



D-MIX HDSF

Installation & Maintenance



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.

Model	Speed r/min	Supply V-Ph-Hz	Power Watts	FLC Amps	Start Amps	Airflow m³/s	Throw metres	Weight Kg
HDSF500/6/1/230	900	230-1-50	190	1.5	3.4	1.52	15-20	25
HDSF500/6/3/230	900	230-3-50	190	1.4	3.3	1.52	15-20	25
HDSF500/6/3/415	900	415-3-50	190	0.9	2.3	1.52	15-20	25
HDSF630/6/1/230	940	230-1-50	390	2.9	7.6	3.11	25-30	35
HDSF630/6/3/230	940	230-3-50	390	2.7	7.4	3.11	25-30	35
HDSF630/6/3/415	940	415-3-50	390	1.5	3.6	3.11	25-30	35

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 Elta or its agents for clarification.
- 1.3 All electrical installations must be carried out by suitably qualified and competent personnel in accordance with all current statutory requirements.
- 1.4 These instructions cover only the Elta product and do not include the supply or installation of any safety equipment that may be required e.g. proper electrical isolation.
- 1.5 Any declarations made by Elta about product installation and safety, are dependent on the fan unit being used within installations which themselves meet the requirements of the relevant Standards and Directives of your region.
- 1.6 The fan unit is designed for use in an ambient temperature of up to 50°C and 95% relative humidity. The fan unit 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 unit is adequately supported.
- 1.9 This product is not intended for the use of 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 unit must be isolated from the power supply during installation and maintenance. The fan must be earthed in accordance with the local regulations.



Installation Instructions

2. Installation

- 2.1 Upon receipt, the fan unit should be visually inspected to check for any damage. Ensure that the impeller is free to rotate.
- 2.2 If there are any queries concerning the fan unit, Elta should be contacted prior to installation.
- 2.3 The fan unit should be securely mounted in the required position to suit the application.
- 2.4 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.
- 2.5 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.
- 2.6 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.

3. Operation

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

4. Fan Maintenance

- 4.1 Inspection of the fan unit at least every 6 months is recommended to ensure that the motor and fan blades are clean. Any build-up of dust deposits 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" variety and will not need a detail 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

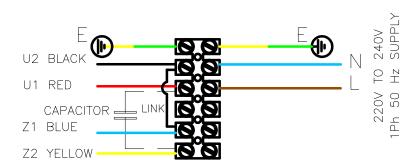
- 5.1 Check that the fan unit supplied is suitable for the supply voltage and type of fan being replaced.
- 5.2 Remove the terminal plate on the motor which will provide access to the terminal connections. A suitably qualified and competent person should carry out the electrical installation in accordance with the current applicable regulations, in particular BS 7671:2018+A2:2022, Regulations 552.1.2 and 552.1.3. Particular attention should be paid to the connections of the capacitor.

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Wiring Diagrams

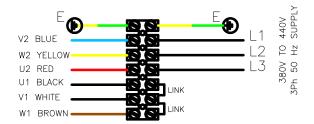
5.3 Motors with flying leads with external terminal box Single Phase

Form "A" Airflow Models Models

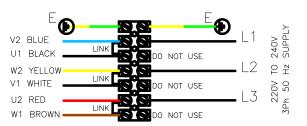


Anti—clockwise rotation (looking in the airflow direction)
To reverse the motor rotation interchange yellow & blue. (Wires do not have markings)

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)



Notes	



Votes	



Notes	



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.

