



MULTIFLOW SMB

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 +50°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 Directives.

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. 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. The fan can be mounted at any angle.
- 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 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 drawn 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.
- 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 – Fuses/circuit breakers are used to provide short circuit protection only. A starter panel with overload protection should be used to protect the motor.

Only a suitably qualified and competent person may carry out maintenance after the electrical supply has been isolated.

5.0 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.

MULTIFLOW SMB



Wiring Diagrams

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

Single Phase 220V - 240V / 50Hz

| Page No. | Product Code | Wiring Diagram No. |
|----------|------------------------------|--------------------|
| 4 | SMB400/4-1AC | 152-104A |
| 4 | SMB450/4-1AC | 152-104A |
| 4 | SMB500/4-1AC | 152-104A |
| 4 | SMB550/4-1AC | 152-104A |
| 4 | SMB650/4-1AC | 152-104A |

Three Phase 380V - 415V / 50Hz

| Page No. | Product Code | Wiring Diagram No. |
|----------|-------------------------------|--------------------|
| 5 | SMB400/4-3AC | 152-106A |
| 5 | SMB450/4-3AC | 152-106A |
| 5 | SMB500/ 4-3AC | 152-106A |
| 5 | SMB550/ 4-3AC | 152-106A |
| 5 | SMB650/ 4-3AC | 152-106A |
| 5 | SMB700/ 4-3AC | 152-106A |

Single Phase 220V - 240V / 60Hz

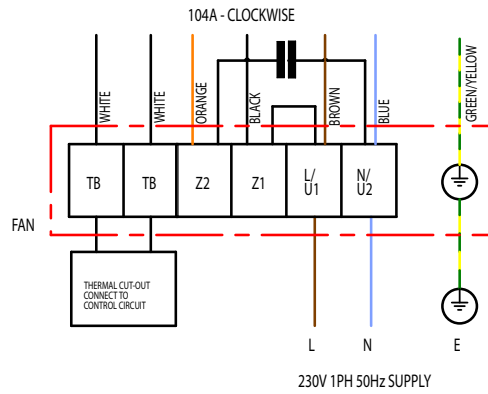
| Page No. | Product Code | Wiring Diagram No. |
|----------|---------------------------------|--------------------|
| 4 | SMB400/4-1AC-60 | 152S-104A |
| 4 | SMB450/4-1AC-60 | 152S-104A |
| 4 | SMB500/4-1AC-60 | 152S-104A |
| 4 | SMB550/4-1AC-60 | 152S-104A |
| 4 | SMB650/4-1AC-60 | 152S-104A |

Three Phase 380V - 415V / 60Hz

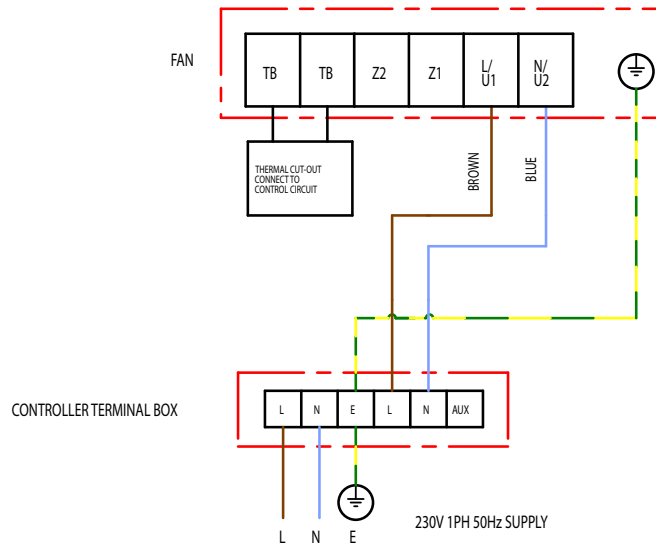
| Page No. | Product Code | Wiring Diagram No. |
|----------|----------------------------------|--------------------|
| 5 | SMB400/4-3AC-60 | 152S-106A |
| 5 | SMB450/4-3AC-60 | 152S-106A |
| 5 | SMB500/ 4-3AC-60 | 152S-106A |
| 5 | SMB550/ 4-3AC-60 | 152S-106A |
| 5 | SMB650/ 4-3AC-60 | 152S-106A |

152-104A

Wiring Diagrams



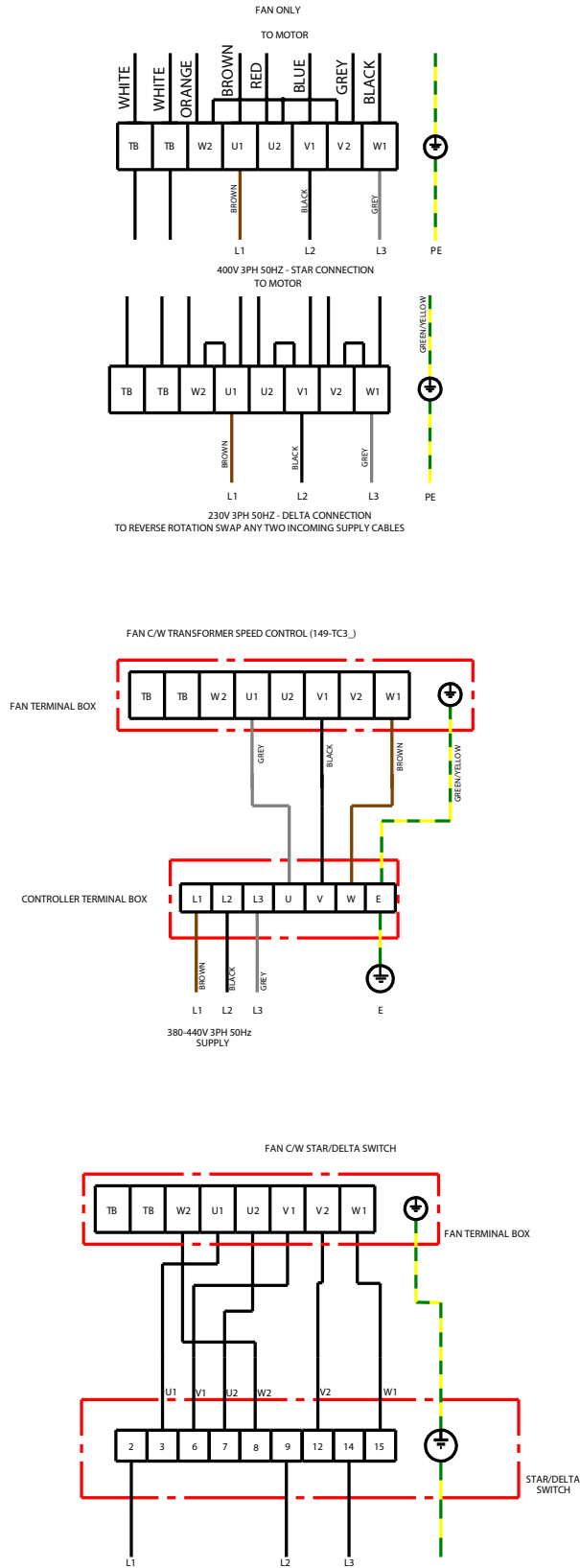
FAN C/W TRANSFORMER SPEED CONTROL (149-TC1_)



All wiring and control equipment must comply to the latest IEE regulations, in particular part 552-01-02/03.
 MK-152-104A Issue E: 03.11.2017
 Check the individual product accessories table for fan controller compatibility.

152-106A

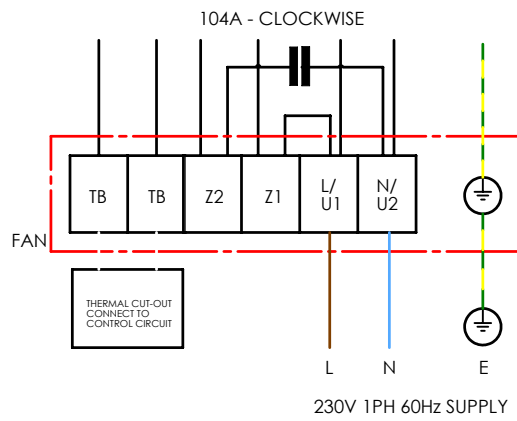
Wiring Diagrams



All wiring and control equipment must comply to the latest IEE regulations, in particular part 552-01-02/03.
 MK-152-106A Issue C: 14.03.2023
 Check the individual product accessories table for fan controller compatibility.

152S-104A

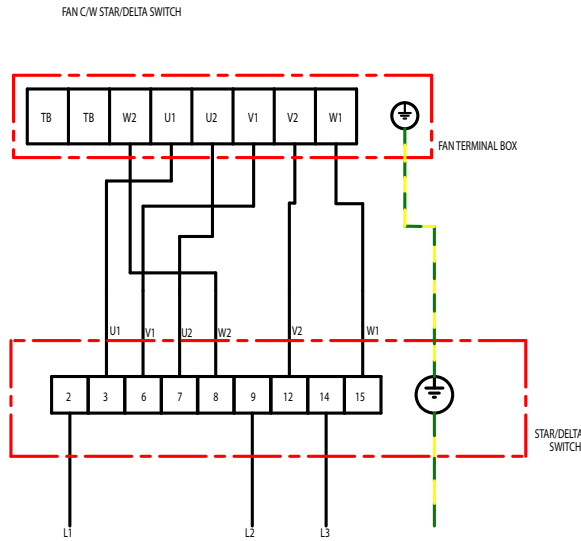
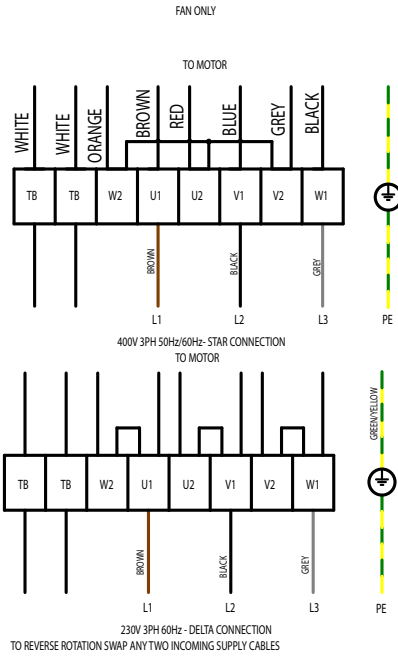
Wiring Diagrams



All wiring and control equipment must comply to the latest IEE regulations, in particular part 552-01-02/03.
MK-152S-104A Issue B: 15.02.2021
Check the individual product accessories table for fan controller compatibility.

152S-106A

Wiring Diagrams



All wiring and control equipment must comply to the latest IEE regulations, in particular part 552-01-02/03.
 MK-152S-106A Issue B: 20.03.2023
 Check the individual product accessories table for fan controller compatibility.

Building Services

Tel **+44 (0) 1384 275800**
Fax **+44 (0) 1384 275810**
Email **bs@eltafans.co.uk**

46 Third Avenue, Pensnett Trading Estate, Kingswinford,
West Midlands, DY6 7US United Kingdom

Applied Technology & Building Services Export

Tel **+44 (0) 1489 566500**
Fax **+44 (0) 1489 566555**
Email **at@eltafans.co.uk / export@eltafans.co.uk**

17 Barnes Wallis Road, Segensworth East Industrial Estate,
Fareham, Hampshire, PO15 5ST United Kingdom

eltafans.com

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