# PROPELLER FAN (Belt Driven)

- 8. If abnormal noise or vibration is found during operation, it should be stopped immediately and checked before it can be put into use again.
- 9. After being used for a period of time, the belt will become soft and need the user to tighten v belt regularly.

The way to adjust the belt: Loosen the fastening bolt of the motor plate on the inlet side, disassemble the small net on the right side of the motor plate, and adjust the M8 bolt from the hole position reserved by the net. Checking if the belt is proper or not , pls use index finger and middle finger to press middle of the belt . It is all right when the belt can be pressed down by 15-20mm . 10.Type Y attachment -Damaged supply cords to be replaced by the manufacturer ,service agent or similarly qualified person to avoid hazard.

#### **GENERAL FAULT ANALYSIS**

Fault name	Fault Analysis			
Excessive motor current and excessive temperature rise	<ul><li>1.Voltage instability or dephase.</li><li>2. Excessive gas density .</li><li>3.Using environment mismatch .</li></ul>			
Abnormal sound	Motor bearing get damaged.     Fan rotating parts get damaged.     Friction of rotating parts.			
Fan can't be started	<ol> <li>Power switch is not enough to withstand the starting current.</li> <li>Power cord is not well connected.</li> </ol>			
Slipping belt	<ol> <li>The belt is not tight.</li> <li>The slot type of the two pulleys is misaligned.</li> </ol>			

Model	Speed (r/min)	Volume (m³/h)	Noise dB(A)	Power (kW)	Voltage (V)	Weight kg!	Dimension AxBxH(mm)
TORNADO EXF- 32T	450	16000	59	0.37	220	39	900x400x900
TORNADO EXF- 38T	450	32000	60	0.75	220	51	1060x400x1060
TORNADO EXF- 38S							
TORNADO EXF-44T	450	37000	63	0.75	220	65	1220x400x1220
TORNADO EXF- 44S							
TORNADO EXF-50T	450	44500	65	1.1	220	71	1380x400x1380
TORNADO EXF-50S							



# PROPELLER FAN

(Belt Driven)

# **USER'S MANUAL**

www.colentco.com

#### **APPLICATION**

Compared with traditional axial fan, EXF series axial fan has large air volume, low noise, energy saving and convenient to be used. Shutters can be opened and closed to achieve dust-proof, waterproof and clean appearance. It can blow or exhaust air . It can transport gas which doesn't contain flammable, explosive, corrosive and viscous substances . Its gas temperature is not more than 40 and gas dust and particulate matter in the body not exceeding 150 mg/m . Widely used in factories, warehouses and other places where easy to produce exhaust gas, heat air and poor ventilation need to be cooled or ventilated.

# **INSTALLATION**

- 1. Before installation, check whether the fan is damaged and deformed due to packing and transportation.
- 2. During installation, make sure the connection parts are well fixed and clearance between blade and housing should be uniform and no collision.
- 3. When installing the fan in the wall, don't install the unit completely inside. The part measuring from the shutter to the body as 140 mm is the maintenance position of the fan shutter linkage system, and this part can not be installed in the wall.
- 4. The fan must be installed in a horizontal position. Eight m8 riveting nuts on the body must be used to fix.
- 5. This fan is not allowed to be hoisted directly and hoisting need to add hanger or support for horizontal installation.
- 6. Voltage fluctuation does not exceed rated voltage 5.
- 7. The motor wiring must be carried out by professionals to ensure the correct and safe wiring.
- 8. The default use state of the fan is to connect the pipe or equipment in front or back .When the inlet (outlet) does not connect the pipe, the personnel may directly contact the inlet and outlet. It needs to add safety protection device and the user can contact the manufacturer to purchase additional protective device.
- 9. After the fan is installed, the fan surface should be kept clean, and the fan should be protected before formal use to prevent subsequent construction from polluting the fan surface. Many pollutants in the wet environment will form an accelerated corrosion on the surface of the fan.

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10. All fan design is in principle non-rainproof design, Outdoor use needs to add rainproof facilities or special custom fan. Under the condition of seaside use, ordinary fan can not meet the requirements of anti-corrosion and needs special customization.

## Use and Maintenance

- 1. Test the machine before formal use and confirm the following items:
  - a! correct connection.
  - b! no abnormal noise.
  - c! power is not overloaded.
  - d! fan rotation is consistent with marking.
- 2. Make sure the machine test is normal before it can be formally used.
- 3. When being used as indoor exhaust, doors and windows can not be closed, there should be enough air for its discharge, otherwise it is easy to cause motor burning.
- 4. Don't start and stop the fan too often.
- 5. Shall regularly check the parts of the fan to ensure that the fan can start and run normally at any time.
- 6. In order to avoid the damage caused by the blade vibration due the damage of dynamic balance, the fan blade must be checked every month regularly. If dust and oil are found on the surface of the blade, it must be cleaned before use.
- 7. If the fan is not in use for a long time, check that the connecting parts are reliable and can be used normally after trial operation.

### Schematic diagram for adjusting belt tension:

