

Thank you for purchasing Revolution Technology make blower. Please read this operation manual carefully before installing and using the blower, and always keep the manual where it is readily accessible.

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## 1. Precautions

### 1.1 Precautions for Installation

Do not use in a place where there is flammable gas and / or corrosive gas. Connect the ground wire to the ground terminal inside the terminal box (if connected).

When installing the blower into your equipment, ensure that the motor lead wires are fixed and do not move.

In addition, do not apply any pressure to these lead wires. Installation must be performed by a qualified installer.

### 1.2 Precautions for Operation

Always turn off power to thermally protected blower before conducting checks or performing work on the blower.

These types of blowers will restart automatically when blower temperature falls below a certain level. The enclosure temperature of this blower can exceed 70°C (depending on operating conditions.).

In case blower is accessible during operation, please attach the following warning label so that it is clearly visible.

Do not touch the blower blades (impeller) when the blower is in operation.



Warning Label

## 2. Checking the Package Contents.

### 2.1 Checking the contents

Please make sure that the package contains all of the items listed below.

|                 |                                 |
|-----------------|---------------------------------|
| Blower .....    | 1 piece                         |
| Capacitor ..... | 1 piece (for single phase only) |

### 2.2 Checking the model name

This manual covers the products specified below.

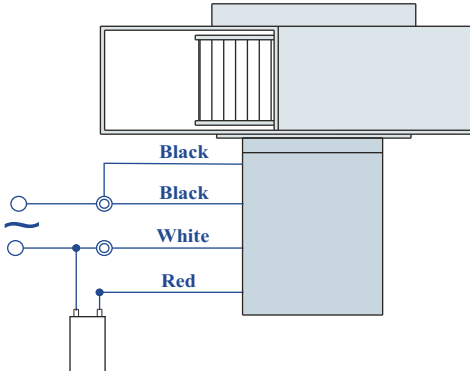
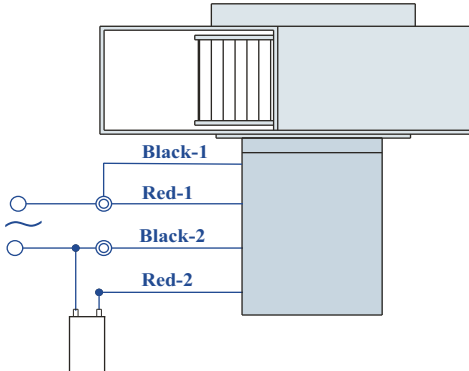
Please make sure that the model, voltage, are as you ordered by the nameplate.

CB161270 W, CB161270 X, CB161270 Y, CB 161270 Z  
CB121255 W, CB121255 X, CB121255 Y, CB 121255 Z  
CB100836 W, CB100836 X, Cb100836 Y, CB 100836 Z

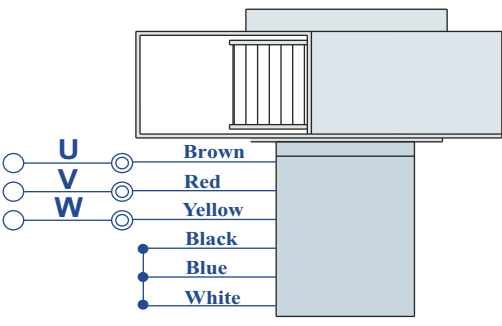
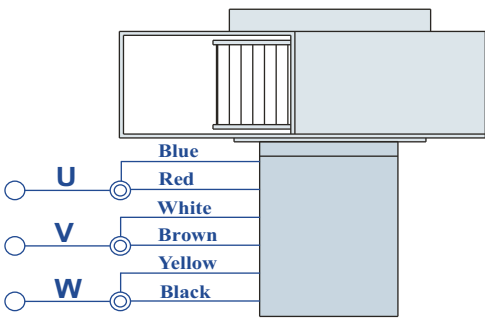
# Wiring Diagram

## Wiring diagram for Single Phase Blower

Ensure that the impeller is rotation in **anti clockwise direction**, air flow is maximum.

| Standard Single Phase Blower   | SR Type Single Phase Blower   |
|--|---|
|   |   |
| <p>Short Black wires and connect the capacitor as shown.<br/>To change the direction, connect the supply wire from White to Red.</p> | <p>Red wires are for running winding and Black wires for Starting winding.<br/>To change the direction, interchange Black wires or Red wires.</p> |

## Wiring diagram for Three Phase Motors

| Star Connection  | Delta Connection  |
|--|---|
|   |   |
| <p>For the Voltage 415 VAC, 3-Phase Supply, Wires are connected as shown in the fig.<br/>Short Blue, Black and White and then insulate it carefully.<br/><br/>To change the direction, interchange any two wires between U, V &amp; W.</p> | <p>For the Voltage 230 VAC, 3-Phase Supply, Wires are connected as shown in the fig.<br/>Short Blue &amp; Red, Black &amp; Yellow, and White &amp; Red as per the fig. Shown.<br/><br/>To change the direction, interchange any two wires between U, V &amp; W.</p> |

## 4. Installation

Indoors (the product is designed and manufactured to be mounted in a machine)  
Install the blower and capacitor in locations that meet the following conditions.

Ambient temperature -10°C ~ +50°C

Ambient humidity 0 ~ 85 % (Non-condensing)

No explosive, flammable, and / or corrosive gas.

No exposure to direct sunlight.

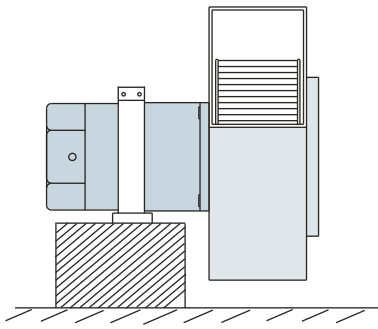
No splashing of water or exposure to dust or debris.

No oil or grease, organic solvents, acid or alkaline chemicals.

No continuous vibration or excessive shock.

## 4.1 Mounting the blower

Use of mounting bracket (Option)



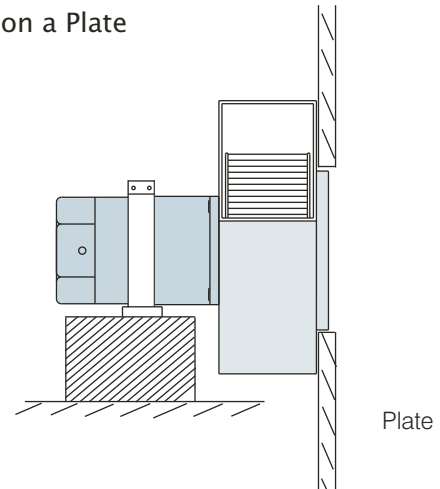
A mounting bracket matching the diameter of the motor casing is available. With this mounting bracket, a blower can be secured to the equipment by using the motor casing section of the blower. While installing a blower, be sure to use a spacer so that the impeller casing does not touch the surface to which the mounting bracket is secured.

## 4.2 Mounting the capacitor (For only single-phase types)

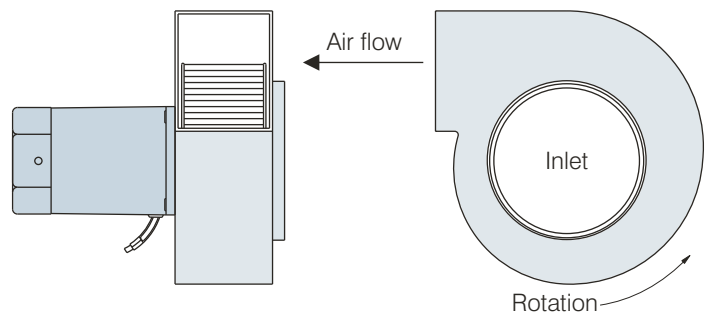
Before mounting the capacitor, check the capacitance of the capacitor provided, matches the capacitance indicated on the blower's nameplate. Use clamp to mount the capacitor

**Note :** Install the capacitor at least 10cm, away from the motor as the capacitor life span may be shortened due to heat from the blower.

Mounting on a Plate



Air flow Direction



# 5. Overheat Protection

CB series blower is equipped with one of two methods to prevent burning the blower as a result of abnormal heating

Impedance Protection ( CB 100836)

The blowers are designed with higher impedance in the motor windings so that even if the motor locks, the increase in current is kept down hence the temperature does not rise beyond certain constant level.

Thermal protection (CB121255, Cb161270, )

When the blower reaches a predetermined temperature, the internal thermal protector is activated and the blower is stopped.

With the automatic resume feature, the blower automatically begins operation again as soon as the blower temperature falls to a certain level. Always turn the power off before performing inspections.

Operating temperature of thermal protectors : Open :  $120^{\circ}\text{C} \pm 5^{\circ}\text{C}$  , Close :  $77^{\circ}\text{C} \pm 15^{\circ}\text{C}$

Specifications subject to change without notice.