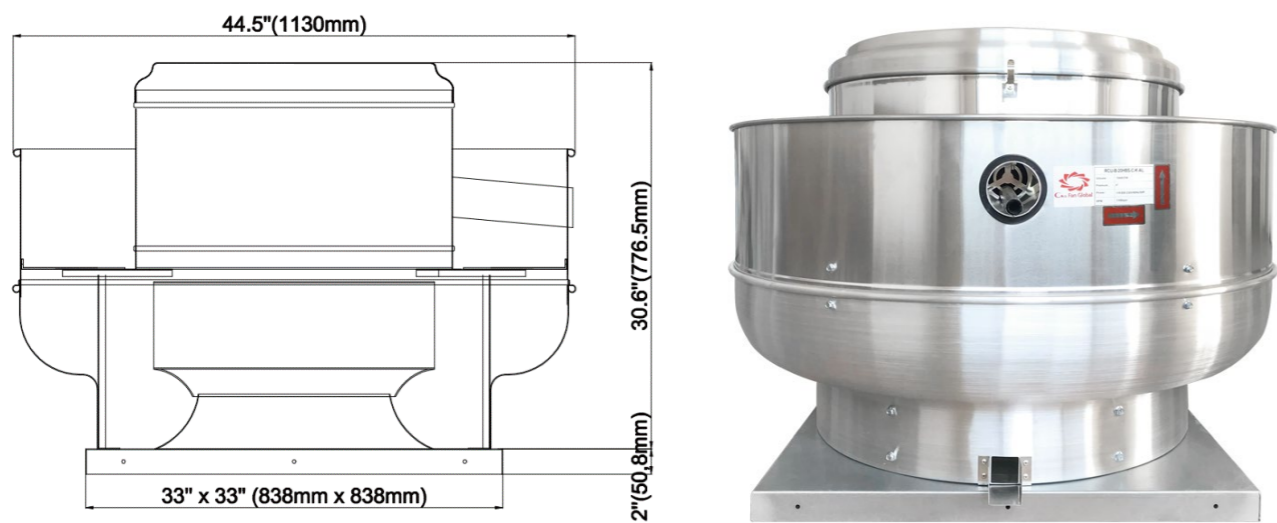
RCU500 (CCU-AE2) Technical Data



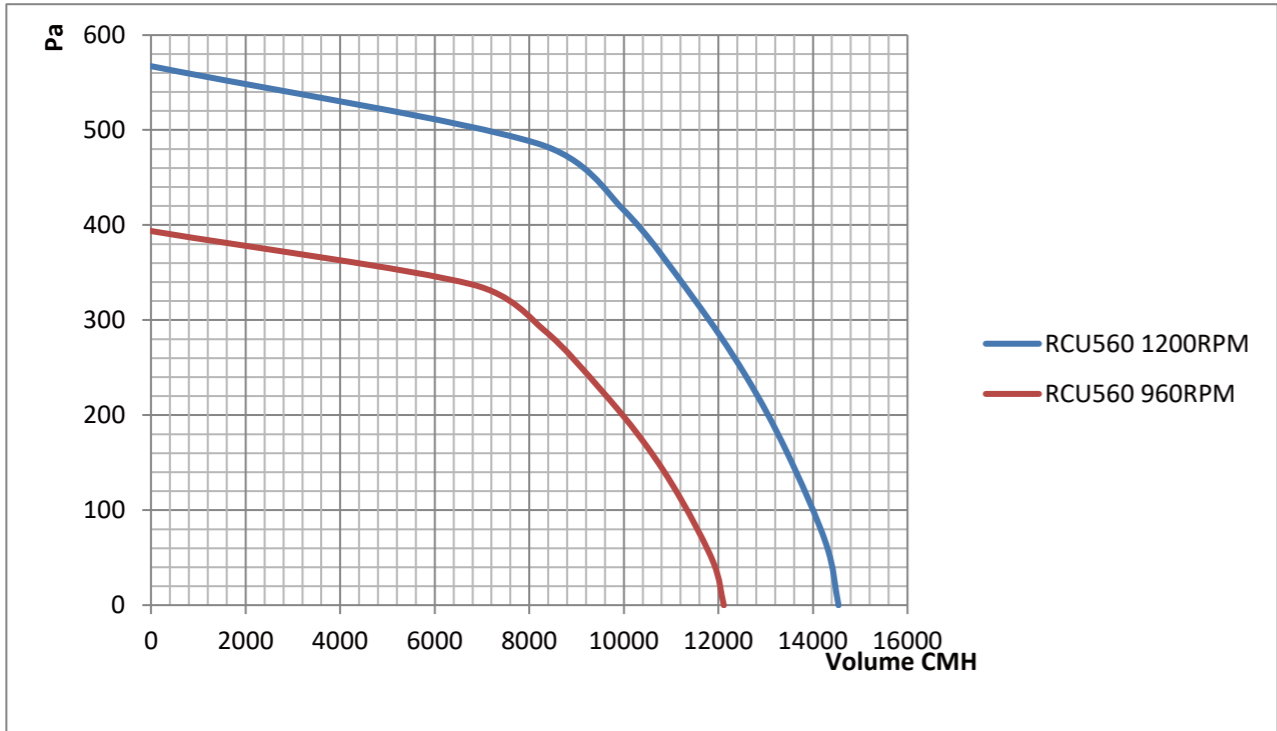
Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU500	1.1KW	220V/-240V/50Hz	380V or 415V/50Hz	960RPM (Direct Drive)	20inch
	1.5Kw	220V/-240V/50Hz	380V or 415V/50Hz	1200RPM (Belt Drive)	



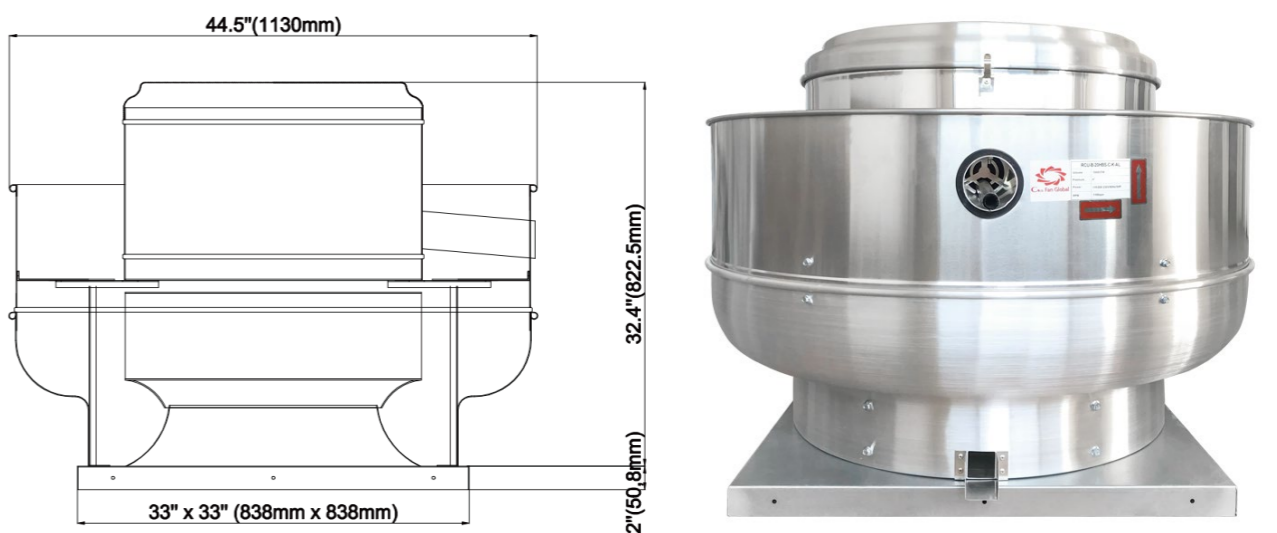
RCU560 (CCU-AT2) Technical Data



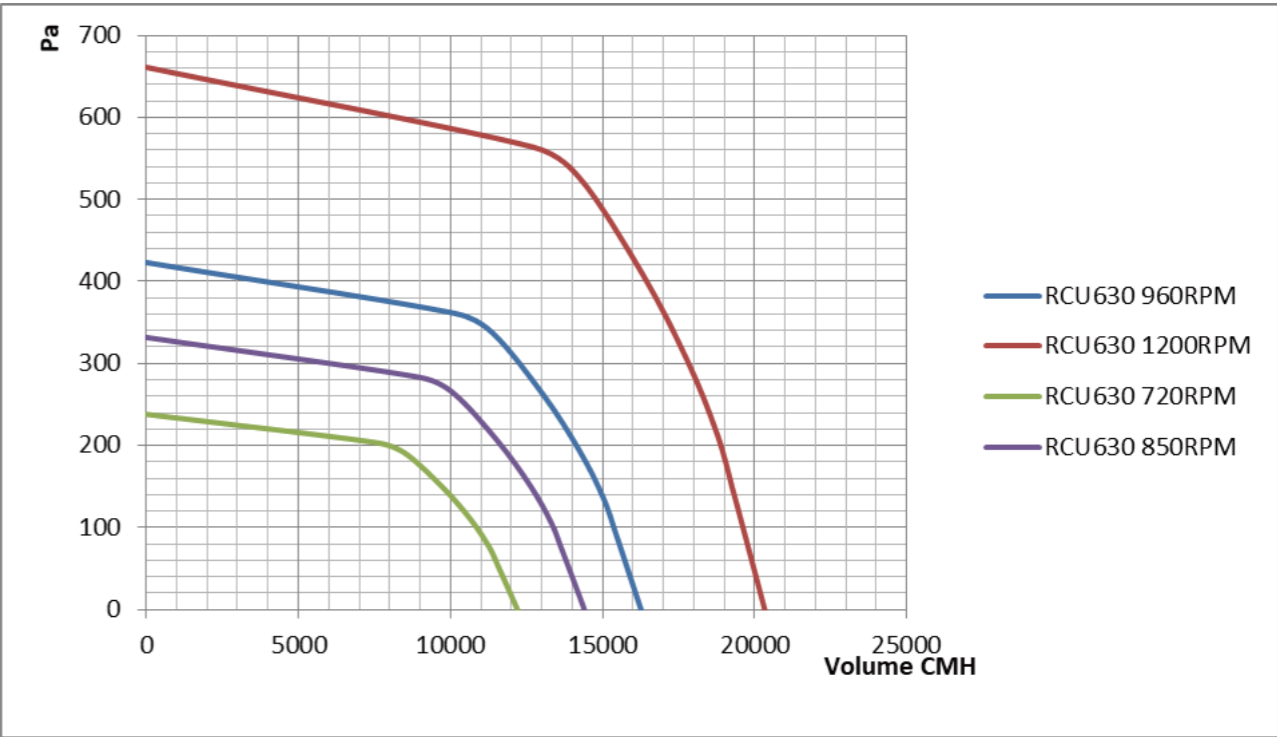
Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU560	1.5KW	220V/-240V/50Hz	380V or 415V/50Hz	960RPM (Direct Drive)	22inch
	2.2Kw	None	380V or 415V/50Hz	1200RPM (Belt Drive)	



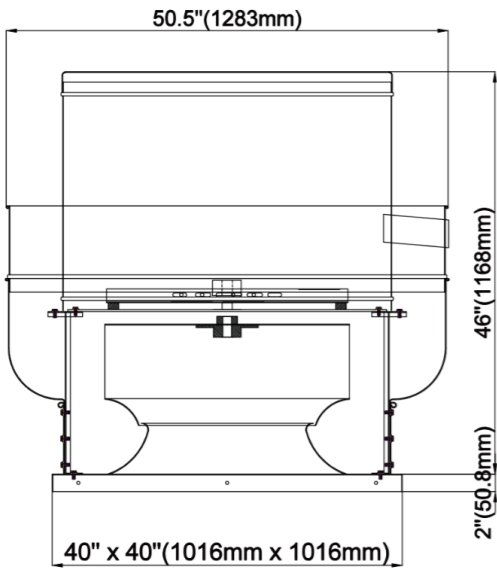
RCU630 (CCU-AT2) Technical Data



Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU630	2.2KW	None	380V or 415V/50Hz	960RPM (Direct Drive)	25inch
	1.1Kw	220V/-240V/50Hz	380V or 415V/50Hz	720RPM (Direct Drive)	
	1.5KW	220V/-240V/50Hz	380V or 415V/50Hz	850RPM (Belt Drive)	
	3Kw	None	380V or 415V/50Hz	1200RPM (Belt Drive)	

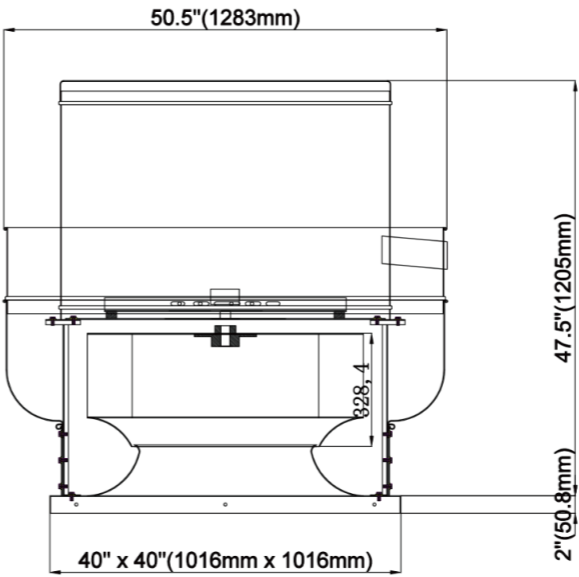


RCU710 Technical Data

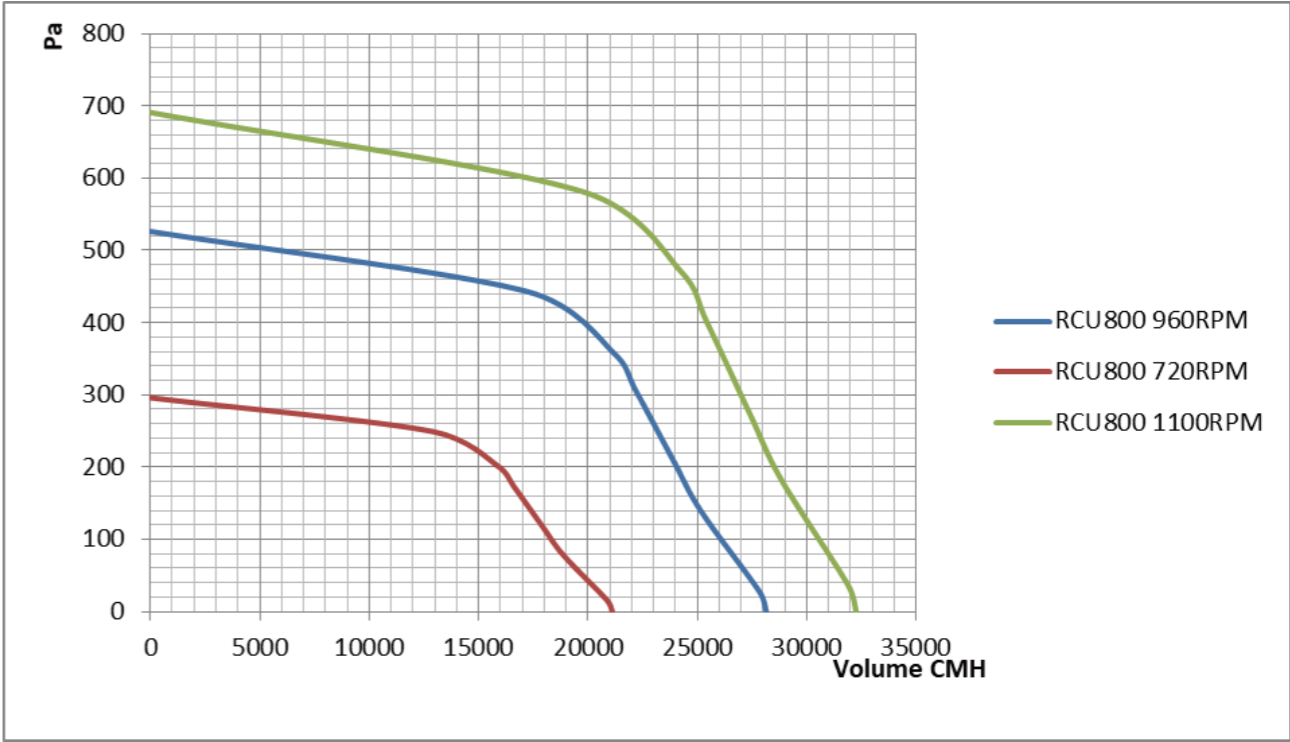
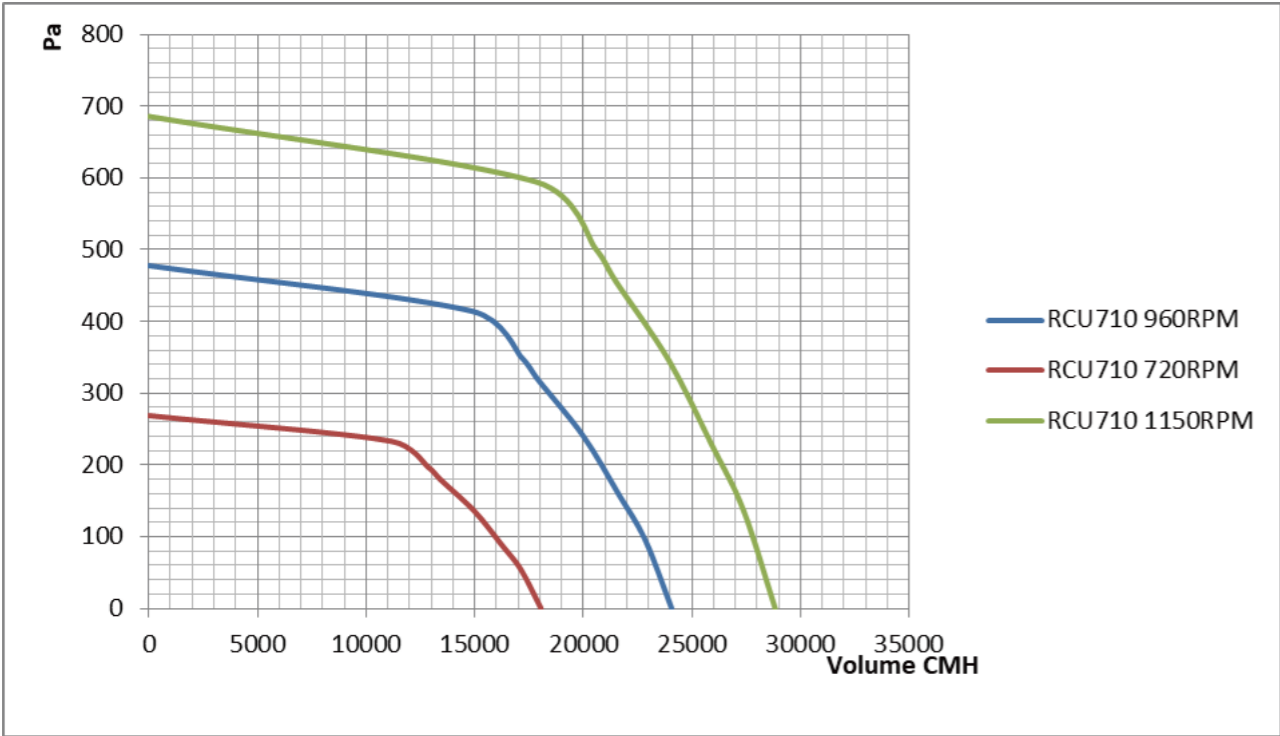


Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU710	4KW	None	380V or 415V/50Hz	960RPM (Direct Drive)	28inch
	2.2Kw	None	380V or 415V/50Hz	720RPM (Direct Drive)	
	5.5KW	None	380V or 415V/50Hz	1150RPM (Belt Drive)	

RCU800 Technical Data



Model	Power	AC Motor 1Ø	AC Motor 3Ø	Fan Speed	Impeller Dia
RCU800	5.5KW	None	380V or 415V/50Hz	960RPM (Direct Drive)	32inch
	4Kw	None	380V or 415V/50Hz	720RPM (Direct Drive)	
	7.5KW	None	380V or 415V/50Hz	1100RPM (Belt Drive)	



Usage Description

- 1. The Fan Is Mainly Use In Delivering The Clean Air Without The Place That With Easy Burning Materials, Explosive Materials And Powder
- 2. If The Fan Is Fed With External Rotor Machine And Sealed Ball Bearing. It Is Free Maintenance.
- 3. If The Fan Install In The Damping And Sobering Area, Continuous Operation Is Required For The Fan.
- 4. The Fan Can Be Installed In The Outdoor Or Damp Environment With Drainage System.
- 5. All The Fans Are Feeding With International Standard Motors, Which Are Single Phase 120V, 60Hz Or 220V, 50Hz And Three Phases 380V, 50Hz
- 6. Installation Is Available In Any Areas

Installation

- 1. Must Be Install According To The Air Flow Marking
- 2. Must Be Connect To The Piping Or Equip With Safety Accessories
- 3. Must Be Installing In A Proper Way And Make Sure The Outlet Is Without Any Unusual Materials.
- 4. Try To Installing The Fan As Easy As For The Maintenance Purpose
- 5. Fan Required Flanges In Order To Avoid The Piping Damage When Vibrated
- 6. Speed Controller Or Transformer Is Available To Connect To The Fan
- 7. Wiring Diagram Is In The Package.
- 8. Wiring Must Be Strictly Following The Wiring Diagram.
- 9. Electrical Installation Must Be Done By Professional Technicians.
- 10. Electrical Installation Must Be Connecting In The Special Control Box.

Operation

- Before Operation, Please Make Sure
- 1. The Real Maximum Current Cannot Be Exceed The National Standard Index:+5%.
 - 2. The Voltage Pulsation Is Between +6% ---+10%
 - 3. No Exceptional Noise Produce When Operation.
 - 4. The Rotating Direction For Three Phase Motor Is The Same As The Marking.

Maintenance

- 1. Before Repair Or Maintenance The Fan, Please Make Sure The Fan Is Stop And The Fan Is Not Working In Overload Condition
- 2. When Disassemble The Larger Fan, Please Care For The Weight To Avoid Blocking And Scratching
- 3. Cleaning The Fan Once A Year, So That It Can Keep The Function And Avoid The Unnecessary Damage.
- 4. Ball Bearing Is Free Maintenance Except For The Necessary Updates.
- 5. When Cleaning The Fan, Please Do Not Use The High Pressure Washer Or Strong Solvent, And Do Not Take Out The Damaging Impeller
- 6. Make Sure The Fan Is Operating Without Any Noise

Failure Detection

- 1. Make Sure The Fan Is In The Load Condition.
- 2. Verify The Impeller Is Without Block.
- 3. Please Do Check With The Heat-variable Switch And Motor Protector. If The Switch Is Not In Connected, Please Do Check It. If Its Need To Restart Makes Sure The Power Supply Is Cut Off In A Few Minutes Until The Rated Current Is Not Higher Than 1.6A. If The Motor Has The Heat Protector, It Will Automatically Reset After Cool Down.
- 4. Make Sure The Capacitor Is Connected According To The Wiring Diagram.
- 5. Please Change The Capacitor At The First Time When The Fan Is Not Work.
- 6. Please Contact The Distributor If The Fan Is Still Not Work
- 7. When Send Back The Fan To The Distributor, Please Clean It And Make Sure The Cables Are

Guarantee

The Guarantee Is Valid Only With The Guideline Of This Manual.

Noise Level Test Method

1m/45° Free Zone, Without Connect The Ducting Noise Data

Company Introduction

Cks Fan Is China Based Business Owned And Operated By Its Management Team. We Specialize In Air Movement And Have Experience Gained More Than Ten Years Of Operation With Worldwide Predecessors. We Service The Ventilation Equipment Needs Of Customers Ranging From HVAC Through Mining, Manufacturing, Construction, And Agriculture As Well As Retail End Users Include Tianjin And Suzhou Retail Stores. We Build Our Products In State Of The Art Facilities In Guangzhou, WuHan And DeQng. We Adapt Iso9001quality System To Ensure Our Customers Are Using Best Products.

Certification:



Capabilities And Services

- 1 Fan And Blower Design And Manufacture
- 2 Fully Performance Tested Products And Published Data
- 3 In-house Design Engineering Team
- 4 Scale And Capacity To Handle Any Size Project
- 5 Servicing Overseas Markets With Built Products And OEM Supply
- 6 Sales And After Sales Support Teams

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