

## HPA Axial Flow Fan

Installation and Maintenance Instructions.

**THESE INSTRUCTIONS MUST BE READ FULLY BEFORE COMMENCING INSTALLATION.**

**Owner / installer:** The life of this apparatus and its efficiency will be increased if its use and maintenance is carried out in accordance with these instructions and current statutory requirements. The installation and initial adjustments should be carried out by a qualified and competent technician. Hydor Limited should be consulted before substituting or fitting parts from another manufacturer. It is the responsibility of the installer to verify that the installation is in accordance with the following standards and the owner is given the current User's Manual.

**Any modifications to the fan or its installation, even the smallest modification, change or elimination of security components or pieces that influence the efficiency or loss of ventilation, will result in the CE Certification and Hydor's warranty being cancelled.**

### **1. General**

- 1.1 It is important these Installation and Maintenance Instructions are fully adhered to.
- 1.2 Full details of the unit supplied are shown on the product nameplate. If in doubt about any detail contact Hydor or its agents for clarification.
- 1.3 All electrical installation must be carried out by suitably qualified and competent personnel in accordance with all current statutory requirements.
- 1.4 These instructions cover only the Hydor product and do not include the supply or installation of any safety equipment that may be required e.g. adequate guarding or protection from rotating parts and proper electrical isolation.
- 1.5 Any declarations made by Hydor about product installation and safety, are dependent on the fan equipment being used within installations which themselves meet the requirements of the relevant Standards and Directives of your region.
- 1.6 The fan is designed for use in an ambient temperature of up to 55°C and up to 95% relative humidity. The fan is not suitable for corrosive or explosive atmospheres.
- 1.7 The installer should provide easy access to the fan to facilitate future maintenance.

- 1.8 The installer should ensure the fan is adequately supported.
- 1.9 This product is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the product safely. Young children should be supervised to ensure that they do not play with the appliance.

**WARNING** The fan must be isolated from the power supply during installation and maintenance. The fan must be earthed in accordance with the local regulations.

## **2. Installation**

- 2.1 Upon receipt, the fan equipment should be visually inspected to check for any damage. Ensure that the impeller is free to rotate.
- 2.2 If there are any queries concerning the fan equipment, Hydor should be contacted prior to the installation.
- 2.3 The fan must be securely mounted in the desired position to suit the application.  
The fan can be mounted at any angle.
- 2.4 Check the details on the motor rating plate to ensure that the correct power supply (voltage, frequency and phase) is available.  
An incorrect power supply will lead to permanent damage to the fan motor.
- 2.5 Refer to the appropriate wiring diagram. Ensure that all earth connections are made.
- 2.6 Means for electrical disconnection must be incorporated in the wiring installation in accordance with the relevant wiring and electrical regulations.
- 2.7 Precaution must be taken to locate the exhaust discharge terminal so as to avoid the backflow of gases into the room from the open flue of gas or other fuel burning appliances.

## **3. Start-up**

- 3.1 Before power is supplied to the unit, check that the wiring is correct as per the fan connection diagram.
- 3.2 At initial start-up, check that impeller rotation and airflow direction is correct.
- 3.3 Check that the motor amperage draw does not exceed the nameplate rating.

## **4. Fan Maintenance**

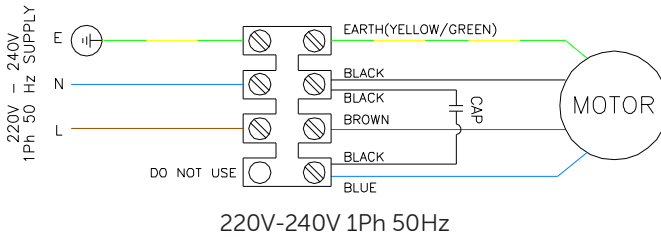
- 4.1 Inspection of the fan at least once every 12 months is recommended to ensure that the motor, fan blades, and supporting guards, are clean. Any build up of dust and deposits on the blades or guards should be removed using a non-abrasive cleaner.
- 4.2 All fastenings should be checked for tightness. In addition, all rotating

items should be checked.

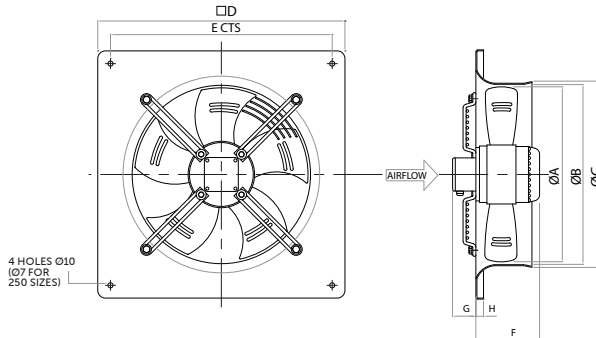
- 4.3 Bearings are of the 'sealed for life' type and will not need a detailed inspection.

**WARNING** This fan is fitted with an auto-reset thermal contact which switches the fan off in the event of a fault condition. Once the motor cools down the fan may start unexpectedly. Only a suitably qualified and competent person may carry out maintenance after the electrical supply has been isolated.

## 5. Wiring



## 6. Dimensional Data



Article No.	Code	A	B	C	D	E	F	G	H	Weight (kg)
005716	HPA250/2-1A	260	280	285	370	320	90	60	15	3
005717	HPA250/4-1A	260	280	285	370	320	90	60	15	3
005719	HPA315/4-1A	315	335	340	430	380	90	60	15	3.3
005721	HPA400/4-1A	410	430	435	540	490	110	60	15	7.2
005722	HPA400/6-1A	410	430	435	540	490	110	60	15	7.2
005723	HPA450/4-1A	460	480	485	575	535	110	60	15	7.2
005724	HPA450/6-1A	460	480	485	575	535	110	60	15	7.2
005725	HPA500/4-1A	510	530	535	655	615	115	60	15	9.5
005729	HPA630/4-1A	640	660	665	805	750	125	60	15	15

Dimensions in mm

## **Guarantee**

Hydor or its agents will, within a period of one year from the date of dispatch from their works, at its option, replace any goods, which are proven to have defects as a result of defective materials or workmanship. The goods must be inspected by a Hydor official and if necessary returned, with a Returns Note Number, carriage paid, for further examination.

Hydor Ltd

## **Hydor**

Unit 8, Parkers Close, Downton  
Business Centre, Downton, Salisbury,  
Wiltshire, SP5 3RB, UK

Tel: +44 (0) 1725 511422  
Email: [info@hydor.co.uk](mailto:info@hydor.co.uk)  
Web: [www.hydor.co.uk](http://www.hydor.co.uk)

## **Elta Fans Building Services**

46 Third Avenue, Pensnett Trading  
Estate, Kingswinford, West Midlands  
DY6 7US, UK

Tel: +44 (0) 1384 275800  
Email: [info@eltafans.co.uk](mailto:info@eltafans.co.uk)  
Web: [www.eltafans.com](http://www.eltafans.com)

## **Elta Fans Export**

17 Barnes Wallis Road, Segensworth  
East Industrial Estate, Fareham,  
Hampshire, PO15 5TT, UK

Tel: +44 (0) 1489 566500  
Email: [export@eltafans.co.uk](mailto:export@eltafans.co.uk)

## **idealair group**

Unit 1, Building 1, Sydney Corporate  
Park 85 O'Riordan Street, Alexandria  
NSW 2015

Tel: +61 (02) 8073 3310  
Fax: +61 (02) 8073 3320  
Email: [info@idealairgroup.com.au](mailto:info@idealairgroup.com.au)

## **AMS**

11 Ingrid Road, Montague Gardens,  
7442 Cape Town, Western Cape

Tel: +27 (0) 21 552 1077  
Fax: +27 (0) 21 552 2797