

**INSTALLATION OPERATION AND MAINTENANCE
INSTRUCTION FOR PLATE MOUNTED FANS**

Unpacking:

Before unpacking the fan check that it is as ordered and that it has not been damaged during transport (bent plate, damaged guard or impeller etc.). When unpacking the fan, care should be taken to avoid injury from sharp edges, burrs, nails, staples etc. The fan packaging should be considered as a protective device only.

General:

Before installing the fan, check that it has not been damaged in storage or transport, that the impeller rotates freely and that the fan nameplate data comply with the requirement of its use.

The fan can be heavy; it should be lifted slowly to prevent damage and distortion. Impeller or fan guard must not be used to lift the fan. The fan must be installed such that squarely positioned. Adequate room must be allowed round the fan for safe inspection and future maintenance.

The fan must be fully aligned before being bolted into position so that no distortion or stress is placed on equipment.

Appropriate fixings, with the correct torque applied, must be used to secure the fan into position.

The final position of the fan must be strong and rigid enough to take the weight of the fan and any other weight applied during installation.

Installation and electrical connection:

Check that the data on the rating plate correspond with the voltage and frequency of the electricity supply. The amperage of the electricity supply must accord with that given on the rating plate

Warning: the fan contains rotating parts and electrical connections that can be a danger and cause injuries. Only approved and qualified people familiar with the assessment of hazards and risks associated with fans should install, operate and maintain the product. They will have to use tools and test equipments required to service such fans,

All motors must be installed in conformity with safety regulations, machine safety directive and EEC low voltage directive.

The information labels and instructions on products to be incorporated must be respected.

The connection must be carried out following the diagram label stuck inside the cover of the connecting box or following the instructions supplied by the company.

The electrical supply cable must not be subjected to pulling or stretching.

The connecting box cover must be correctly fitted and screwed on. The seal must be correctly positioned to avoid any water entry. Cable glands must be tight enough with droplet form cables.

All motors must be earthed according to current safety regulations.

Warning: The fan must be earthed and no installation or maintenance work should be attempted without first switching off and isolating the fan and its controls from the electric supply.

Protection of the motor:

Overload protectors should be rated to 25% above the motor full load current indicated on the motor rating plate. The fuses only protect the windings against short-circuits. They must be AM type and tolerate a starting current 3.5 times the full-load current.

All motors fitted with overheat protection (thermostat) wired within the connecting box must be connected to an appropriate motor start contactor via a suitable relay.

Warning: on single-phase motors, overheat protection are wired in series with the motor winding: they operate by opening and closing with temperature to automatically open circuit the winding and stop the fan in an overheat situation. While cooling, the motor will automatically restart.

The installation must take in count the disturbances networks and over voltages of operation due to the interruption of current.

Starting: All motors can accept direct on line starting (DOL) by break switch or contact switch.

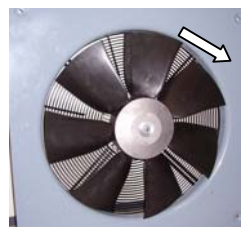
Warning: Whatever the application, access from either side to the rotating parts must be prevented while the fan is operating. Guards are available for this purpose

Speed controllers should not be used without prior agreement with company.

Direction of rotation: It is important to verify the direction of rotation of the fan.



Direction of rotation



Direction of rotation

**Airflow: motor → impeller
Impeller Form A**

**Airflow: impeller → motor
Impeller Form B**

Standard use: -30°C to +50°C (temperature of airflow around fan)

Environmental conditions of the place in which the product will function (according to IEC 721-3-4)

Warning: the fan is intended for moving air and is not suitable for use in environments or for purposes other than those specified in these instructions. If used improperly, or for different purposes without prior agreement of company, then such use would be outside the scope of reasonably foreseen circumstances, and may be unsafe.

⇒ Climatic conditions: 4K4H

⇒ Special climatic conditions: 4Z2 (process radiation)

⇒ Mechanical conditions: 4M3

⇒ Chemical substances: 4C2

Plastic propeller resistance to chemical products:

- No corrosion by acid-based or mineral-salt-based aqueous solutions, detergents.
- Resistant to water – weak acid – strong acid – alcohol – ester – ketone – oils
- Limited resistance to halogen hydrocarbons – aliphatic hydrocarbons (petrol) – aromatic hydrocarbons (benzene – petroleum)
- No resistance to: nitric acid – fuming sulphuric acid – chlorine solvent
- It is advisable to carry out tests under the conditions of use, to take in count the simultaneous effect of several chemical actions or other conditions such as temperature, etc.

⇒ Mechanical substances: 4S2

Capacitors (for single-phase motors only): if the capacitors are not supplied by company, they should be of the type – 10,000 hours 450VDB -30°C to +70°C

Protective guard: when the guard is supplied as a separate part, it is important to make sure that it is fitted in conformity with the machines safety directive.

Motor maintenance: the “COMPACT” range is designed without maintenance. The average lifetime is about 30,000 hours for a bearing temperature of 80°C.

Guarantee against defects: our products are one year guaranteed from the date they leave our workshops against all hidden manufacturing defects which render them unusable or which reduce considerably their use.

This guarantee will not be valid in case of improper use of the products or use not in accordance with the given instructions. This guarantee will not be valid in case of defect lies in action of the user.

Our guarantee is only limited to the repair or the replacement of the fan. If the fan can't be repair, the guarantee is only limited to the replacement of the acknowledged defective parts. All other damages are solely excluded to the guarantee.

Fan, Parts and repairing costs remains entirely at the charge of the purchaser when the defects result from abnormal use, force majeure, normal wear, poor maintenance or in case of the use of inappropriate cleaning and maintenance substances.

For the guarantee to be effective, the purchaser must give us written notice of the existence of the defects within ten days of their discovery.

The purchaser must provide his help and grant us every facility for observation of the defect so that we can put it right.

Our guarantee is invalid if the purchaser has effected himself or by a third party the dismantling or modification of the sold products without our prior authorisation.

Our guarantee is also invalid if the defects are caused by material supplied by the purchaser or due to a product design imposed on us by the purchaser.