

INSTALLATION AND OPERATING INSTRUCTIONS FOR AUTO CHANGEOVER PANEL ACOTO RANGE

The ACOTO range of changeover panels are designed to suit either single phase or three phase (Direct On Line starting) twin fan units fitted with or without airflow switches. The changeover panels incorporate industrial contactors fitted with thermal overloads pre-set to your requirements. The control panel fascia has a power lamp, fan fail lamp and a rocker switch. The ACOTO range of auto changeover panels are compatible with our EFSC and ATC range of speed controllers. The ACOTO range are not suitable for use with inverters.

Model no.	Electrical supply	Rating	Dimensions (H x W x D)	Mounting
Manual duty share models				
ACO1TO-MDS	230v 1Ph 50Hz	As marked	315mm x 235mm x 130mm	Surface
ACO3TO-MDS	400v 3Ph 50Hz & neutral	As marked	315mm x 235mm x 130mm	Surface
Automatic duty share models				
ACO1TO-ADS	230v 1Ph 50Hz	As marked	315mm x 235mm x 130mm	Surface
ACO3TO-ADS	400v 3Ph 50Hz & neutral	As marked	315mm x 235mm x 130mm	Surface

Installation

Check that the auto changeover panel supplied is compatible with the fan motors.

Install in a dry sheltered position. Do not install in close proximity to a heat source.

Remove the front cover of the controller by unscrewing the fascia fixing screws. This provides access to mounting holes and electrical terminals. All wiring must be carried out by a suitably qualified and competent person and comply with current applicable regulations.

ACOTO Range Features

- Fan A/B selector switch on manual duty share version
- Internal timer on auto duty share version to provide 12hr duty cycle for each fan
- Auto changeover on tripping of thermal overload or loss of airflow (if airflow switches fitted)
- Optional fan fail output
- Enable connections available as optional extra allowing duty fan to be enabled from a set of volt free contacts (230v ac rated)
- Compatible with EFSC & ATC speed controllers



Auto Changeover

The control panel will automatically changeover from the duty fan to the standby fan if the thermal overload trips or on loss of airflow detected by airflow switches (if airflow switches are fitted to the twin fan unit)

Manual duty share models

Manual duty share models are fitted with a 2-position (Fan A/Fan B) rocker switch enabling the user to manually select the duty fan. The control panel will auto changeover from the duty fan to the standby fan as described in Auto Changeover above

Auto duty Share models

Auto duty share models are fitted with an electronic timer to provide a 12 hour cycle time for each fan. The timer has a jumper link to allow testing of the auto changeover on a 1 minute test cycle for each fan. After testing the jumper link should be fitted back in the 12hr cycle time position. The position of the jumper link for the test cycle and 12 hour cycle are shown below.

Jumper link in
1 minutes test
position



Jumper link in
12 hour cycle
position



Volt free contacts (VFC Models)

These models are suffixed with VFC and feature 1 set of volt free contacts for a common fan fail status. The contacts are normally open and close when either fan fails.

Volt free contact enable connections (if fitted)

The control panel has the facility for the user to enable the duty fan using an external set of volt free contacts e.g. Building Management system. The duty fan will run when the contacts close.

Wiring diagrams

