

149-EC-TB

BMS TRICKLE & BOOST CONTROL

Installation & Maintenance

149-EC-TB

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. 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 unit or its installation, even the smallest modification, change or elimination of security components or pieces that influence the efficiency or loss of the system, will result in warranty being cancelled.

Elta Limited have a policy 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 Limited shall be under no liability whatsoever in respect of such contents.

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

Introduction

This Manual is intended as a guide to the engineering and commissioning principles of Elta 149-EC-TB Trickle & boost Control and covers the hardware information only.

System Design

IMPORTANT — This document does not cover Electrical system design and you should contact a qualified person for assistance with electrical installation.

WARNING — Do not attempt to install this equipment until you have fully read and understood this manual. Failure to do so may result in damage to the equipment and could invalidate the warranty.

1.0 General

- 1.1 It is important this Installation and Maintenance is fully adhered to.
- 1.2 Full details of the control panel supplied are shown on the circuit diagrams shown within this manual. If in doubt about any detail, contact Elta or its agents for clarification.
- 1.3 All electrical installations must be carried out by 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 All declarations made by Elta about the product installation and safety, are dependent on the control panel being used within installations which themselves meet the requirements of the relevant Standards and Directives of the region.
- 1.6 The control panel is designed for use in an ambient temperature of up to 40°C and 95% relative humidity. The control panel is NOT suitable for corrosive or explosive atmospheres.
- 1.7 It is the Installer's responsibility to provide easy access to the control panel to facilitate future maintenance.
- 1.8 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 they can use the product safely. Young children should be supervised to ensure they do not play with the appliance.



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. Installation

- 2.1 Upon receipt, the controller should be visually inspected to check for any damage.
- 2.2 If there are any queries concerning the fan equipment, Elta Limited should be contacted prior to the installation.
- 2.3 The controller must be securely mounted in the desired position to suit the application.
- 2.4 The controller is only suitable for surface mounting and must not be recess mounted.
- 2.5 Install in a dry sheltered position.
- 2.6 Do not install in close proximity to a heat source or in areas of high humidity. The maximum ambient temperature for the controller must not exceed 40° C (104° F).
- 2.7 All electrical installation must be carried out by suitably qualified and competent personnel in accordance with all current statutory requirements.
- 2.8 Check the details on the rating plate to ensure that the correct power supply (voltage, frequency and phase) is available. An incorrect power supply will lead to permanent damage of the unit.

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- 2.9 Check that the number, size and speed of the fan(s) can safely be controlled by the controller supplied.
- 2.10 Remove the front cover of the controller by unscrewing the cover fixing screws. This provides access to mounting holes and electrical terminals.
- 2.11 The controller must be connected to a suitably rated fused spur.

3. Wiring

- 3.1 Select the correct wiring diagram for the fan and controller supplied. Ensure that all earth connections are made.
- 3.2 All wiring and control equipment **MUST** comply with the latest IEE regulations.
- 3.3 In the event that the wiring connections for the fan supplied do not correspond to diagrams shown, please refer to the fan instructions or contact Elta for further assistance.

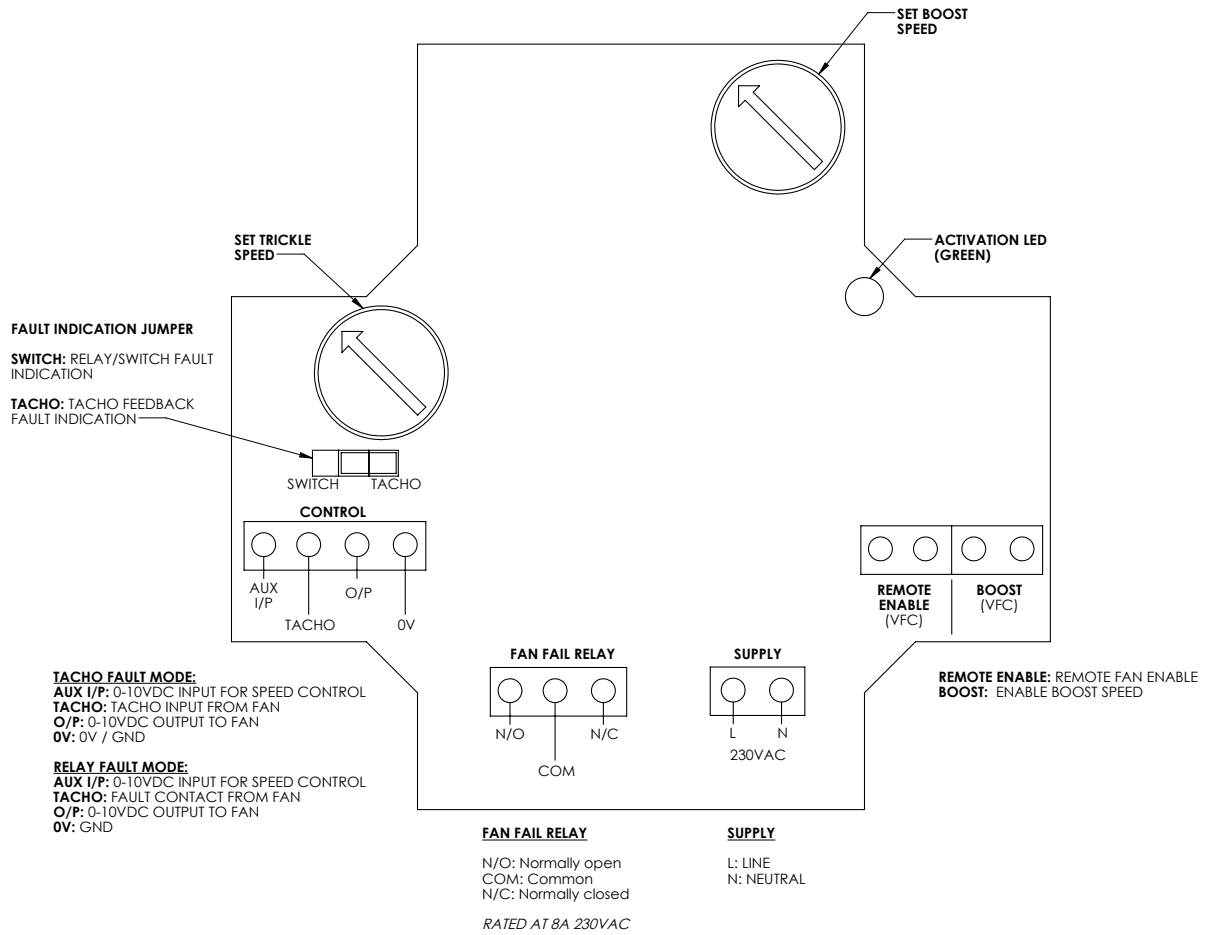
4. Features

- 4.1. Auxiliary input that can be a 0 to 10 volts signal from a sensor or BMS system.
- 4.2. Manual run speed/minimum set by control knob on board.
- 4.3. IP56 enclosure.
- 4.4. Motor run detection by tacho detection or fault relay (such as thermal cutout) from motor.
- 4.5. Relay with volt free contacts triggered by fault detection.
- 4.6. Full speed/boost triggered by volt free contacts.
- 4.7. LED lights to show when pir active and a second one to show if fan has failed.
- 4.8. Adjustable boost speed.
- 4.9. Remote enable triggered by volt free contacts.

WARNING – The fan must be isolated from the power supply during installation and maintenance. Only a suitably qualified and competent person may carry out maintenance after the electrical supply has been isolated.

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Wiring Diagrams



All wiring and control equipment must comply to the latest IEE regulations, in particular part 552-01-02/03.
 152-728 Issue A: 17/08/23
 Check the individual product accessories table for fan controller compatibility.

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5. Guarantee

- 5.1 Elta 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.

6. Disposal and Recycling

- 6.1 Information on disposal of units at the end of life.

This product complies with EU Directive 2002/96/EC.

The symbol of the crossed-out dustbin indicates that this product must be collected separately from other waste at the end of its life.

The user must, therefore, dispose of the product in question at suitable electronic and electro-technical waste disposal collection centres, or else send the product back to the retailer when purchasing a new, equivalent type device.

Separate collection of decommissioned equipment for recycling, treatment and environmentally

compatible disposal helps to prevent negative effects on the environment and on health and

promotes the recycling of the materials that make up the equipment.

Improper disposal of the product by the user may result in administrative sanctions as provided by law.



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149ECTB-IOM Issue A



BS EN ISO 9001:2015 FM 556465



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