

CENTRI-GRAIN HGD

Installation & Maintenance

CENTRI-GRAIN HGD

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 Centri Grain HGD Pedestal Fan units.
- 1.2 Incorporating an efficient IE2/IE3 motor, and a painted steel casing.
- 1.3 Service items include: Motor, Casing, Capacitor (single phase models only)
- 1.4 Details of the HGD 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 article number.
- 1.5 The fan is designed for use in an ambient temperature of up to 40° 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 HGD 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 specialised personnel who observe the relevant regulations! The installer should ensure the fan is adequately supported.
- 2.7 A minimum pressure is required as stated on the HGD product label, failure to meet this will result in damage to the motor.

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

3. Delivery

- 3.1 All HGD 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.
- 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

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

CENTRI-GRAIN HGD

Installation Instructions

- 4.2 The fan unit should be securely mounted in the required position to suit the application.
- 4.3 Check the details on the motor rating plate to ensure that the correct power supply [voltage, frequency and phase] and starters are available. Particularly if the motors are to be controlled by an inverter speed control. An incorrect power supply will lead to permanent damage to the motor.
- 4.4 Means for electrical disconnection must be incorporated in the installation in accordance with the relevant the wiring and electrical regulations. Ensure that all earth connections are made and secure.
- 4.5 If the fan is being used through a speed control device, either electrically or electronically, refer to the relevant control device instructions. Before commencing installation.

5. Operation

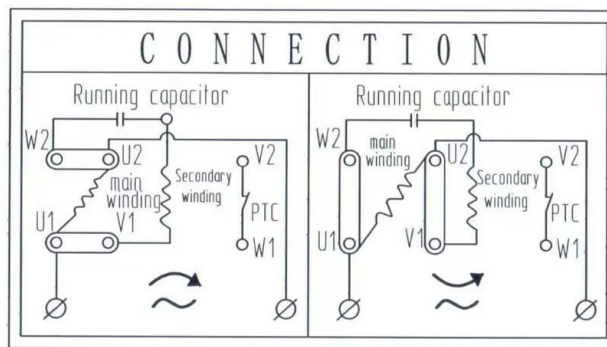
- 5.1 Before power is supplied to the unit, check that the wiring is correct as per the fan connection diagram and control instructions [If fitted].
- 5.2 At initial start-up, check that the impeller rotation and airflow direction is correct.
- 5.3 Check that the motor amperage drawn does not exceed the nameplate rating at full speed.

WARNING: Do not run the unit with no airflow resistance, check minimum operating pressure

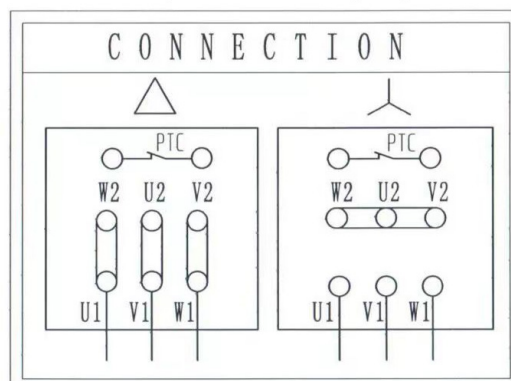
IMPORTANT: Failure to ensure minimum airflow resistance will result in motor burn out

6. Wiring

Single phase motor wiring diagram



Three phase motor wiring diagram



All wiring and control equipment must comply to the latest IEE regulations, in particular part BS 7671:2018+A2:2022, Regulations 552.1.2 and 552.1.3.

CENTRI-GRAIN HGD

Installation Instructions

7. Installation

- 7.1 Should the unit trip out, check the motor current or connections as an overload condition has occurred, indicating airflow resistance, misconnection, faulty motor, capacitor (on single phase models), or a jammed impeller.
- 7.2 If the unit airflow direction is incorrect at initial start-up, re-check the electrical connections for the desired connection.
- 7.3 If the unit is slow to start or will not start, it is likely that the capacitor needs replacing (on single phase models).

8. Maintenance

- 8.1 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.
- 8.2 All fastenings should be checked for tightness. In addition, all rotating items should be checked.
- 8.3 Bearings are of the 'sealed for life' type and will not need a detailed inspection.

9. Recycling

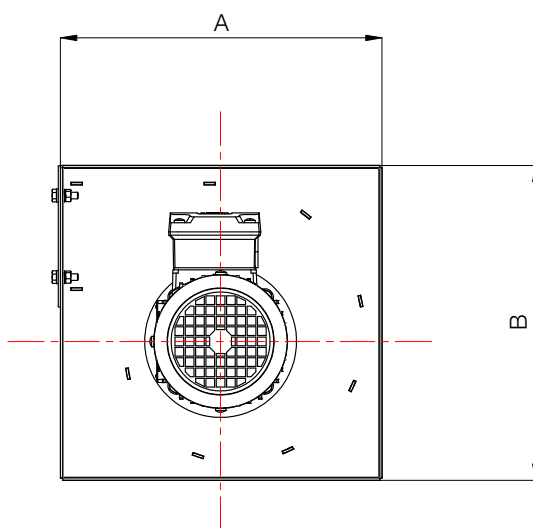
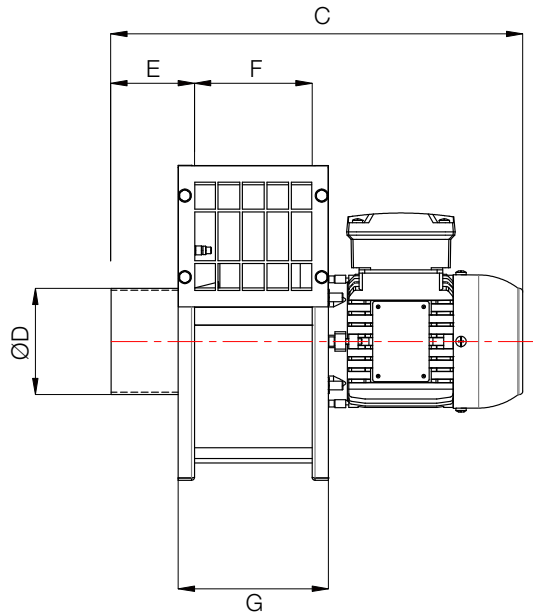
- 9.1 Elta use materials within products that are largely recyclable. Components covered by the Waste Electrical and Electronic Equipment (WEEE) regulations can be segregated for WEEE recycling, these components include Motors, control devices, cabling etc. Metal components can be segregated and fully recycled. All other materials should be safely disposed of in accordance with local waste management, and health and safety regulations.

CENTRI-GRAIN HGD

Installation Instructions

10. Dimensions

| Product Code* | A | B | C | D | E | F | G | Weight kg |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----------|
| HGD1-0.18-1 | 297 | 290 | 380 | 98 | 77 | 109 | 139 | 10 |
| HGD3-1.10-1 | 445 | 424 | 504 | 198 | 102 | 146 | 196 | 22.7 |
| HGD3-1.10-3 | | | | | | | | 23.1 |
| HGD4-1.50-1 | 445 | 424 | 494 | 198 | 102 | 136 | 186 | 26.8 |
| HGD4-1.50-3 | | | | | | | | 26.8 |
| HGD5-2.20-3 | 493 | 468 | 525 | 198 | 102 | 166 | 216 | 32.6 |



CENTRI-GRAIN HGD

Notes

[illegible]

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Notes

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**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.

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