ELTA

AGRI HEB

Installation & Maintenance

These instructions must be read fully before commencing installation.

AGRI HEB

Installation Instructions

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, ensuring the correct PPE is used at all times. Elta 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 Elta's warranty being cancelled.

Please note the following indicators used within this document:

WARNING: Hazards associated with electric current and high voltages.

IMPORTANT: Important information.

Elta's policy is one of continual improvement and the right to change a specification at any time without notice is reserved. Whilst every care has been taken to ensure that the contents of this document are correct at time of publication, Elta shall be under no liability whatsoever in respect of such contents.

Elta cannot guarantee the operation of any equipment unless all documented instructions are complied with, without variation.

1. General

1.1 A range of Elta HEB axial plate fan units designed as replacements for the previous Hydor HE Fan.

1.2 Incorporating an efficient IE3 motor, epoxy coated plate fan body and high quality GRP blades.

1.3 Service items include:
Plate
Motor
Arms
Impeller
Capacitor (single phase models only)

1.4 Details of the HEB supplied are given on the nameplate attached to the side of the unit; in the event that assistance is required please quote the model and serial number.

1.5 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.

2. Health & Safety

2.1 Any declarations made by Elta about product installation and safety are dependent on the equipment being used within installations which themselves meet the requirements of the Standards and Directives of your region.

2.2 This product is not intended to be operated 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.

2.3 Adequate site plant and lifting equipment should be made available to lift and position the fan unit.

2.4 The HEB is intended only for the transportation of CLEAN air mixtures. Use in potentially hazardous or explosive areas or for transportation of gas, mist, vapours or their mixtures are NOT permissible. The transportation of solid materials or similar materials in a transport media is NOT permissible.

2.5 Misuse can lead to physical injury or damage to the fan.

2.6 Mounting, electrical connection and commissioning may only be carried out by trained specialized personnel who observe the relevant regulations! The installer should ensure the fan is adequately supported.

WARNING: All electrical installations must be carried out by suitably qualified and competent personnel in accordance with local regulations.

AGRI HEB

Installation Instructions

3. Delivery

3.1 All HEB units are tested and inspected prior to despatch and leave the factory in good condition. Upon receipt, it should be examined for visible damage, ensure that the impeller is free to rotate and that all parts listed on the delivery note are present.

3.2 Any damage or shortages should be notified to the carrier immediately.

3.3 Elta cannot accept any responsibility for damage sustained whilst unloading from the carrier, or subsequent damage on site.

3.4 If there are any queries concerning the fan unit, Elta should be contacted prior to installation.

4. Installation

WARNING: All electrical installations must be carried out by suitably qualified and competent personnel in accordance with local regulations.

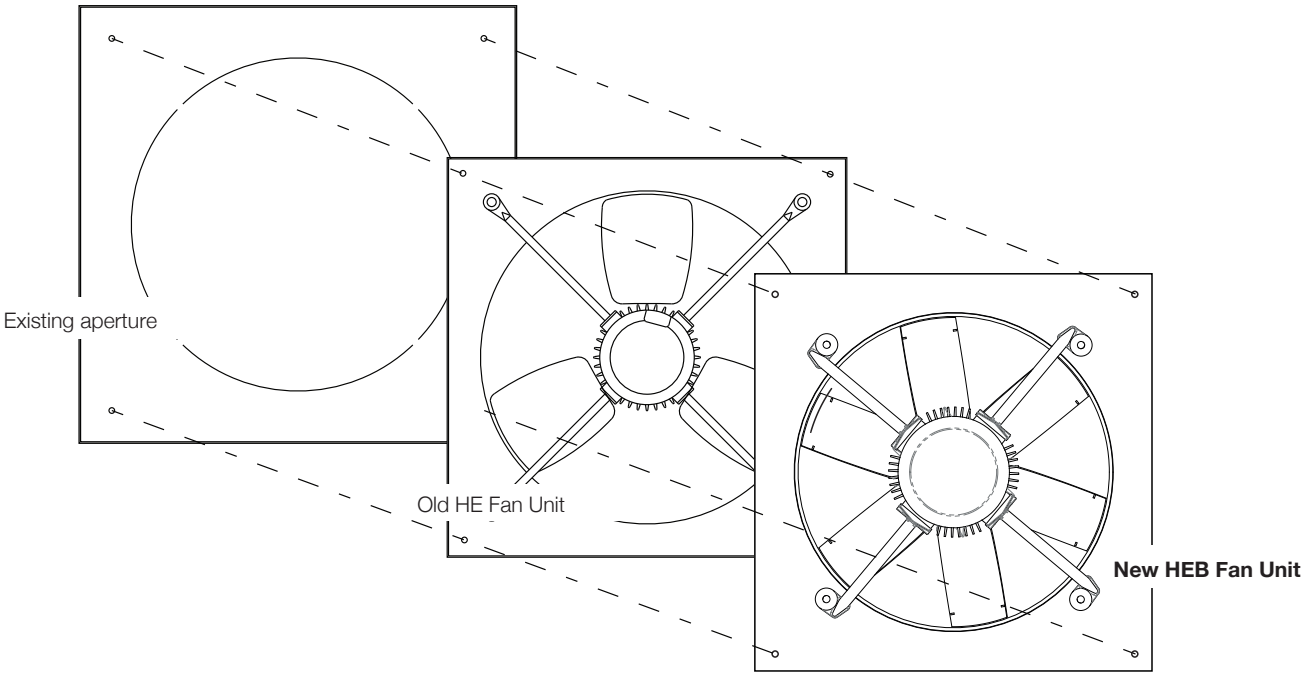
4.1 The HEB range of fans is normally supplied assembled. The single phase units are supplied with the Capacitor loose.

4.2 The fan must be securely mounted in the desired position to suit the application. The fan can be mounted at any angle.

4.3 Precaution must be taken to locate any exhaust discharge terminals so as to avoid the backflow of gases into the room from an open flue of gas or other fuel burning appliances.

5. Existing aperture installation

5.1 If the HE fan is mounted using the 4x fixing holes in the mounting plate, then the HEB will directly replace it as follows for the 630mm and 710mm models. When replacing the 760mm HE with a 710mm HEB, the mounting will need to be adjusted.



5.2 Isolate supply to HE fan.
5.3 Disconnect the wiring from the motor terminals. Make sure the wiring is adequately marked for reconnection.
5.4 Withdraw all cables from the motor and detach from motor arms to clear HE fan assembly.
5.5 Ensure the HE fan assembly is adequately supported to avoid injury or damage.
5.6 Unbolt the HE fan assembly from its mounting (4x fixings in the mounting plate).
5.7 Lift the HE fan assembly away from its mounting location and place out of the way for disposal or recycling at a local facility.
5.8 The new fan can now be fitted as follows:
5.9 Lift the new HEB fan into the original mounting place.
6.0 The fixing holes will line up exactly to the HE fan fixing points for 630mm and 710mm models. When replacing the 760mm HE with a 710mm HEB, the mounting holes will move slightly.
6.1 Ensure the HEB fan assembly is adequately supported.
6.2 Fix the HEB fan assembly into the aperture in the same manner as the HE fan was.
6.3 Re-run power supply cables to the new motor.
6.4 Connect wiring to new fan, see section 9.

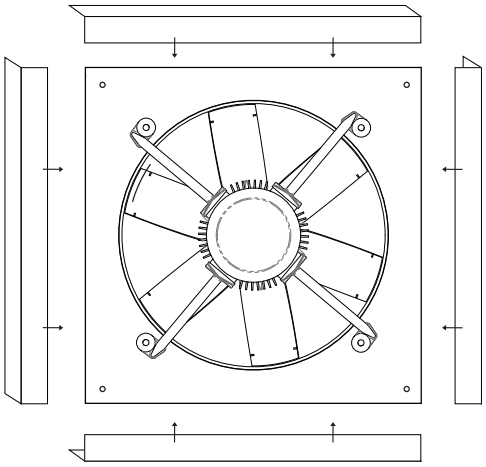
IMPORTANT: If the fan is single phase, the capacitor value will have changed.

6.5 Secure all loose cable as required to make safe.

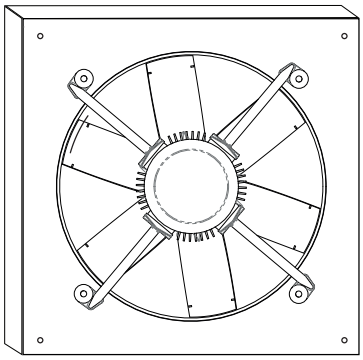
7. Additional steps when your existing HE fan is part of another Elta product installation (such as a sidewall unit):

In some instances, the fixing may not be by the 4 plate mounting holes, but by fixings through the return flange around the outside of the HE fan plate. If this is the case, there are 2 options for fan replacement.

Option 1
Return flanges are available as an optional extra and can be purchased at the time of order. These will be fitted to the plate ready for you to install. There will not be any fixing holes in the return flange supplied and these will have to be drilled on site by the customer when fitting.



Optional flanges attached to edges



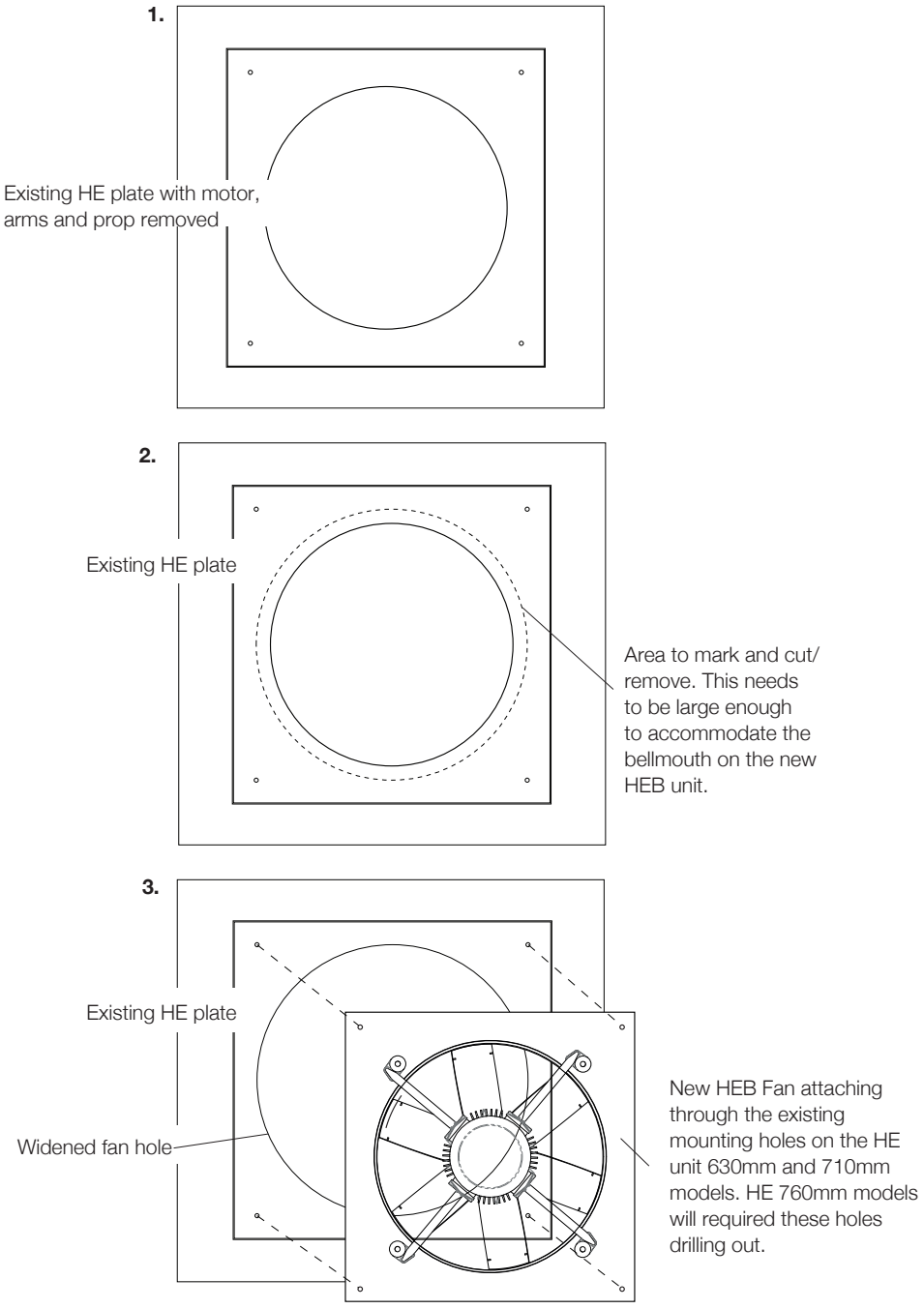
Optional flanges ready to be marked and drilled with fixing locations

AGRI HEB

Installation Instructions

Option 2

The existing HE fan plate can be left in-situ. The motor, arms and propeller can be removed. The plate could then be cut down in-situ so that the new HEB plate fan will use the existing plate 4 point fixings to locate it.



All other parts of the replacement instructions are still valid.

IMPORTANT: The unit is heavy. Use correct fixing hardware to secure the unit. Observe recommended lifting practices to guard against injury.

8. Electrical Connection

Electrical wiring should only be undertaken by technically trained competent personnel in accordance with good industry practice and should conform to all local governing and statutory bodies.

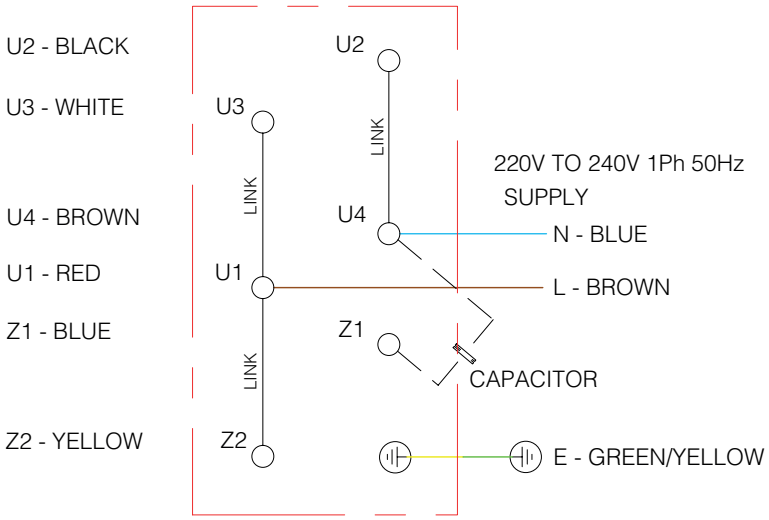
8.1 Check the details on the motor rating plate to ensure that the correct power supply (voltage, frequency and phase) is available. An incorrect power supply will lead to permanent damage to the fan motor.
8.2 Refer to the appropriate wiring diagram. Ensure that all earth connections are made. See section 9.
8.3 If the fan is being used through a speed regulation device, please refer to the relevant control device instructions or contact Elta.
8.4 Check that the motor amperage draw does not exceed the nameplate rating.
8.5 Means for electrical disconnection must be incorporated in the wiring installation in accordance with the relevant wiring and electrical regulations.
8.6 The capacitor should be installed as per the electrical drawings shown in section 9 for single phase installations.
8.7 Ensure that all earth connections are made. Means of electrical disconnection must be incorporated in the wiring installation in accordance with the relevant wiring and electrical regulations.

WARNING: The fan(s) must be isolated from the power supply during installation and maintenance.

NOTE: For motors with Integral connection box. Single Phase see 9.0 on page 7. Three Phase see 9.0 on page 8. For motors with flying leads with external terminal box, see 10. on page 9

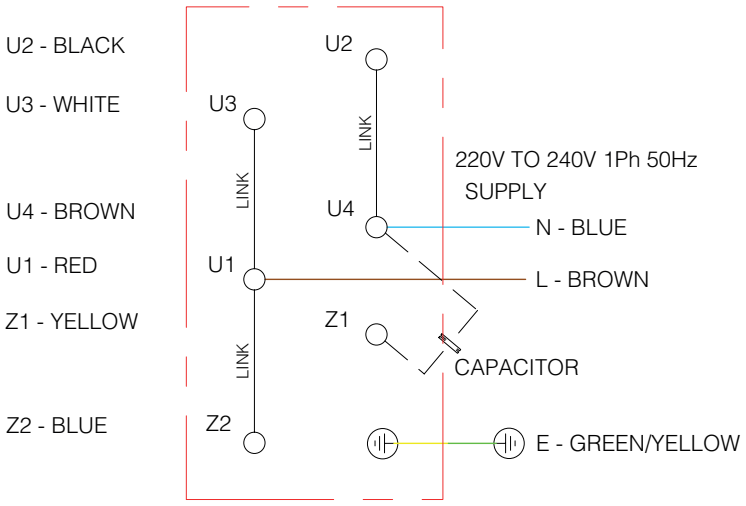
9. Wiring
Single Phase

FORM "A" AIRFLOW MODELS



ANTI-CLOCKWISE ROTATION

FORM "B" AIRFLOW MODELS

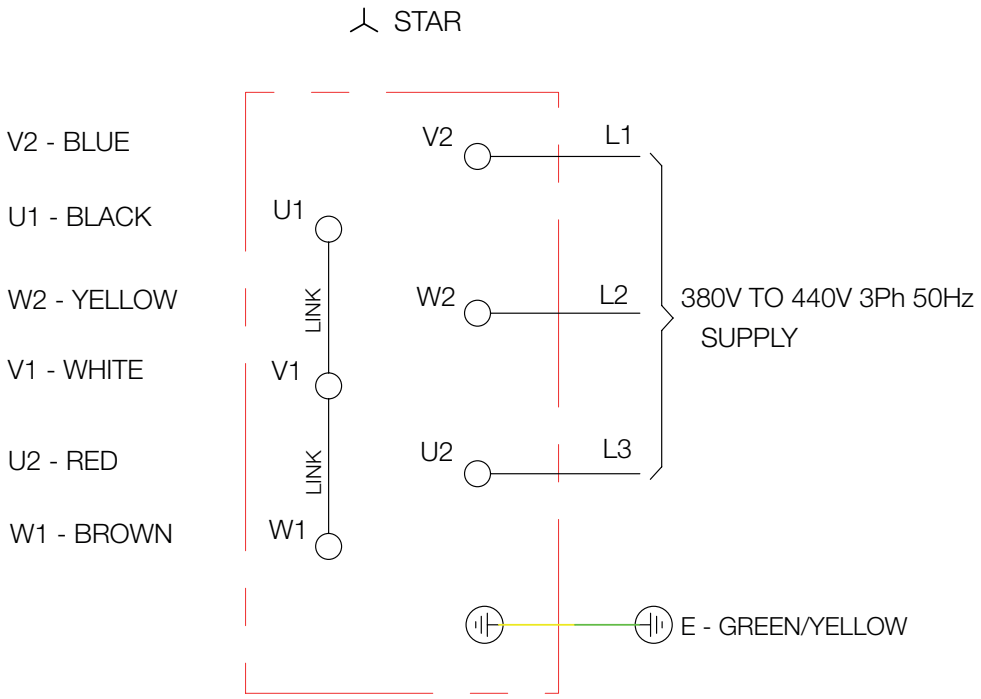


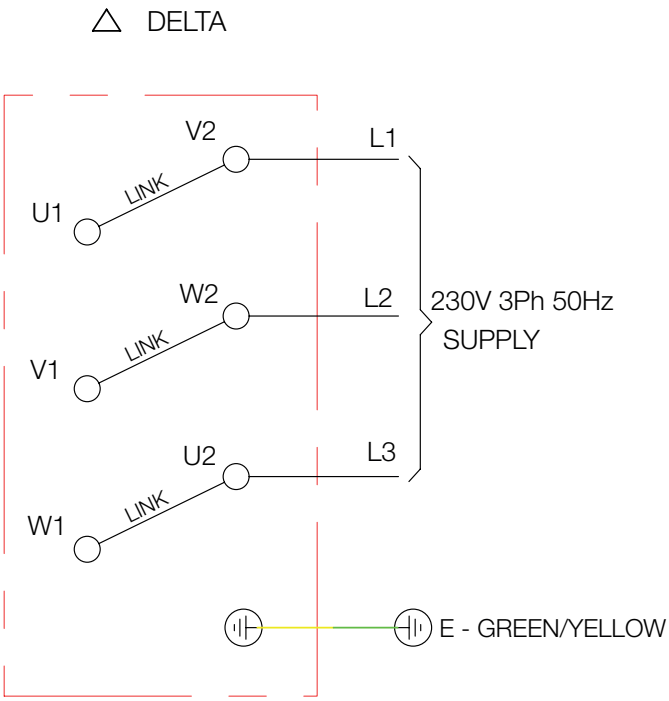
CLOCKWISE ROTATION

AGRI HEB

Installation Instructions

Three Phase

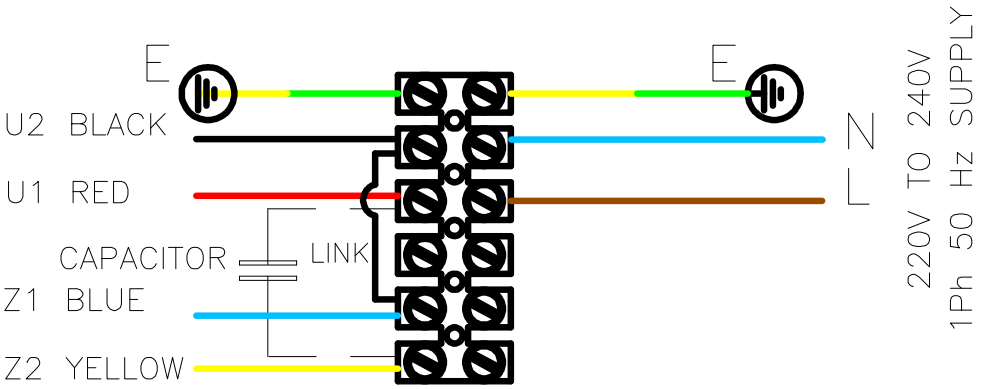




TO CHANGE MOTOR ROTATIOI
SWAP ANY 2 SUPPLY PHASES

10. Motors with flying leads with external terminal box
Single Phase

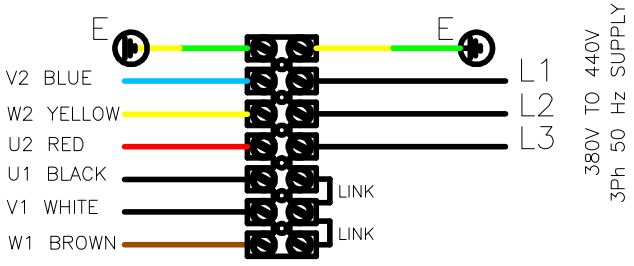
Form “A” Airflow Models Models



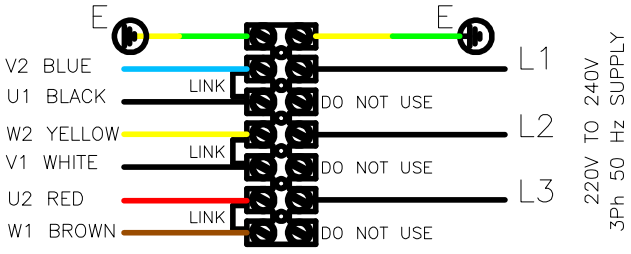
Anti—clockwise rotation (looking in the airflow direction)
To reverse the motor rotation interchange yellow & blue. (Wires do not have markings)

Three Phase

STAR (415V / 3Ph / 50Hz)



DELTA (230V / 3Ph / 50Hz)



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

11. Troubleshooting

11.1 Should the unit trip out, check the motor current or connections as an overload condition has occurred, indicating misconnection, faulty motor or capacitor (on single phase models), or a jammed impeller.

11.2 If the unit airflow direction is incorrect at initial start-up, re-check the electrical connections for the desired connection.

11.3 If the unit is slow to start or will not start, it is likely that the capacitor needs replacing (on single phase models).

12. Maintenance

12.1 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, motor or guards should be removed using a non-abrasive cleaner. Failure to keep the unit clean can lead to overheating and damage which is not covered by the warranty.

12.2 All fastenings should be checked for tightness. In addition, all rotating items should be checked.

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

AGRI HEB

Installation Instructions

Guarantee
Elta 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 Elta, carriage paid, for examination. An Elta Engineer or appointed person should attend to carry out any work, unless otherwise agreed. Elta will not accept accounts for workmanship by others.

Please see the Elta warranty booklet for full details on submitting a warranty claim.

Any modifications to the system 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 Elta's warranty being cancelled.

Recycling
Elta use components, when possible, that are suitable for recycling at the end of the product's life, components can be segregated as stated below and processed in accordance with local regulations. Metallic items can be segregated and recycled; Electrical and Electronic equipment such as motors, cables and control devices can be segregated for WEEE recycling; Cardboard, wood, packaging, and plastic components can be widely recycled. Items not listed should be segregated in accordance with local authority zero waste hierarchy recommendations.

Tel **+44 (0)1725 511422**
Email **agriculture@eltauk.com**
eltauk.com/agriculture

Issue A. 06.2025