

## HXRUS Roof Mounted Agri-Jet Silent

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 unit 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 50°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. The unit is normally supplied as fan housing and assembled fan with loose capacitor. 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 Agri-Jet housing requires a square hole in the roof either at the ridge or at a convenient place off-ridge as per the dimensions listed in the table below and must be securely mounted in the desired position to suit the application.
- 2.4 Insert the Agri-jet in the hole and secure to the roof by drilling and fixing the soaker sheet flashing of the unit. With the On-ridge version the flashings sit on the roof sheets. On the Off-ridge version it is necessary to ensure that the upper flashing is under the roof cap or under the roof sheet above it to ensure waterproofing. Apply sealant as required.
- 2.5 With the Unit securely installed, mount the assembled Form B diaphragm fan to the Ring-plate, with the motor, up in the trunk and the air passing over the motor and up the square trunk secure using the four M8 x 40 Bolts, washers, rubber mounts and Nyloc nuts. Ensure that all fixings are secure.
- 2.6 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.
- 2.7 Refer to the appropriate wiring diagram. Ensure that all earth connections are made.
- 2.8 Means for electrical disconnection must be incorporated in the wiring installation in accordance with the relevant wiring and electrical regulations.

- 2.9 If the fan is being used through a speed regulation device, either electrically or electronically, refer to the relevant control device instructions, however the minimum speed of the fan must be sufficient to raise the shutters of the Agri-Jet.  
Connect wire to terminal and replace terminal to its original position.

### **3. Start-up**

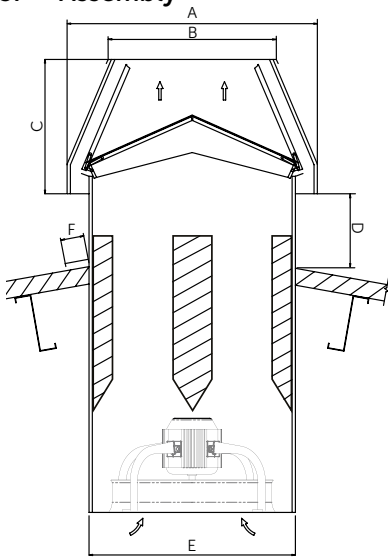
- 3.1 Before power is supplied to the unit, check that the wiring is correct as per the fan connection diagram.
- 3.2 At initial start-up, check that impeller rotation and airflow direction are correct.
- 3.3 Check that the motor amperage draw does not exceed the nameplate rating.

### **4. Fan Maintenance**

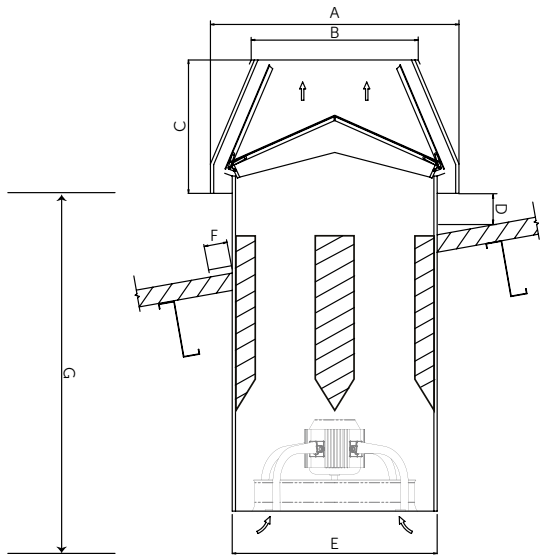
- 4.1 Inspection of the fan at least once every 12 months is recommended to ensure that the motor, fan blades, and supporting guards, are clean. Any build up of dust and deposits on the blades or guards should be removed using a non-abrasive cleaner. The Agri-Jet can be cleaned from below using a suitable pressure hose, although care must be taken not to saturate the fan motor. Occasionally the Agri-Jet will require cleaning from above to ensure the shutter is free to operate.
- 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. Assembly



On Ridge



Off Ridge

Product Code	A	B	C	D	E	F*	G
HRUS450	670	269	385	143	575	300	1450
HRUS500	750	308	431	153	655	300	1450
HRUS560	820	349	449	175	725	300	1750
HRUS630	900	421	509	193	805	300	1750
HRUS710	941	454	543	199	847	300	1750
HRUS800	1067	503	603	197	971	300	1750

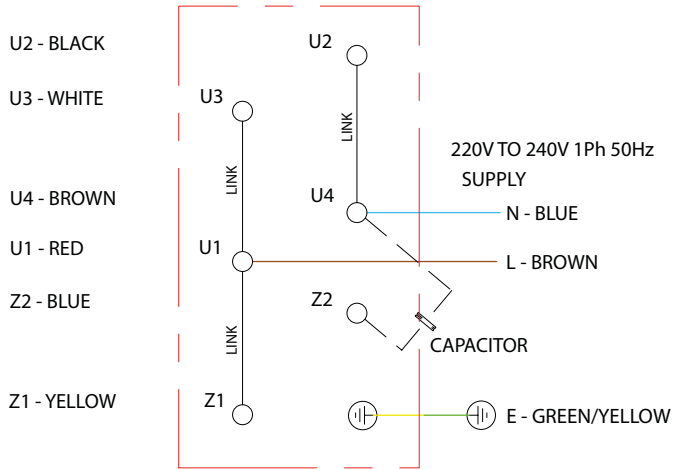
Dimensions in mm. \*Weather skirt

## 6. Wiring

- 6.1 Check that the fan unit supplied is suitable for the supply voltage and type.
- 6.2 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.

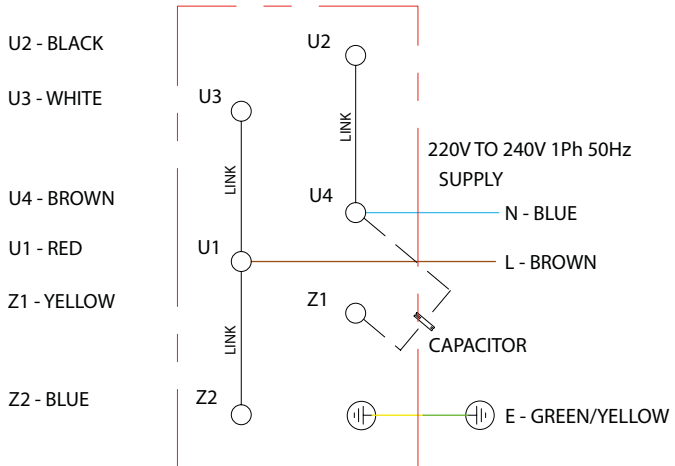
### 6.3 Single Phase

#### FORM "A" AIRFLOW MODELS



ANTI-CLOCKWISE ROTATION

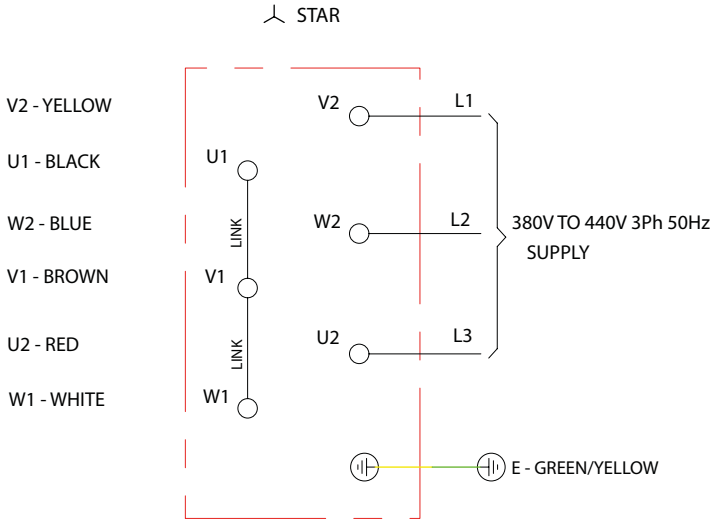
#### FORM "B" AIRFLOW MODELS



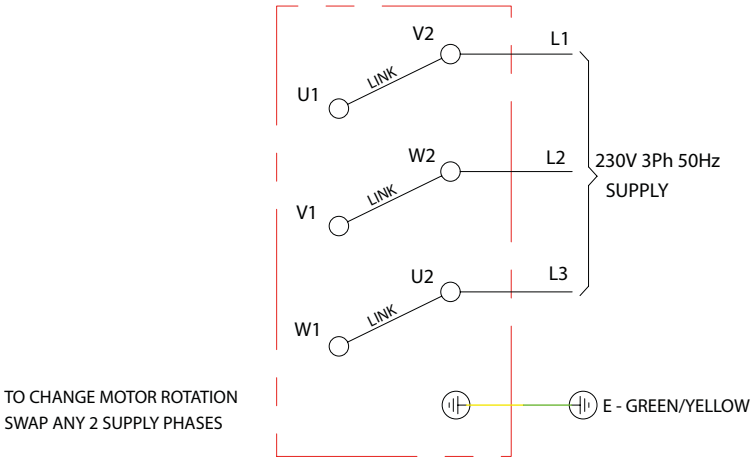
CLOCKWISE ROTATION

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

## 6.4 Three Phase

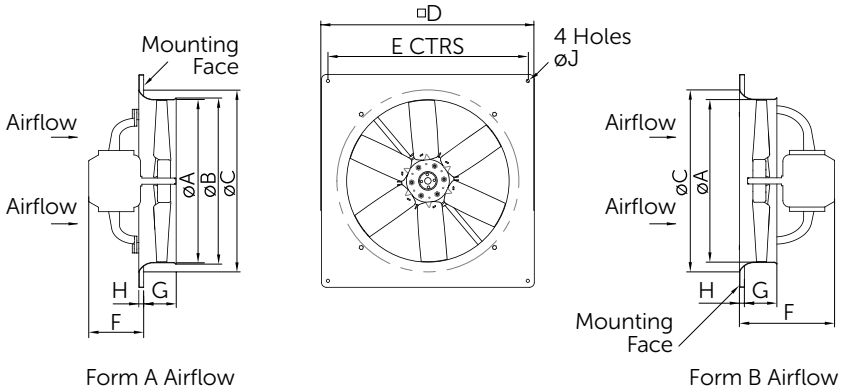


△ DELTA



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

## 7. 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.

Hydor Ltd

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