
RING BLOW 8TH SERIES

Thank you for purchase of Ring Blow. Our product is made of the first quality materials and incorporates superior workmanship, it will work well for your air moving needs. We beg you to read the instructions carefully before use.

Operating instructions

1) Handling gases

The Ring Blow are used for handling non-combustible, non-corrosive and non-explosive, gas as well as air. The gas temperature and ambient temperature should be kept at less than 40°C, and the relative humidity at less than 80%.

2) Installation

The Ring Blow can be installed in any direction. When installed vertically or aslant, the motor side should be positioned upward. VFC708A, 808A and 908A should be install horizontally.

Do not install The Ring Blow on a base which is subject to vibration.

The mounting base should be rigid enough to prevent resonance. Use a rubber pad or other vibration-proof materials as necessary. The allowable limit of vibration is shown in the figure.

3) Solid body

Gases contaminated by solid bodies must not be handled. Remove any hard objects, waste threads, water drops, etc. before suction point. Care should be used not to allow dust and any other object to be sucked in The Ring Blow.

4) Direction of rotation

The Ring Blow should be rotated in the "arrow" direction. All the units are rotated counterclockwise as viewed from the driving side. The rotating direction can be checked at the shaft end of the anti-driving side or by observing whether or not the airflow direction matches the marking IN or OUT provided on the flange.

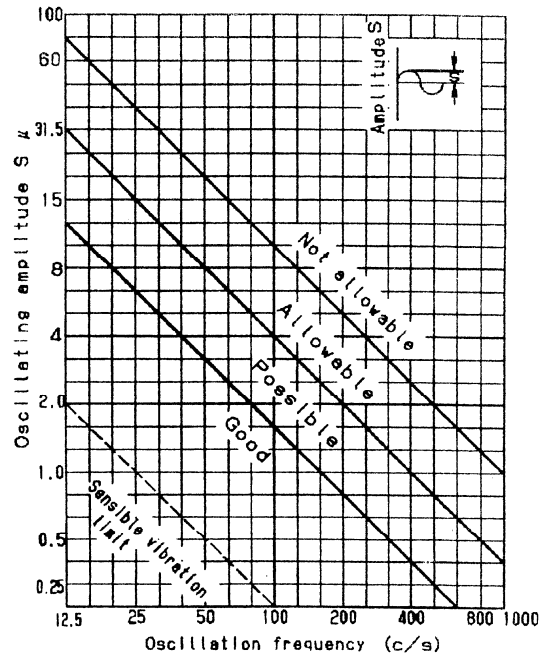
The 3-phase unit can be rotated reversely by changing the connection of power line cords. The single-phase unit keeps rotating in the forward direction even when the 2 power line cords are connected reversely. Note that reverse rotation will result in loss of performance.

5) Connecting

Before using, check to be sure that the power connected is as specified on the nameplate.

6) Continuous operation

For operation of The Ring Blow the airflow can be adjusted freely from free delivery to shut off. To shut-off, Blow should be operated within allowable duty time shown in the table. For continuous operation, the airflow should be above the value shown in the table. If it is desired to reduce the airflow below this value during continuous operation, a bypass hole should be provided in the middle of the pipe line as the illustration.

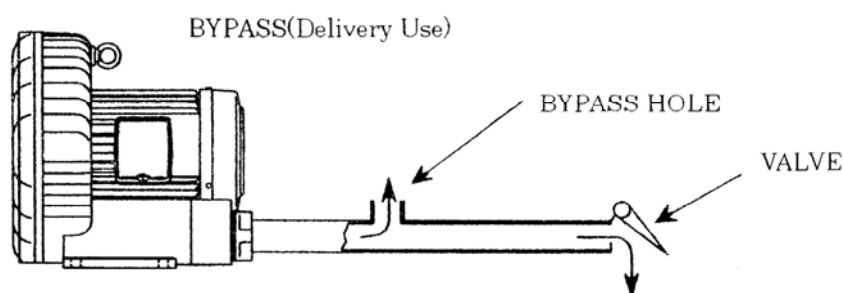


Shut-off allowable time and minimum required airflow for continuous operation

Model \ Item	Delivery		Suction	
	sec ①	Q ②	sec ①	Q ②
VFC088A,088P	Cont.	0	Cont.	0
VFC108A,108P	600	0.05 / 0.1	600	0.05 / 0.1
VFC208A,208P	240	0.1 / 0.1	240	0.1 / 0.1
VFC308A,308P	120	0.3 / 0.4	120	0.3 / 0.4
VFC408A,408P	120	0 / 0.1	120	0 / 0.1
VFC508A,508P	60	0.2 / 1.3	60	0.2 / 1.2
VFC608A	60	0.8 / 1.6	60	0.8 / 1.6
VFC708A	30	1.8 / 2.5	30	1.5 / 2.0
VFC808A	30	2.5 / 4.0	30	2.0 / 3.0
VFC908A	30	4.0 / 5.5	30	3.0 / 4.0

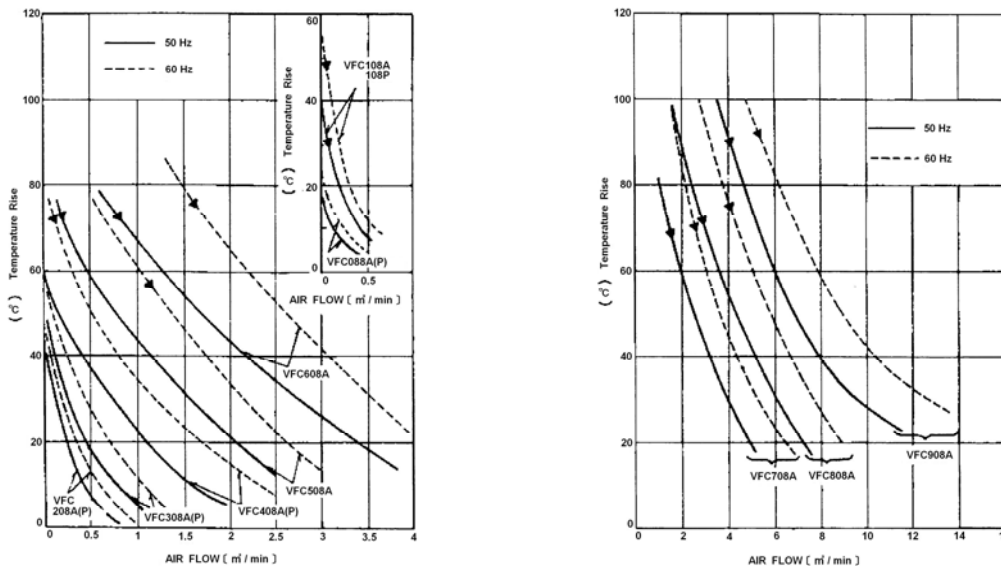
① Shut-off allowable time(sec)starting at a normal temperature.

② Minimum required air flow at 50/60Hz
 $Q = \text{m}^3/\text{min}$



7) Temperature rise

The temperature of the air passing through The Ring Blow will rise as shown in the figures.



The temperature rise of the air passing thru The Ring Blow

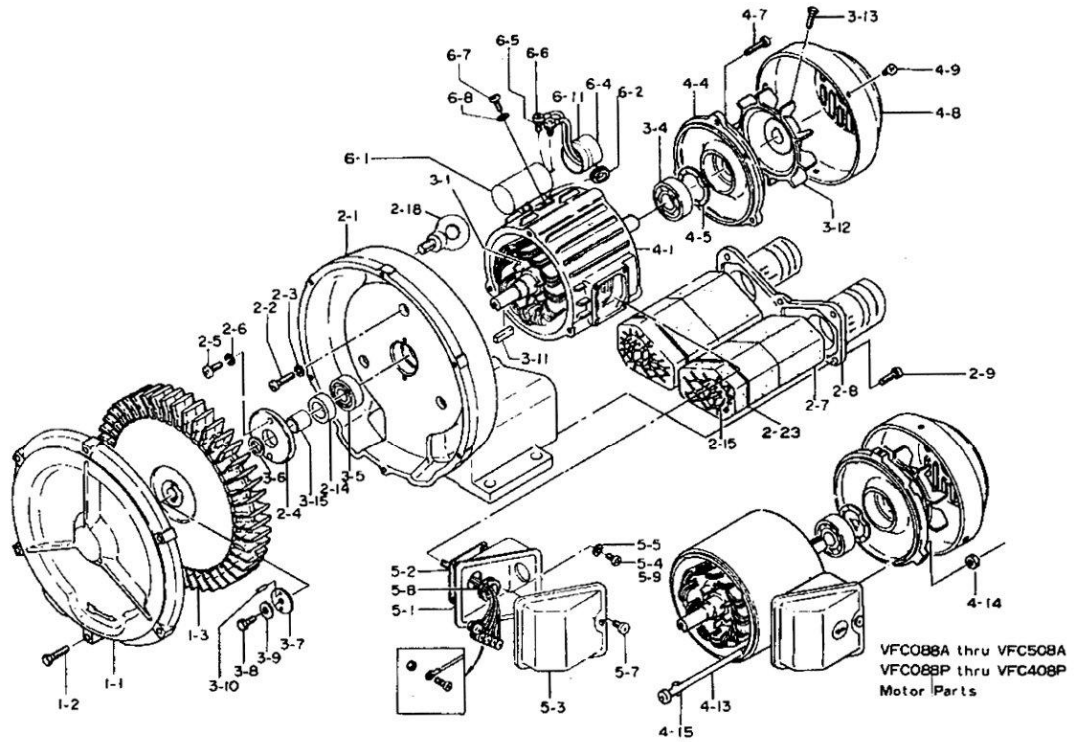
Note : Limited maximum air temperature is temperature rise value marked(▲)+40°C(Ambient temperature)

Trouble shooting -----

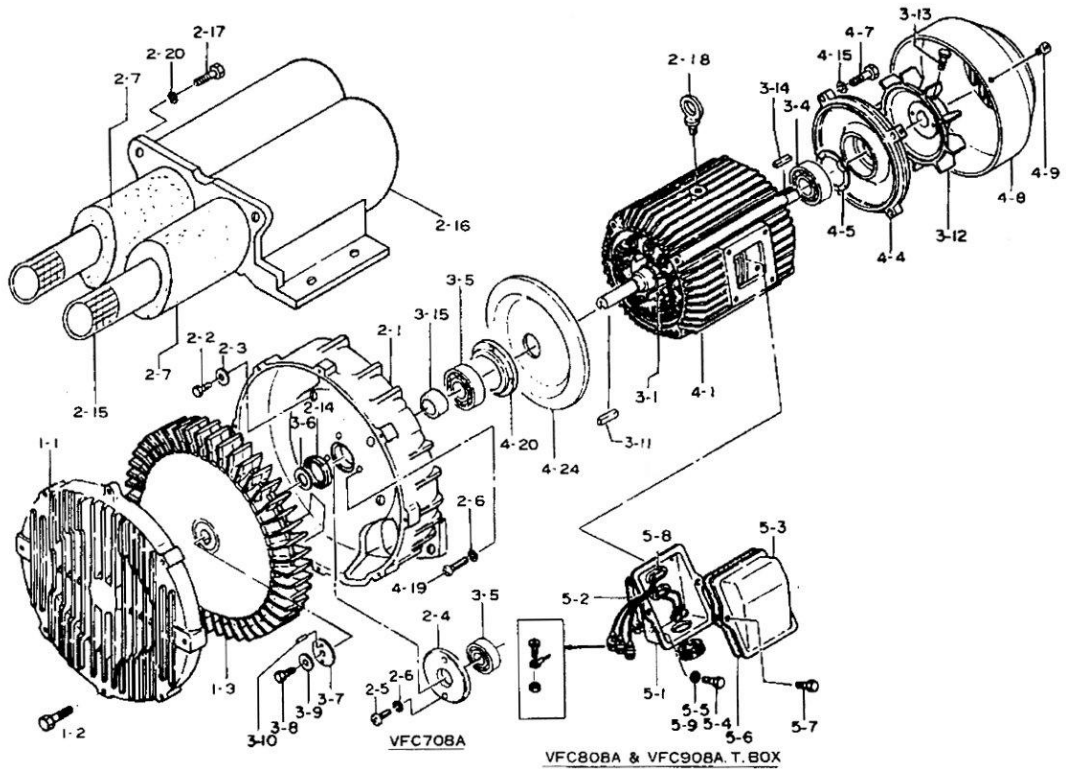
	Troubles	Possible cause (* 3 Phase Units, **1 Phase Units)	Remedy
Impeller does no turn	Humming sound	1. One phase of line not connected. (*) 2. One phase of stator winding open (*) 3. Bearings defective 4. Impeller jammed by foreign material 5. Impeller jammed against housing or cover 6. Capacitor open (**)	1. Connect 2. Contact Factory 3. Change bearings 4. Clean 5. Adjust 6. Change capacitor
	No sound	1. Two phases of power line not connected.(*) 2. Two phases of stator winding open (*)	1. Connect 2. Contact factory
Impeller turns	Blown fuse	1. Insufficient fuse capacity 2. Short circuit	1. Use fuse or proper rating 2. Repair
	Motor overheated or protector trips	1. High or low voltage 2. Operating in single phase condition(*) 3. Bearing defective 4. Impeller rubbing against housing or cover 5. Impeller or air passage clogged by foreign material 6. Unit operating beyond performance range 7. Capacitor shorted 8. One phase of stator winding short circuited (*)	1. Check input voltage 2. Check connections 3. Change bearings 4. Adjust 5. Clean 6. Contact factory 7. Change capacitor 8. Contact factory
	Abnormal sound	1. Impeller rubbing against housing or cover 2. Impeller or air passages clogged by foreign material 3. Bearings defective	1. Adjust 2. Clean 3. Change bearings
	Performance below standard	1. Leak in piping 2. Piping and air passages clogged 3. Impeller rotation reversed 4. Leak in Compressor 5. Low voltage	1. Tighten 2. Clean 3. Check wiring 4. Tighten cover, flange 5. Check input voltage

VFC088A thru VFC608A

VFC088P thru VFC408P and 508P assembly diagram



VFC708A thru VFC908A assembly diagram



8) Maintenance

Clean the inside and outside (particularly the air path of cooling fan) of The Ring Blow remove dirt and dust, or else the result is abnormal temperature, loss of performance or increase of vibration.

9) Parts

The bearing, oil-seal and silencer are subject to wear. These parts should be replaced with new ones as necessary. The impeller, casing, gasket and wire net may also need replacement depending on the operating conditions.

Parts list -----

When ordering, specify Model No., Serial No., Name of part.

No.	Name of part	No.	Name of part
1-1	Casing Cover	4-1	Frame Stator
1-2	Bolt-Casing Cover	4-4	Rear Housing
1-3	Impeller	4-5	Spring Washer
2-1	Casing	4-7	Bolt-Rear Housing
2-2	Bolt-Casing	4-8	Fan Cover
2-3	Spring Washer	4-9	Bolt-Fan Cover
2-4	End Cover	4-13	Bolt-Frame
2-5	Bolt End Cover	4-14	Nut-Frame
2-6	Spring Washer	4-15	Spring Washer
2-7	Silencer Assembly	4-19	Bolt-Bearing Retainer-Front
2-8	Flange	4-20	Bearing Retainer-Front
2-9	Bolt-Flange	4-24	Front Frame Cover
2-14	Shaft Seal	5-1	Terminal Box
2-15	Silencer Retaining Net	5-2	Gasket-T.Box
2-16	Silencer Box	5-3	Cover-T.Box
2-17	Bolt-Silencer Box	5-4	Bolt-T.Box
2-18	Lifting Bolt	5-5	Washer-T.Box Ground
2-20	Washer Silencer Box	5-7	Bolt-T.Box Cover
3-1	Rotor and Shaft Assembly	5-8	Grommet-T.Box
3-4	Bearing-Rear	5-9	Bolt-Ground
3-5	Bearing-Front	6-1	Capacitor and Cap. Assy
3-6	Bearing Shim	6-2	Bushing-Capacitor
3-7	Plate Retaining	6-4	Cap-Capacitor Assembly
3-8	Bolt-Impeller	6-5	Washer-Capacitor
3-9	Tab Washer	6-6	Bolt-Cap. Lead
3-11	Key-Impeller	6-7	Bolt-Cap.
3-12	Motor Fan	6-8	Spring Washer
3-13	Bolt-Motor Fan		
3-14	Key-Motor Fan		
3-15	Collar		

① VFC108A(P) : Not applicable
 ② VFC088A(P), Thru VFC308A(P) And VFC408P : Not applicable
 ③ VFC088A(P), 508A(P) Thru VFC708A : Not applicable



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