



# Installation and Maintenance Instructions

## HRU Range 450-760

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

Model	Speed r/min	<i>Electrical Data</i>					
		Supply V-Ph-Hz	Power Watts	FLC Amps	Start Amp	Capacitor uf	Hole Size (mm)
HRU450/4-1	1350	230-1-50	280	1.9	4.0	8	570
HRU500/6-1	900	230-1-50	500	3.0	6.0	10	610
HRU630/6-1	940	230-1-50	390	2.7	7.6	14	725
HER710/6-1	900	230-1-50	550	3.7	7.6	16	810
HRU760/6-1	900	230-1-50	670	5.3	12.0	28	875

### 1.0 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.

### 2.0 INSTALLATION

**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.**

- 2.1 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 above table 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.

### **3.0 START-UP**

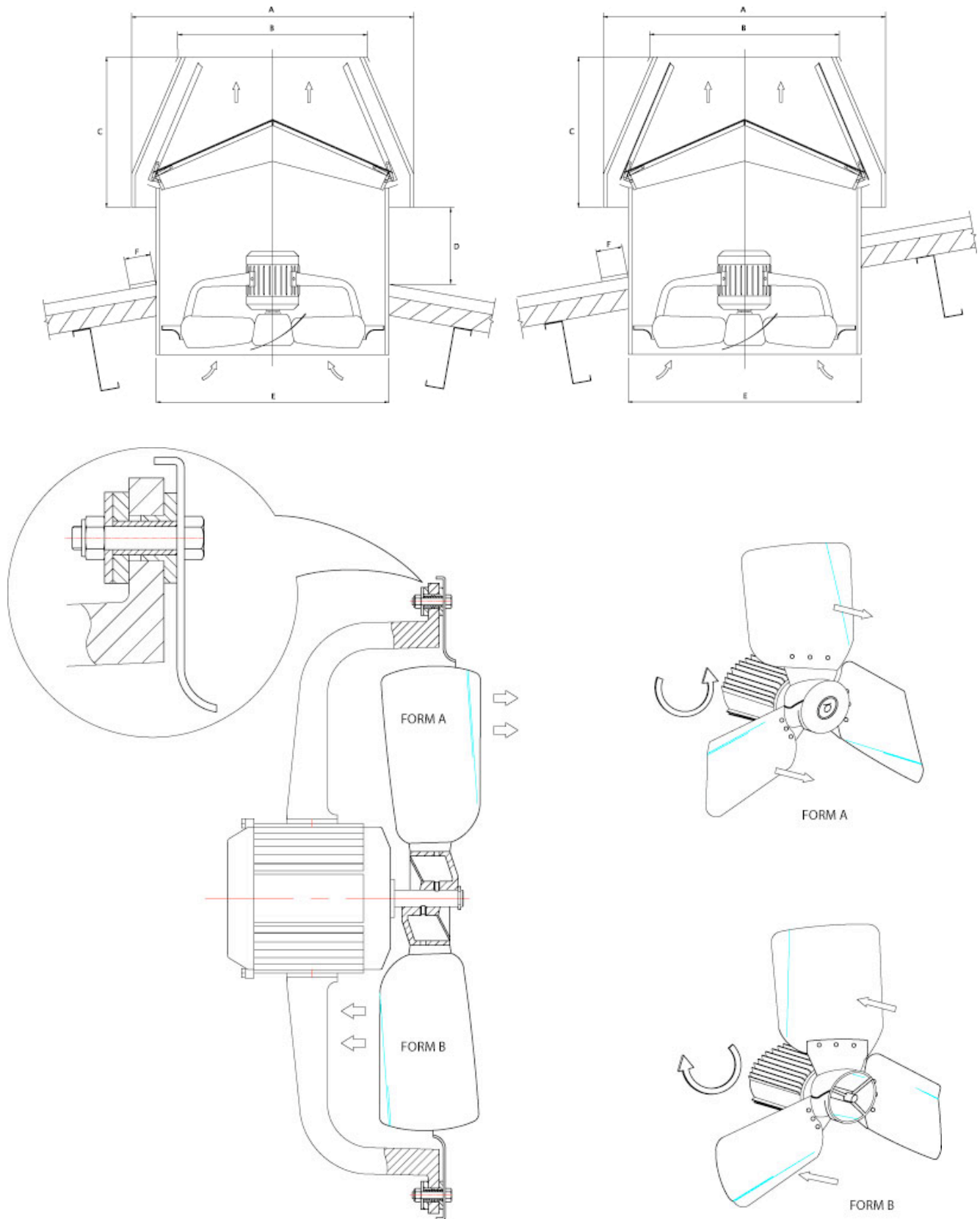
- 3.1 Before power is supplied to the unit, check that the wiring is correct as per the fan connection diagram.
- 3.2 At initial start-up, check that impeller rotation and airflow direction is correct.
- 3.3 Check that the motor amperage draw does not exceed the nameplate rating.

### **4.0 FAN MAINTENANCE**

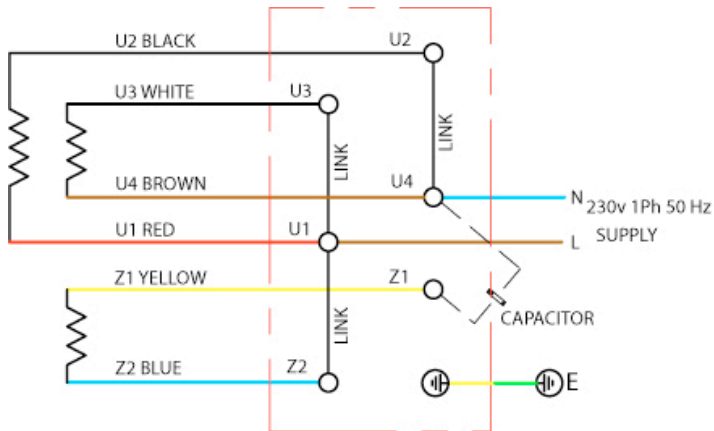
- 4.1 Inspection of the fan at least once every 12 months is recommended to ensure that the motor, fan blades, and supporting guards, are clean. Any build up of dust and deposits on the blades or guards should be removed using a non-abrasive cleaner. The Agri-jet can be cleaned from below using a suitable 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.**

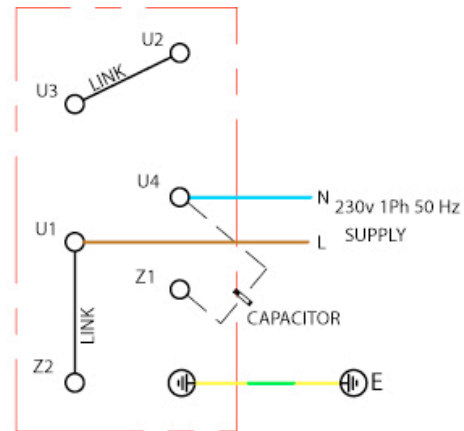
## 5.0 ASSEMBLY



## 6.0 WIRING



HIGH SPEED CONNECTION



HALF SPEED CONNECTION

FAN SUPPLIED CONNECTED FOR HIGH SPEED- MAIN WINDINGS IN PARALLEL. A STARTER OR HYDOR INFINITELY VARIABLE CONTROLLER MAY BE APPLIED TO THE FAN BY CONNECTING TO TERMINALS U1 AND U4. TO REVERSE THE MOTOR, INTERCHANGE Z1 YELLOW & Z2 BLUE.

FOR HALF SPEED ONLY- CONNECT MAIN WINDINGS IN SERIES AS SHOWN.

## 7.0 GUARANTEE

**HYDOR or its agents will, within a period of 1 year from the date of dispatch from their works, repair or, at its option, replace any goods, which are proven to have defects as a result of defective materials or workmanship. The goods MUST be returned to HYDOR, carriage paid, for examination.**

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