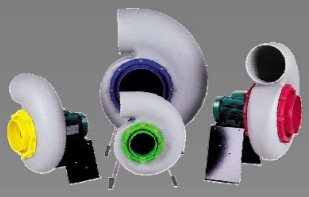


SEAT
VENTILATION

INSTALLATION AND MAINTENANCE GUIDE

DEDICATED FOR TOXIC AND CORROSIVE ENVIRONEMENTS!

WARNING:

Please read this manual before installation and follow the procedures extremely carefully!

1. INSTALLATION

Before installation, this manual must be readed carefully.

- ⇒ Before installation check that they are no foreign bodies in the coil or in the intake and pressure connections
- ⇒ Before installation check whether all the locking screws (including the motor screws) are tightened properly
- ⇒ Check the electrical connections and wiring (see page 9)
- ⇒ Fan should be connected to ductwork with PVC sleeves to reduce vibrations and noise
- ⇒ If exhaust stacks are mounted on SEAT or STORM Series fan outlet (ubplast discharge), the weight of the stack must not be supported by fan housing.
- ⇒ Avoid continous temperature use higher than 70°C
- ⇒ Please do the enclosed pedestal or kit roof installation as indicated on pages 4 to 6
- ⇒ If rain water can enter the fan housing then a drain plug with hose connector should be fitted at the lowest point of the housing

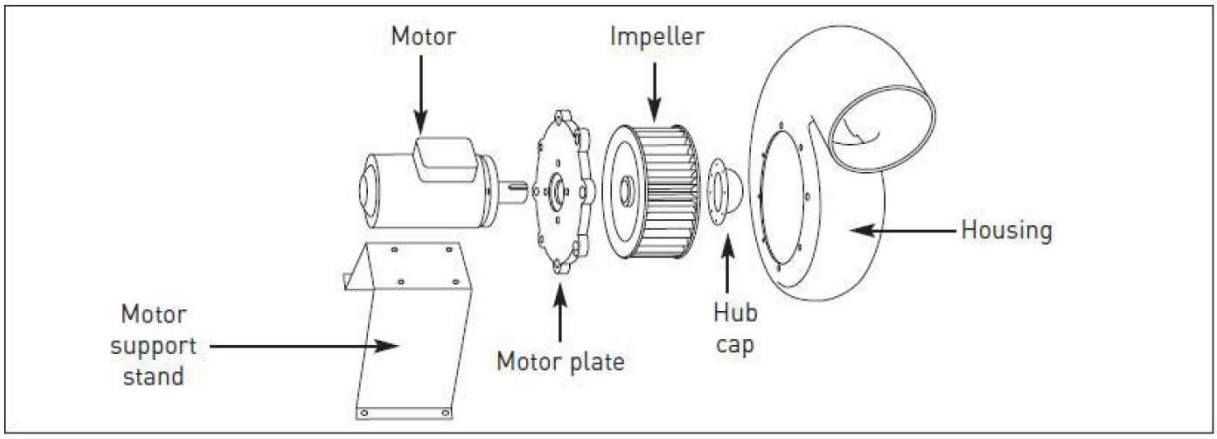
!!WARNING:

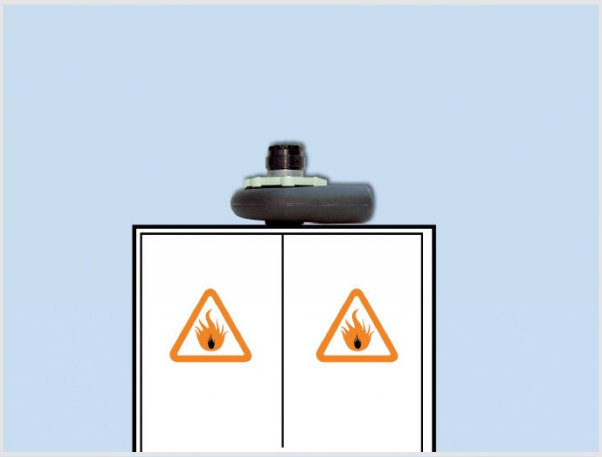
For the SEAT Series, for each model, the impeller turn in a one direction, LG or RD. Housing montage was planed in function of this direction of rotation: in case of housing inversion, the fan will not deliver anymore the real performances.

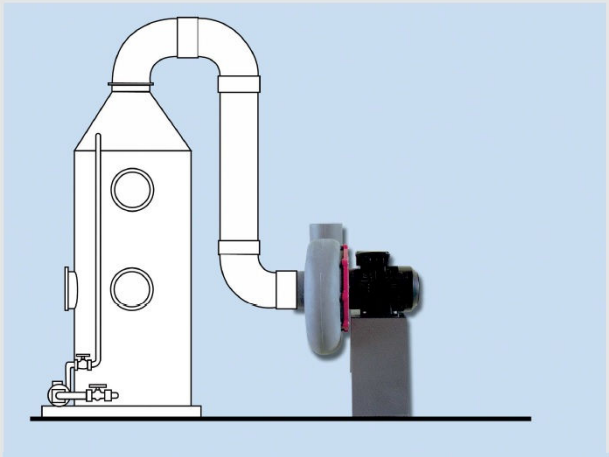
IMPELLER DIRECTION OF ROTATION

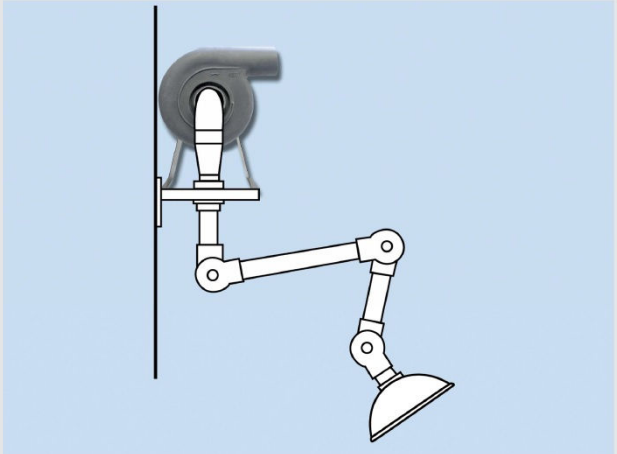
(viewed from inlet side)

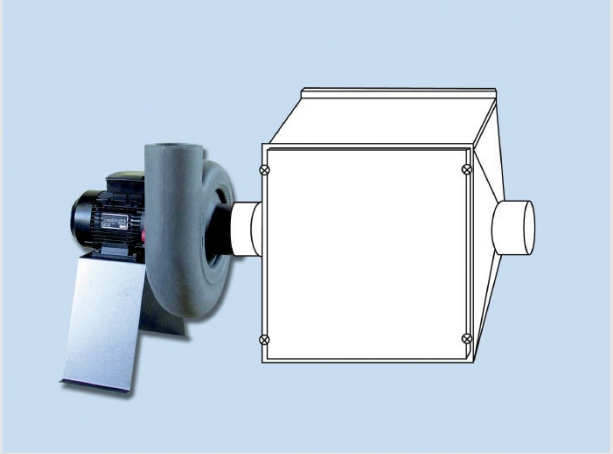
Assembly drawing







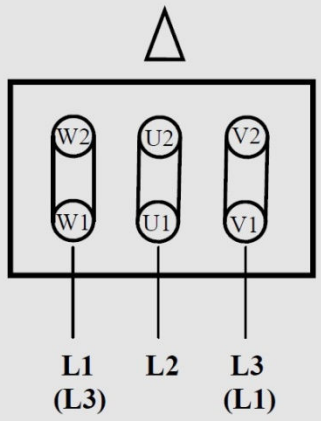




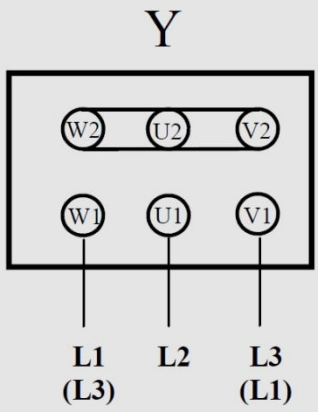
2. ELECTRICAL CONNECTION

The motor should be wired to the electrical supply in accordance with the connection diagram within the terminal box. It is essential that the motor should be protected from electrical overload by the fitting of a starter switch complete with current sensing relay.

Three phase wiring:

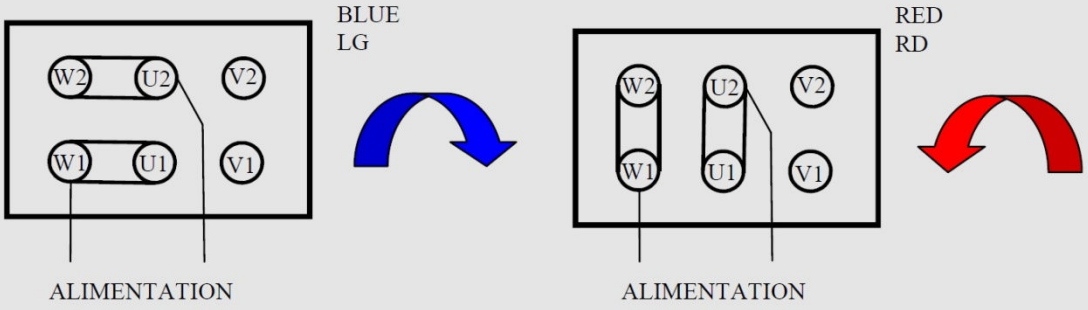


3 X 220 - 240 V



3 X 380 - 440 V

Single phase wiring:



The electrical installation may only be carried out by an authorised electrician in accordance with the regulations .

FINDING BREAKAGES

Problem found	Cause	Solution
Lack of capacity	Impeller obstructed	Clean the impeller
	Direction of rotation inverted	Check connection of winding on motor terminal box
	Insufficient speed of rotation	Check transmission, check that the belts do not slide
Eccessive air capacity	Speed of rotation	Check direction of rotation; check speed of motor rotation, voltage, defects in winding
Insufficient pressure	Speed of rotation too-low	Clean tubes and hood, check position of the shutters
Start up difficult	Excessive power absorption	Check direction of rotation; check the conditions of turbulence at aspiration; check rotation speed of the motor
Excessive noise	Elevated number of rotations to obtain the required performance	Choose an appliance with a bigger size equal to the performance
	Break down of the bearings	Check bearing wear
Vibrations	Support structure not suitable	Add weights to the structure to make it more stable

3. START UP

Prior to commisioning and initial start up, please compare the motor power with the system tension and frequency and check the electrical connections if wired at the factory. The motor must be equipped with a ON/OF switch according to EEC Machinery Directive of 14th June 1989 (89/392 EEC). The electric cable must be protected against spoiling and conceived in accordance with the observed power.

4. FONCTIONING

- ⇒ The fan must be protected against surging
- ⇒ The deposits on the impeller could cause impeller break; ensure their clearance;
- ⇒ Even in case of default of power supply, the fonctioning maxim temperature should not be exceeded
- ⇒ The plastic fans are not adapted for the solid particles exhaust
- ⇒ Please use ATEX version for potentially explosive atmospheres

5. MAINTENANCE

After first month fonctioning, the fan must be maintained as follows:

- ⇒ Check the smooth running of the fan
- ⇒ Check the motor temperature
- ⇒ Remove any dusts deposits on the impeller and the motor

The fan may only be maintained by trained personnel who are authorised to carry out such work.