



# ACO Controllers

## 3Ph Auto Changeover Panels ACO3/B

### Installation and Maintenance Instructions

**THESE INSTRUCTIONS MUST BE READ FULLY BEFORE COMMENCING INSTALLATION**

Code	Supply	IP Rating
149-ACO3/B(O)	400V/3Ph/50Hz	IP51
149-ACO3/BD(O)	400V/3Ph/50Hz	IP51
149-ACO3/BV(O)	400V/3Ph/50Hz	IP51
149-ACO3/BDV(O)	400V/3Ph/50Hz	IP51

Suffix	Description
B	Electric type (operation by overload) & Air type (operation by air flow switch)
BD	Electric / Air type, Duty Share (Automatically changes between Fan 1 and Fan 2 at a pre – determined time via internal time clock)
BV	Electric / Air type , Volt free contacts (two N/O contacts, one fail, one run, that can be used to connect a visual/ audible alarm located externally to the panel, also for use with energy management systems)
BDV	Electric / Air type , Duty share, Volt free contacts
(O)	Electric / Air type , a volt free contact or 230V connection terminal to allow the panel to be remotely switched on or off

#### 1.0 DESCRIPTION

- 1.1 Auto Changeover controller suitable for use with three phase fan units.

#### 2.0 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 Fans Ltd 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 with a minimum clearance of 150mm above and below the controller to allow for adequate ventilation.

- 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.
- 2.9 Check that the number, size and speed of the fan(s) can safely be controlled by the controller supplied.

**WARNING! The controller must be isolated from the power supply during installation and maintenance.**

- 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 These units are fitted with thermal overloads pre – set to your requirements.

### **3.0 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, in particular 552-01-02/03.
- 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 FANS for further assistance.

### **4.0 OPERATION FOR NON DUTY SHARE MODELS**

- 4.1 Switch on the electrical supply to the controller, select required fan via the two position rocker switch located on the front of the controller. In the event of the thermal overload tripping or airflow failure detected via the fans internally fitted air flow switches, the controller will automatically changeover to the standby fan, a fail light will be illuminated on the front panel.

### **5.0 OPERATION FOR DUTY SHARE MODELS**

- 5.1 Switch on the electrical supply to the controller, select required fan via the two position rocker switch located on the front of the controller. In the event of the thermal overload tripping or airflow failure detected via the fans internally fitted air flow switches, the controller will automatically changeover to the standby fan, a fail light will be illuminated on the front panel.
- 5.2 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.
- 5.3 Children should be supervised to ensure that they do not play with the product.

