



ZOO FAN SDF

Installation & Maintenance

Installation Instructions

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 Elta Fans Ltd 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 Elta Fans Ltd 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 Elta Fans Ltd about product installation and safety, are dependant 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 -20°C up to a maximum of +70°C (refer to the relevant table) 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 persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety. Children should be supervised to ensure that they do not play with the product.
- 1.10 At end-of-life, the unit must be disposed of in an environmentally friendly manner by suitably qualified and competent personnel in accordance with the requirements of applicable Standards and Directive

2.0 Installation

WARNING – Rotating equipment. Death, severe injury and property damage may result. ZOO Fans are intended to be hung out-of-reach of people. The bottom of the fan must be no less than 3.05m from any area capable of receiving pedestrian traffic. The fan must be isolated from the power supply during installation and maintenance. The fan must be earthed in accordance with the local regulations.

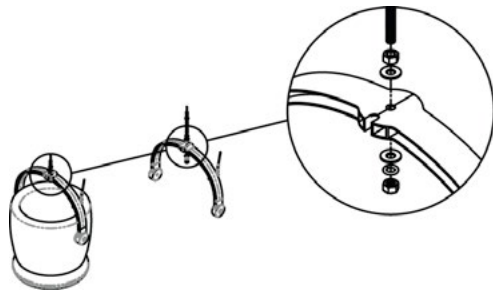
- 2.1 Upon receipt, the fan equipment should be visually inspected to check for any damage. Ensure that the impeller is free to rotate.
- 2.2 If there are any queries concerning the fan equipment, Elta Fans Ltd should be contacted prior to the installation.
- 2.3 The fan must be securely mounted in the desired position to suit the application. (Refer to Gripple Fastening Method).
- 2.4 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.
- 2.5 Refer to the appropriate wiring diagram. Ensure that all earth connections are made.
- 2.6 Means for electrical disconnection must be incorporated in the wiring installation in accordance with the relevant wiring and electrical regulations.
- 2.7 Precaution must be taken to locate the exhaust discharge terminal so as to avoid the backflow of gases into the room from the open flue of gas or other fuel burning appliances.

3.0 Gripple Fastening Method

- 3.1 Using the 3m Cable with M8 Stud End Fixing, attach the Gripple to the handle of the fan.

NOTE – Gripple Installation Guidelines are included with your Gripple hardware and should be consulted for guidelines on how to install, adjust, and care for your Gripple attachment hardware.

- 3.1.1 Screw regular M8 Nut to the top of the M8 Stud Fixing
- 3.1.2 Place M8 Flat Washer on the thread
- 3.1.3 Insert M8 Stud Fixing (with installed nut and flat washer) through the center hole in the handle
- 3.1.4 Place M8 Flat Washer and M8 Nylock Nut on thread sticking through the handle
- 3.1.5 Securely tighten M8 Nylock Nut



- 3.2 Fasten Stabilisation Tether Gripple
Using the 4m Cable with Eyelet Fixing, attach the Gripple to the handle of the fan.

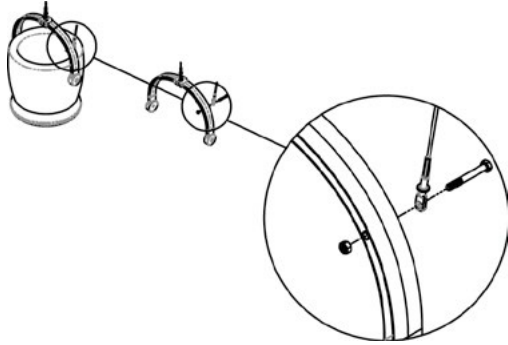
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Installation Instructions

TIP – Leave the Gripper wire wound in a circle, as it is shipped, until you are ready to install the Stabilization Tether to the Truss, I-Beam, or support structure

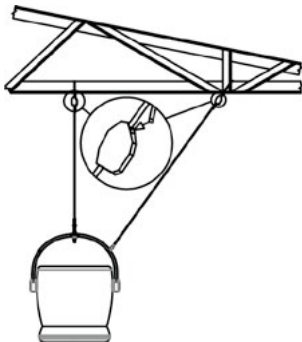
- 3.2.1 Insert proper M6 Hex Head bolt through the Eyelet of Gripper:
- 3.2.2 Use M6 x 50 Hex Head bolt for SDF250
- 3.2.3 Use M6 x 60 Hex Head bolt for SDF300
- 3.2.4 Insert M6 Hex Head bolt through the hole located at 45° on either side of the handle
- 3.2.5 Securely tighten M6 Nylock Nut



To secure the Main Hanging Gripper and Stabilization Tether to the Truss, I-Beam, or support beam.

WARNING – The Stabilization Tether **MUST** be installed properly to ensure safe operation of your ZOO Fan.

- 3.2.4 Place Gripper on the wire
- 3.2.5 Loop wire over Truss, I-beam, or support beam (Tether at a 45 ° angle)
- 3.2.6 Push end of wire into Gripper
- 3.2.7 Adjust wire so there is no slack



4.0 Start Up

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

5.0 Fan Maintenance

- 5.1 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.
- 5.2 All fastenings should be checked for tightness. In addition, all rotating items should be checked.
- 5.3 Bearings are of the 'sealed for life' type and will not need a detailed inspection.

WARNING – This fan is fitted with an auto-reset thermal contact which switches the fan off in the event of a fault condition. Once the motor cools down the fan may start unexpectedly. Only a suitably qualified and competent person may carry out maintenance after the electrical supply has been isolated.

6.0 Guarantee

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

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Wiring Diagrams

Please use the table(s) below to match up the product code and the wiring diagram number.



Single Phase 220V to 240V / 50Hz or 60Hz

Page No.	Product Code	Wiring Diagram No.
5	SDF250/4-1AC	152-177
5	SDF300/4-1AC	152-177

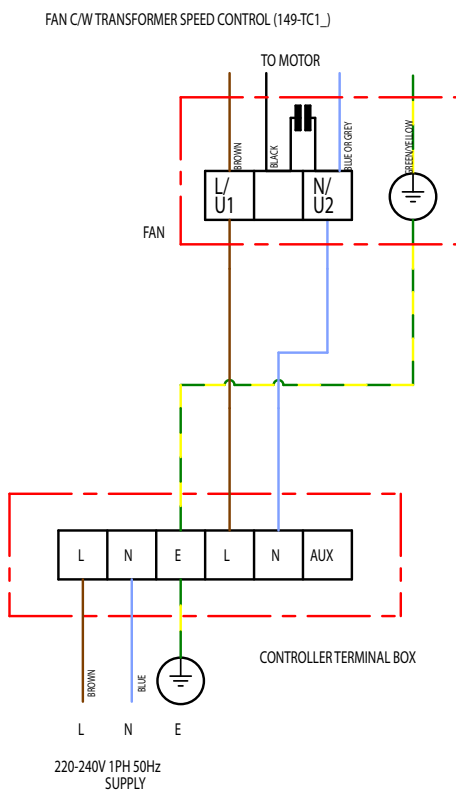
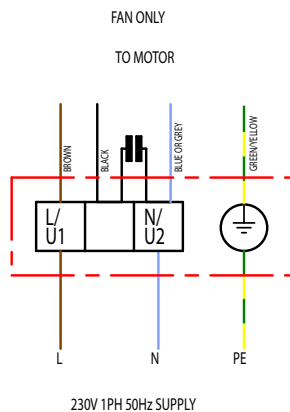


Single Phase 200V to 277V / 50Hz or 60Hz

Page No.	Product Code	Wiring Diagram No.
6	SDF250/4-1EC	152-00036
6	SDF300/4-1EC	152-00036

152-177

Wiring Diagrams

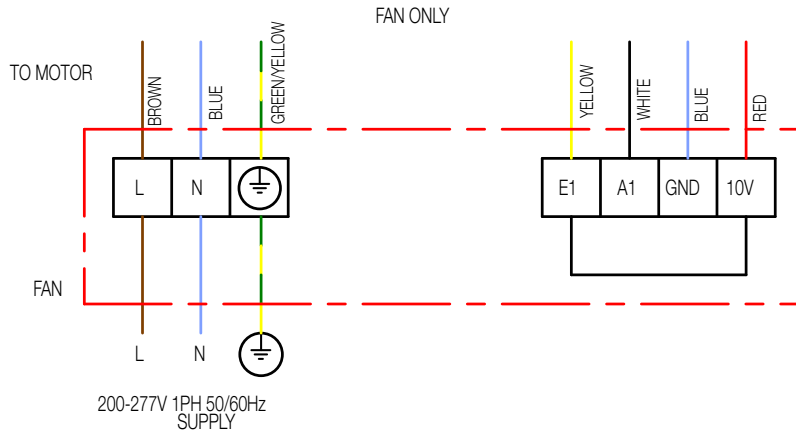


All wiring and control equipment must comply to the latest IEE regulations, in particular part 552-01-02/03.

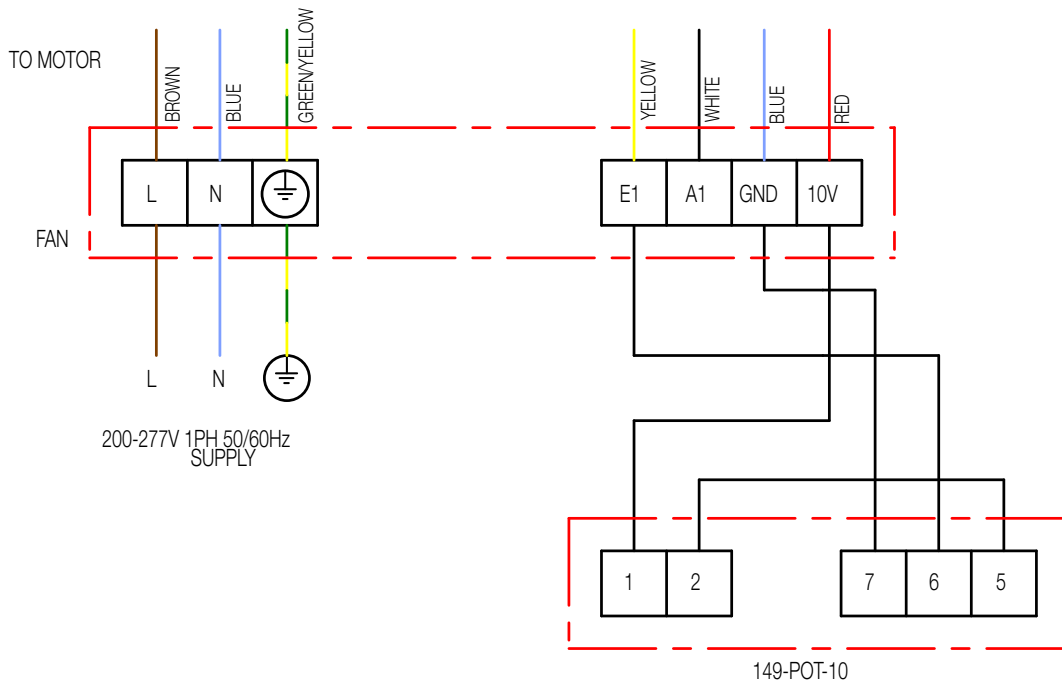
MK-152-177 Issue C: 03.11.2017

Check the individual product accessories table for fan controller compatibility.

Wiring Diagrams



FAN C/W POTENTIOMETER SPEED CONTROL (149-POT-10)



All wiring and control equipment must comply to the latest IEE regulations, in particular part 552-01-02/03.
 MK-152-00036 Issue C: 11.07.2013
 Check the individual product accessories table for fan controller compatibility.

EU Declaration of conformity/incorporation



Herewith we declare that the air movement equipment below, on the basis of its design and construction as partly completed machines brought onto the market complies with relevant health and safety requirements of the EC Directives stated below. In the event that alterations are made to the machinery without prior consent from Elta Fans Ltd, this declaration becomes invalid.

EU Declaration of Conformity	Declaration of Incorporation
<p>Description of Equipment: Building Services Ranges - Air movement fan</p> <p>Equipment model numbers for safe area fans: SCP, SPA, SAX, SCD, SDA, SCC, SLC, SCPP, SPP, SAMF, HIT, SEM, SEL, ISEO IMF, SH, SSD, SQS, QSDCV, SQU, SMB, STD, SQT, SQTDCV, SCH, SCHAT, SSSDR, SSSDRDCV, STDR, STDRDCV, SB, SQU-HT, SSQU-HT, SDF, ZFHIC, SRC, SRC, CF, TF, SSRL, BLB, BLTF</p> <p>Relevant / applied directives: Machinery directive 2006/42/EC, Low voltage directive 2014/35/EU</p> <p>Relevant / applied directives where applicable: Energy related products directive 2009/125/EC (when used in Europe) Electromagnetic compatibility directive 2014/30/EU (where driven via Inverter) RoHS 2011/65/EU and its amendments (including Directive 2015/863/EU)</p> <p>Relevant / applied directives where applicable: BS EN ISO 12100 : 2010 BS EN 14694 : 2003 + A1 : 2011 BS EN 308:1997 BS EN ISO 5801:2008</p>	<p>In accordance with the Machinery Directive 2006/42/EC;</p> <p>The design of the partly completed machine, listed above, complies with the Essential Health and Safety Requirements (EHSRs) of ANNEX I, sections 1.1.2, 1.1.5, 1.4.1, 1.5.1 in EC Machinery Directive 2006/42/EC.</p> <p>Machinery is incomplete and must not be put into service until such time as the machinery which is partly complete, is to be incorporated, and has been assessed and Declared in Conformity with the provisions of any relevant parts of the Machinery Directive.</p> <p>We undertake to transmit, upon reasoned request by appropriate national authorities, relevant information relating to the partly completed machinery identified above.</p>
<p>Manufacturer: Elta Fans Limited 46 Third Avenue Pensnett Trading Estate Kingswinford West Midlands DY6 7US United Kingdom</p>	
<p>Date / Signature of Manufacturer:</p>  <p>Name / Position of Signatory: Mr. Robert Rees Q.A.Manager Elta Fans Ltd This is an electronic document and is valid without a signature or date.</p>	<p>Document last revised: 20th July 2020</p> <p style="text-align: right;">ECD F Issue Status D</p>

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