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# **DIRECT DRIVEN SINGLE FANS**

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## **INSTALLATION AND MAINTENANCE INSTRUCTIONS**

### **MCS MODELS**

#### **SITE STORAGE**

The fan must be stored in clean, dry conditions. It is recommended that before installation the resistance to earth should be measured and if it is found to be less than 1 megohm the motor should be dried out before applying mains voltage. If the fan is to be stored for a long period of time the impeller should be rotated occasionally to prevent hardening of the lubricant and corrosion of the bearings.

#### **GENERAL**

MCS units are fitted with forward curved centrifugal fans with sealed for life bearings.

#### **INSTALLATION**

Unless otherwise specified by Metrico this product is supplied as a unit intended for incorporation into other installations. The installer must ensure that the installation complies with all applicable EC directives and current regulations. Some installations may occur where additional safety parts are required to ensure safety in operation, the installer must ensure that all necessary parts are fitted. The installer must ensure that the fan is adequately supported and that clear and reasonable access is provided to enable maintenance to be carried out.

#### **SAFETY**

When installing or using the fan units the following precautions should be taken.

1. Do not carry out any work without isolating the fan from the electrical supply ensuring the fan is secured against restoration of electrical power.
2. Should the fan be installed where there is reasonable possibility of persons or objects coming into contact with the impeller a guard should be fitted. It is the responsibility of the installer and user to ensure that the installation complies with all applicable EC directives, standards, and health and safety requirements.
3. Please note that this is a sheet metal product. Although due consideration is given during manufacture to minimise risk, care should be taken when handling this product.
4. Larger products of this type are heavy and therefore due consideration and care must be given to the weight when lifting.
5. **WARNING**  
The control system of this product may be activated by a time clock, thermostat or similar device. This may allow the fan to start without warning

#### **MOUNTING OF UNIT**

The fan unit must be fixed by using channel base and threaded rods (when suspended from the ceiling). The fan unit must be mounted securely through at least four locations on the fan plane.

#### **SUPPLY**

The site supply must be checked to ensure that the voltage, frequency, number of phases and current rating comply with the rating data plate.

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## EARTHING

All fans must be earthed in accordance with the requirements of your supply authority and current regulations. The earth conductor must be of adequate rating to conduct the maximum of fault current.

## PROTECTION

Fuses in the circuit should be regarded as only protecting the wiring against short circuits or earth faults and they are not suitable for overload protection. Fuse ratings must be able to carry starting loads which can be taken as a maximum of six times the running current for 25 seconds. Overload protection must be provided in accordance with current applicable regulation. Overload protection can be provided using a D.O.L. starter.

## ELECTRICAL CONNECTION

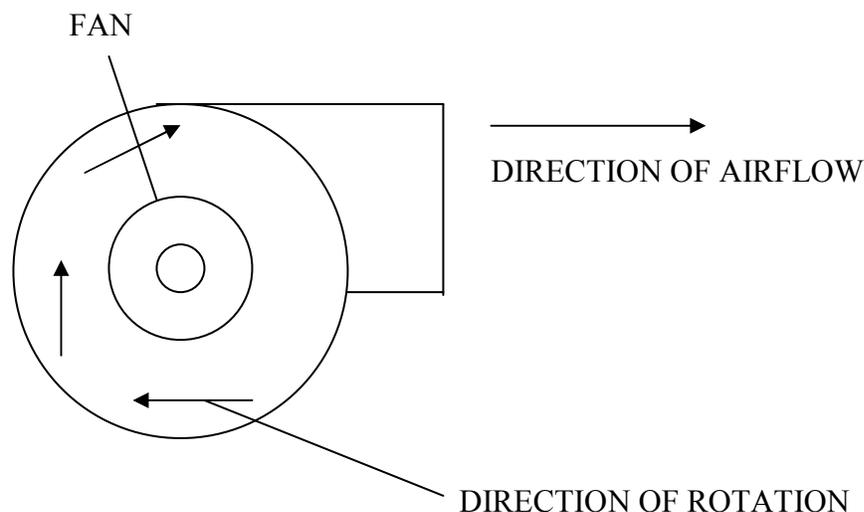
All motors are pre-wired externally to a IP55 terminal box located on the casing. Connections should be made by a suitable qualified and competent person. All work should be carried out in accordance with current applicable regulations.

- \* Cable entry should be made through the IP 55 terminal box located on the unit.  
A cable gland should be used to make connections.



## DIRECTION OF ROTATION

The installer must visually check for correct rotation. Note that if the direction of rotation is incorrect the airflow will still be in the correct direction but at a reduced rate. Three phase fans require a trial connection. To reverse direction interchange any two SUPPLY leads. Single phase fans are despatched with connection made but correct rotation should always be confirmed on site.



## MAINTENANCE OF DIRECT DRIVE UNITS

The units should be periodically checked for security of fastenings and the impeller cleaned should it become soiled.

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