

AXIAL FLOW & BIFURCATED FANS

OPERATING & MAINTENANCE INSTRUCTIONS

GENERAL INFORMATION

Under normal circumstances handling clean air, axial fans will require cleaning only about once a year. However, the fan and system should be checked at regular intervals to detect any unusual accumulation.

On externally motor driven axial fans the impeller should be specially checked for build-up of material or dirt which may cause an imbalance with resulting undue wear on bearings and v-belt drives. A regular maintenance programme must be established as needed to prevent this build up.

Regular inspection of the rotating assembly should be made to detect any indication of weakening of the impeller because of corrosion, erosion or metal fatigue, etc.

Do not attempt any maintenance on a fan unless the electrical supply had been completely disconnected. If an isolating switch has not been provided, remove all fuses from the circuit and lock the fuse panel so that they cannot be accidentally replaced.

Where guards have to be removed to carry out maintenance or servicing of equipment these must be correctly replaced and the fastenings checked.

I. DIRECT ON LINE STARTING

This starting method is normally used with the smaller type of Motor. It is so called because the electric current required to start the fan is taken as an instantaneous surge by the motor, this is known as 'Starting Current'. This 'current draw' can sometimes equal as much as eight times the running current of the motor (which is shown the motor nameplate). Therefore, care should be taken in the selection of this type of starting method.

II. STAR DELTA STARTING

This starting method is normally for larger power units or where 'current draw' on the Direct on Line method would exceed the available supply. The 'current draw' could with this method be 2/3 times the rating of the motor, but the load would not be instantaneous, since the 'current draw' would be split over the Star Delta cycle. If there is any doubt as to the starting method to use for your particular application please consult the electricity authority or the supplier of the fan equipment.

Wherever possible the impeller should be rotated by hand before the fan is fitted into the ductwork system and before it is 'switched on' electrically.

On Reversible Fans, care must be taken to ensure that the Impeller has stopped rotating before it is reversed.