



**DRYFLOW 'A100 - LV' SERIES**  
**LOW VOLTAGE AUTOMATIC HUMIDITY CONTROL UNITS**  
**for BATHROOM, TOILETS AND SHOWER ROOMS**  
**INSTALLATION AND MAINTENANCE INSTRUCTIONS**

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**1. GENERAL DESCRIPTION**

- DRYFLOW A100-LV:** Standard Low Voltage with internal gravity shutter.  
**DRYFLOW A100T-LV:** Low Voltage with internal gravity shutter and overrun timer.  
**DRYFLOW A100P-LV:** Low Voltage with internal gravity shutter and pull cord.  
**DRYFLOW A100HPT-LV:** Low Voltage with internal gravity shutter, humidistat, overrun timer and pull cord.

1.1 **Before commencing any part of the installation program, READ ALL PARTS OF THESE INSTRUCTIONS CAREFULLY, and ensure that the electrical supply matches the specification marked on the rating plate of the appliance.**

1.2 **COMPONENT CHECK:**

Description	Qty.
DRYFLOW Fan unit	1
Low Voltage Transformer	1
Screws	2
Wall Plugs	2

**2. DETAILS**

2.1 The **DRYFLOW A100T-LV** is for use in conjunction with a light switch. When the light is switched on the fan will operate, and when the light is switched off, the fan will continue to operate for a preset overrun time (between 5 and 20 minutes).

2.2 The **DRYFLOW A100P-LV** has a pull cord for turning the fan ON and OFF.

2.3 The **DRYFLOW A100HPT-LV** has an integral and adjustable electronic humidistat, which is sensitive to the relative humidity (moisture level) in the air. The humidistat is preset at factory level to automatically operate the fan when the humidity reaches 75%. The fan can also be operated by a remote light switch or the pull cord override, regardless of the humidity level. The neon indicator is illuminated when the fan is operating in override mode. Switching off the fan using the pull cord or remote light again will revert the fan to automatic humidistat and/or overrun timer operation. The fan will continue to operate until the humidity has fallen below the preset level and the timer has completed its overrun period.

2.4 **ADJUSTMENT:** Both the humidistat and the overrun timer may be adjusted by following the instructions (i.e. set the trimmer to '+' to increase the overrun period, or setting the humidistat trimmer to a higher % humidity level setting to reduce the sensitivity of the humidistat.

2.5 **TECHNICAL INFORMATION:**

Extract:	90m <sup>3</sup> /h, (25l/s) Maximum. 55m <sup>3</sup> /h, (15l/s) Minimum.
Noise emission:	39dB(A) maximum. 30dB(A) minimum at 3 metres.
Compliance:	The fans comply with the current standards appertaining to electrical equipment, and conform to BS 3456, EC Directive EMC 89/336, and CE marking.

**3. POSITIONING**

3.1 The fans are suitable for installation in walls or ceilings in internal rooms to extract air and fumes directly to outside or through short lengths of ducting. Wall mounted installation should be at least 2.3m above floor level.

3.2 If the fan is sited in a room containing a fuel-burning appliance, the installer must ensure that the air replacement is adequate for both installations. The fan must not be used in an area with an ambient temperature higher than 40°C (104°F).

3.3 The transformer is to be located in an area of free air flow, and is not to be covered.

3.4 Installation is to be carried out by suitably qualified persons. Incorrect installation can cause damage to people or property, for which the manufacturer cannot be held liable.

**4. ELECTRICAL**

- 4.1 All wiring and electrical installation shall be carried out by a competent person in accordance with I.E.E Regulations (current edition) (BS7671), with particular attention to sections 130-05-02; 461-01-01; 461-01-03; 463-01-01; 476-02-01; 530; 537-01; 600-01; 600-02; 601-01; 601-02 to 601-08 and 601-10.
- 4.2 Whilst making the recommendations given in para 4.1 of these instructions, Johnson & Starley Ltd. accept no liability in respect of any installation failing to comply with the referred regulations and standards.
- 4.3 All **DRYFLOW** units are double insulated.

**5. INSTALLATION**

- 5.1 Remove all packing material, and check that the fan has not been damaged in transit.
- 5.2 Check that the electrical supply (voltage and frequency) correspond to those marked on the rating label.
- 5.3 Check the location of existing wiring for ease of connection, and ensure that the electrical connections are made in accordance the following instructions.

**6. FIXING**

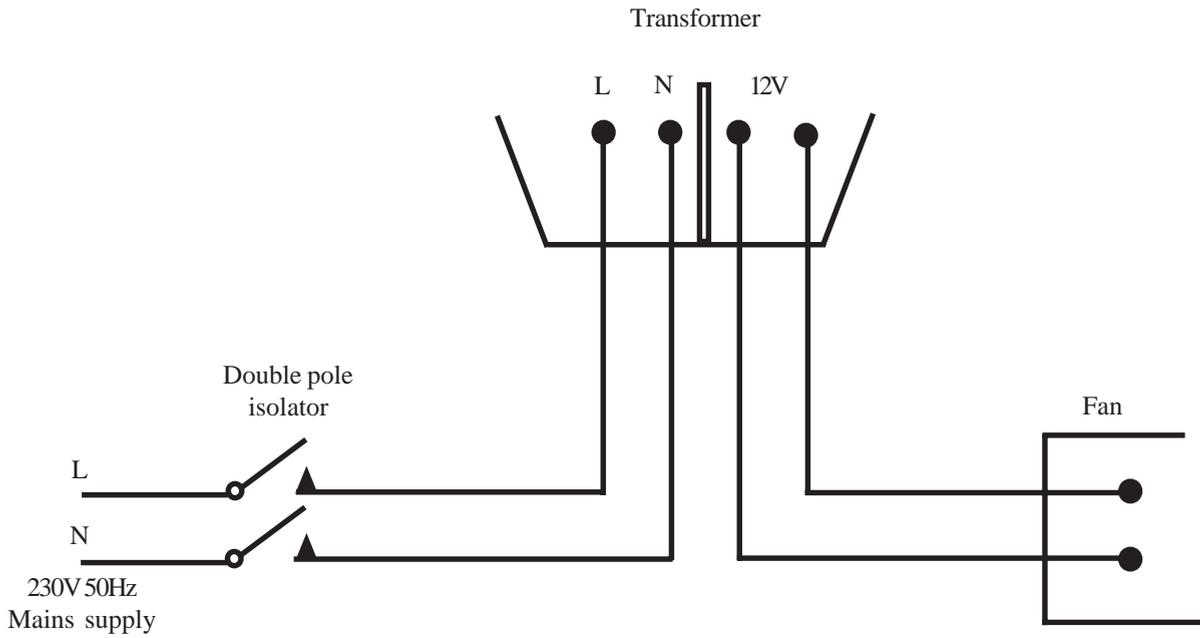
- 6.1 Cut a 100mm dia. hole in the chosen location for the fan. This hole size is for the fan only, and does not account for the thickness of any ducting.
- 6.2 Partially release the screw located in the lower edge of the casing, and remove the front cover and gravity shutter by pulling forwards and upwards.
- 6.3 Using the main body as a template, mark and drill 2 x 5mm dia. fixing holes, fit and secure the main body to the wall/ceiling using the 2 x plugs and screws (provided) having ensured that the fixing surface is flat to avoid distortion of the casing.
- 6.4 Refit and secure the casing and gravity shutter.
- 6.5 Release the 2 x securing screws and withdraw the Transformer wiring cover.
- 6.6 Using the Transformer as a template, and ensuring that the Transformer will be sited in an area of free air, mark and drill 2 x 5mm dia. fixing holes and secure the transformer in its chosen location using the 2 x plugs and screws provided in the Transformer packaging.

**7. WIRING**

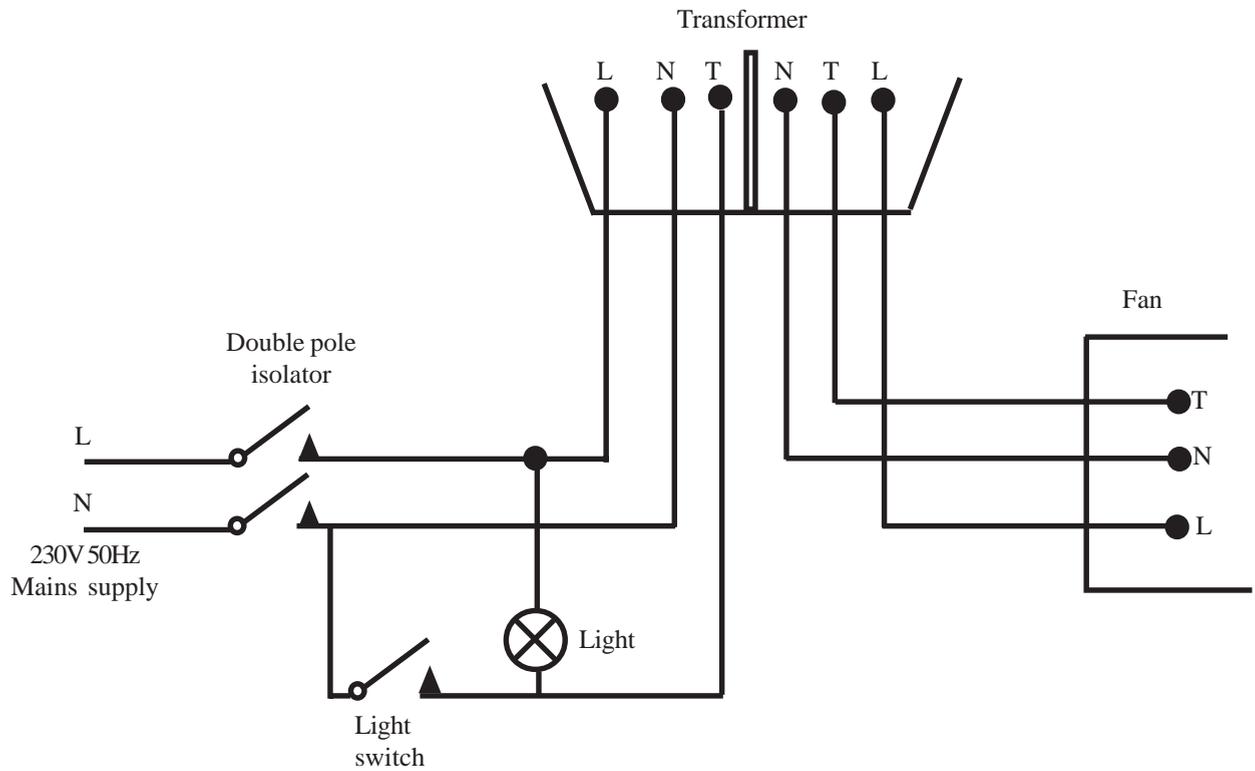
- 7.1 Ensure that the electrical supply is switched OFF and isolated during the installation of the fixed spur.
- 7.2 Installation must be in compliance with the current editions of Building Regulations.
- 7.3 The fan is a fixed appliance, and therefore the electrical supply to it must be a fixed supply fused at 3A and using cable of 0.75mm<sup>2</sup> csa, suitable for a 230V 50Hz supply and shall be connected to the fixed wiring using a double pole switched of contact separation of 3mm minimum. Connections shall be in accordance with the current edition of I.E.E Regulations BS7671.
- 7.4 Referring to Figs. 1 or 2 as appropriate, connect the fan as detailed.

**8. MAINTENANCE AND CLEANING**

- 8.1 Switch OFF the electrical supply to the fan at the double pole isolator.
- 8.2 Partially release the screw located in the lower edge of the casing, and remove the front cover and gravity shutter by pulling forwards and upwards. Wash the front cover and gravity shutter in a mild soap solution.
- 8.3 Clean inside the fan using a soft brush, taking care to not disturb or damage any electrical wiring or connections.
- 8.4 Refit and secure the casing and gravity shutter.



**Fig. 1**  
**A100-LV and A100P-LV Installation Wiring**



**Fig. 2**  
**A100T-LV and A100HPT-LV Installation Wiring**

**Johnson and Starley prides itself on its ability to supply spare parts quickly and efficiently. If your service engineer indicates a problem in obtaining a spare part, advise him to contact Johnson and Starley Spares Department at the address below.**

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