5-STEP AUTO TRANSFORMER

Installation, Set-up and Operating Instructions

Stock Ref. Nos.
103 14 103 103 14 301
103 14 105 103 14 304
103 14 107 103 14 307
103 14 113 103 14 311

READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS
PLEASE LEAVE THESE INSTRUCTIONS WITH END USER
SINGLE AND THREE PHASE 5-STEP AUTO TRANSFORMER CONTROLLER
INSTALLATION AND WIRING INSTRUCTIONS

IMPORTANT – READ THESE INSTRUCTIONS FULLY BEFORE COMMENCING THE INSTALLATION

DO NOT install this product in areas where the following may be present or occur:-

- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Ambient temperatures less than -5°C or higher than 40°C.
- Relative humidity above 95%.
- Possible obstructions which would hinder the access or removal of the controller.

SAFETY GUIDANCE NOTES

A. All wiring must be in accordance with current I.E.E. Regulations, or the appropriate standards of your country. The equipment should be protected with a local isolator switch having a contact separation of at least 3mm.
B. Ensure that the mains supply (Voltage, Frequency and Phase) complies with the rating label.
C. The controller should only be used in conjunction with the appropriate Vent-Axia Products.
D. The controller should not be sited within 600mm of/or 2250mm above a bath/shower tray, in accordance with current I.E.E. Regulations for bathrooms.
E. This controller should not be used where it is liable to be subject to direct water spray from hoses etc.

INSTALLATION

MOUNTING

1. The controller is suitable for mounting directly on either a vertical or horizontal surface. DO NOT SUSPEND.
2. Securely mount the controller using the appropriate screws or bolts.
3. If the controller is mounted on a metal surface or partition, ENSURE THAT THE SURFACE IS EARTHED.

WIRING

WARNING:- THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION AND MAINTENANCE OF THIS PRODUCT.

THE CONTROLLER AND ASSOCIATED EQUIPMENT MUST BE EARTHED.

1. Ensure the switch is in the ‘OFF’ position.
2. Remove the front cover and connect the unit in accordance with the appropriate wiring diagram (Figs 1-2).
3. Check that all connections have been made correctly and ensure that all terminals screws/nuts and cable clamps are securely fastened.
4. The cable entry must be by a suitable grommet or cable gland.
5. Connect the power supply and check that the fan and any ancillary equipment are operating correctly.

NOTES ON RUNNING

Before switching ‘On’ CHECK :

- Control unit and motor/fan are secure.
- All relevant guards and covers are fitted.
- Earth connections have been made and are secure.

Switch ‘On’ the mains and controller.

Turn controller to maximum and down to minimum to ensure motor/fan operates accordingly.
**Fig. 1**

**SINGLE PHASE AUTO-TRANSFORMER**

STOCK REFERENCE No.
103 14 103 3 amps. (max)
103 14 105 5 amps. (max)
103 14 107 7.5 amps. (max)
103 14 113 13.6 amps. (max)

NOTE: Circuit Breaker fitted on 103 14 113 version only

![Diagram of Single Phase Auto-Transformer](image)

**Table: Controller Switch Positions and Output Voltages**

<table>
<thead>
<tr>
<th>Switch Position</th>
<th>Output Voltage (240V Input)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0V</td>
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<tr>
<td>1</td>
<td>90V</td>
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<tr>
<td>2</td>
<td>115V</td>
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<td>3</td>
<td>140V</td>
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<tr>
<td>4</td>
<td>175V</td>
</tr>
<tr>
<td>5</td>
<td>240V</td>
</tr>
</tbody>
</table>

**Refer to the Fans Fitting & Wiring Instructions**

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**Fig. 2**

**THREE PHASE AUTO-TRANSFORMER**

STOCK REFERENCE No.
103 14 301 1.4 amps. (max)
103 14 304 4 amps. (max)
103 14 307 7 amps. (max)
103 14 311 11 amps. (max)

![Diagram of Three Phase Auto-Transformer](image)

**Table: Controller Switch Positions and Output Voltages**

<table>
<thead>
<tr>
<th>Switch Position</th>
<th>Output Voltage (415V Input)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0V</td>
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<tr>
<td>1</td>
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<tr>
<td>3</td>
<td>175V</td>
</tr>
<tr>
<td>4</td>
<td>240V</td>
</tr>
<tr>
<td>5</td>
<td>415V</td>
</tr>
</tbody>
</table>

**Refer to the Fans Fitting & Wiring Instructions**

**NOTE:**
A TRIAL CONNECTION SHOULD BE MADE TO CHECK THAT THE DIRECTION OF FAN ROTATION IS CORRECT. IF INCORRECT, INTERCHANGE ANY TWO PHASES OF THE THREE PHASE SUPPLY. ENSURE THE EARTH CONNECTION IS MADE INSIDE THE TERMINAL BOX OR ISOLATOR.
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The Vent-Axia Guarantee
Applicable only to products installed and used in the United Kingdom. For details of guarantee outside the United Kingdom contact your local supplier.

Vent-Axia guarantees this product for one year from the date of purchase against faulty material or workmanship. In the event of any part being found to be defective, the product will be repaired, or at the Company’s option replaced, without charge, provided that the product:
1) has been installed and used in accordance with the instructions given with each unit.
2) has not been connected to an unsuitable electricity supply. (The correct electricity supply voltage is shown on the product rating label attached to the unit.)
3) has not been subjected to misuse, neglect or damage.
4) has not been modified or repaired by any person not authorised by the company.

IF CLAIMING UNDER TERMS OF GUARANTEE
Please return the complete product, carriage paid to your original supplier or nearest Vent-Axia Centre, by post or personal visit. Please ensure that it is adequately packed and accompanied by a letter clearly marked ‘Guarantee Claim’ stating the nature of the fault and providing evidence of date and source of purchase.

As part of the policy of continuous product improvement Vent-Axia reserves the right to alter specifications without notice.

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