

HXP Plate 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 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 all current statutory requirements 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 dependant 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 70°C (fixed speed), 55°C (speed controlled) 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.
- 1.10 At end-of-life, the unit must be disposed of in an environmentally friendly manner by suitably qualified and competent personnel in accordance with the requirements of applicable Standards and Directives.



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 The HXP range of fans is normally supplied assembled. The single phase units are supplied with the Capacitor loose or fitted in the terminal box on the flying lead.
- 2.2 Upon receipt, the fan equipment should be visually inspected to check for any damage. Ensure that the impeller is free to rotate.
- 2.3 If there are any queries concerning the fan equipment, Hydor should be contacted prior to the installation.
- 2.4 The fan must be securely mounted in the desired position to suit the application. The fan can be mounted at any angle.
- 2.5 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.
- 2.6 Refer to the appropriate wiring diagram. Ensure that all earth connections are made.
- 2.7 Means for electrical disconnection must be incorporated in the wiring installation in accordance with the relevant wiring and electrical regulations.
- 2.8 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.
- 2.9 If the fan is being used through a speed regulation device, either electrically or electronically. Please refer to the relevant control device instructions.

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: Only a suitably qualified and competent person may carry out maintenance after the electrical supply has been isolated. Particular care must be taken when automatic switching controls are used.

5. Wiring

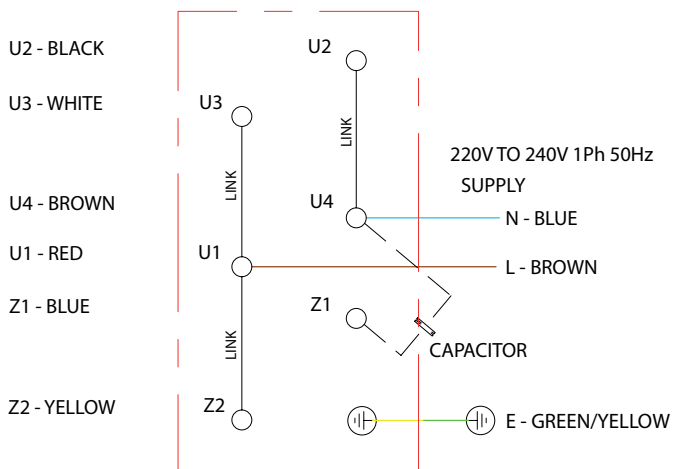
- 5.1 Check that the fan unit supplied is suitable for the supply voltage and type of fan being replaced.
- 5.2 Remove the terminal plate on the motor which will provide access to the terminal connections. A suitably qualified and competent person should carry out the electrical installation in accordance with the current applicable regulations, in particular IEE 552-01-02/03. Particular attention should be paid to the connections of the capacitor.



NOTE: For motors with Integral connection box. **Single Phase** see 5.3 on page 4. **Three Phase** see 5.4 on page 5. For motors with flying leads with external terminal box, see 5.6 on page 6

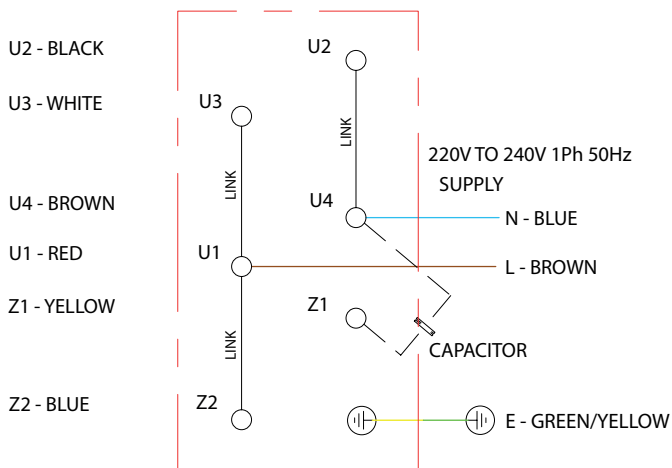
5.3 Single Phase (motors with integral connection box)

FORM "A" AIRFLOW MODELS



ANTI-CLOCKWISE ROTATION

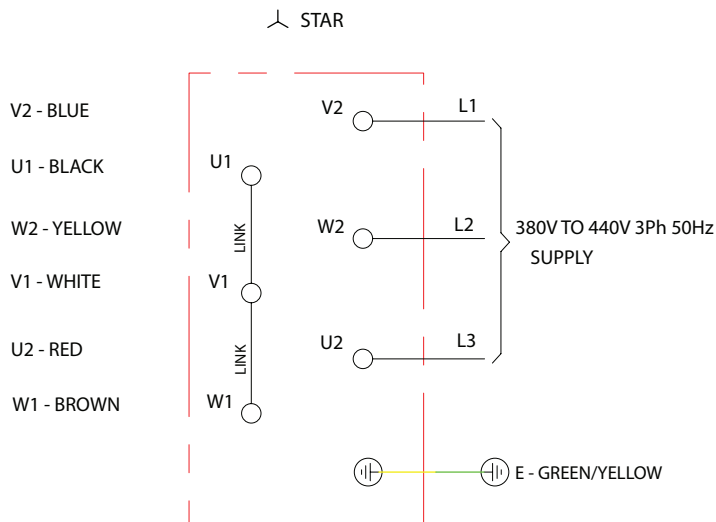
FORM "B" AIRFLOW MODELS



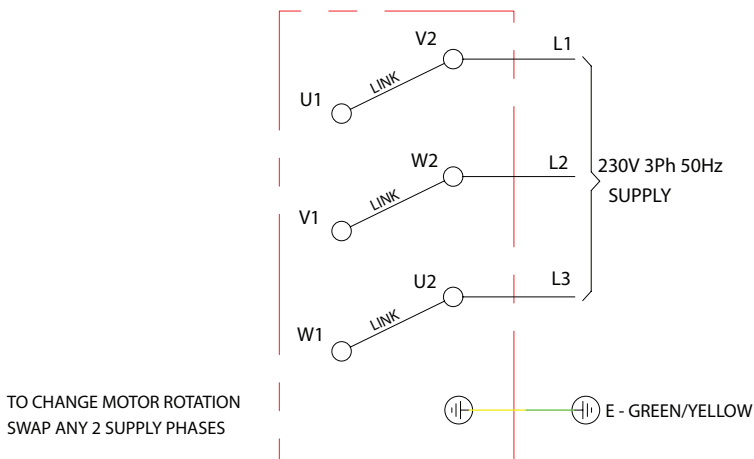
TO REVERSE THE MOTOR ROTATION
INTERCHANGE Z1 BLUE & Z2 YELLOW.

CLOCKWISE ROTATION

5.4 Three Phase (motors with integral connection box)



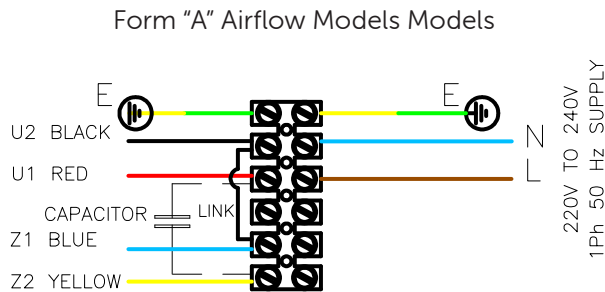
△ DELTA



Replace the terminal cover and test run the fan unit, checking the rotation and fan currents.

5.5 Motors with flying leads with external terminal box

Single Phase



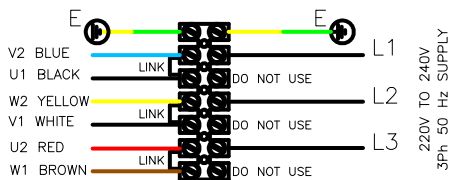
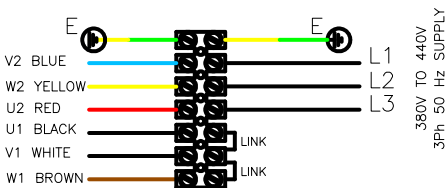
Anti-clockwise rotation (looking in the airflow direction)

To reverse the motor rotation interchange yellow & blue.
(Wires do not have markings)

Three Phase

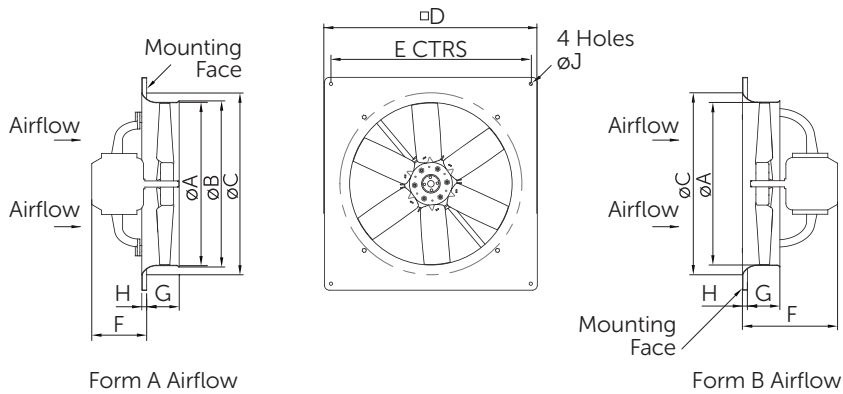
DELTA (415V / 3Ph / 50Hz)

STAR (230V / 3Ph / 50Hz)



To reverse the motor rotation interchange any 2 supply phases
(wires do not have markings)

6. Dimensional Data



Product Code	A	B	C	D	E	F (A Airflow)	F (B Airflow)	G	H	J
HXP45041	450	462	500	575	535	157	269	95	15	10
HXP45043	450	462	500	575	535	186	299	95	15	10
HXP45061	450	462	500	575	535	173	286	95	15	10
HXP45063	450	462	500	575	535	173	286	95	15	10
HXP50041	500	512	560	655	615	182	305	100	15	10
HXP50043	500	512	560	655	615	182	305	100	15	10
HXP50061	500	512	560	655	615	169	293	100	15	10
HXP50063	500	512	560	655	615	169	293	100	15	10
HXP56043	560	577	620	725	670	182	321	100	15	10
HXP56063	560	577	620	725	670	169	323	100	15	10
HXP63061	630	647	700	805	750	189	328	105	20	10
HXP63063	630	647	700	805	750	189	328	105	20	10
HXP63083	630	647	700	805	750	187	326	105	20	10
HXP71061	710	725	765	850	810	204	341	103	27	10
HXP71063	710	725	765	850	810	191	328	103	27	10
HXP80061	800	817	880	973	910	202	353	105	30	10
HXP80063	800	817	880	973	910	202	354	105	30	10

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.

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