### Fan Overview

### **Range Overview**

Aria Quiet fans are designed for ventilation of domestic premises i.e. bathrooms, toilets and shower rooms. They are recommended for any wall or ceiling installations.

The Aria Quiet 100B model may be used as a simple extract fan operated by remote switch.

The Aria Quiet 100T model includes an adjustable timer function 2 to 30 minutes.

The Aria Quiet 100HT model includes an adjustable timer function 2 to 30 minutes and an adjustable humidity function 60 to 90% RH.

The Aria Quiet 100MST model includes an adjustable timer function 2 to 30 minutes and motion sensing.

Fan Size	Max flow, m³/h	Max Pressure Pa	Nominal power, W	Noise level dB(A)	
100mm	97	42.5	7.5	25	

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### Fan Adjustment - Timer

The fan with timer function switches on when the voltage is supplied to the LT(1) terminal via an external switch.

After the voltage to the LT(1) terminal is disconnected the fan continues to run for the set overrun period between 2 and 30 minutes. The overrun period is adjusted by turning the potentiometer clockwise to increase and anti-clockwise to decrease.

### The Aria Quiet fan range is IP45 rated and is suitable for mounting in Zone 1 and 2 in toilets, bathrooms and inside

**Electrical Installation** 

shower cubicles when installed with a 30mA RCD. In addition AFDD protection is also required.

The fan requires a 220 - 240V 50Hz single phase supply. Class II equipment. BS EN 60417. An external 3A fuse is required for each fan unit. Cable sizes (max): Fixed flat wiring 2 core 1mm<sup>2</sup>, 3 core 1/1.5mm<sup>2</sup>.

All electrical installation work to be carried out by a competent person in compliance with the relevant Building Regulations/Standards as well as the current edition of BS7671 (IET Wiring Regulations).

### Important Notes

The Aria Quiet range also complies with the requirements of the EU norms and directives. Do not place the ventilator near direct heat sources, e.g. radiant heaters, or where temperatures can exceed 40°C (104°F).

Precautions must be taken to avoid back flow of gases in rooms with open flue fuel burning appliances.

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### Fan adjustment - Humidity / Timer

Humidity and timer functions are activated when the voltage is supplied to the LT(1) terminal via an external switch or when the humidity level rises above the set % RH level (adjustable between 60 and 90% RH).

After the voltage to the LT terminal is disconnected or the humidity level falls below the set %RH level, the fan continues to run for the set overrun period between 2 and 30 minutes.

### The humidity level is adjusted by turning the potentiometer clockwise to increase and anti-clockwise to decrease. To set the maximum humidity level the

potentiometer has to set at the max position (90%).

60%

# AIRFLOV

#### Fan Range Aria Quiet 100 Fan Range Installation and Operating Guide

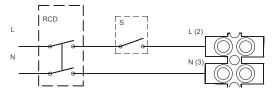


Aria Quiet 100B - 90001047 Aria Quiet 100T - 90001048 Aria Quiet 100HT - 90001050 Aria Quiet 100MST - 90001051

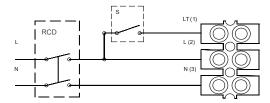


### **Electrical Installation**

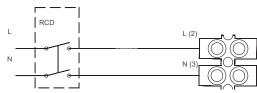


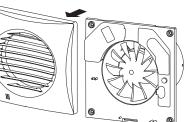


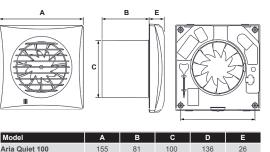
### Aria Quiet 100T, 100HT



Aria Quiet 100MST







### Page 2 of 16 Mechanical Installation

### Aria Quiet fans can be wall or ceiling mounted.

For mounting the fan, a ø100mm hole is required for the spigot, as well as at least two holes for the mounting screws. When mounting the fan, remove the front cover and place the fan into the pre drilled hole. Make sure that the spigot fits into any pre-installed ducting. Wire the fan appropriately according to page 5, ensuring that the cables from the fan are routed through the provided cable hole.

Use at least two mounting screws to secure the fan to the ceiling or wall ensuring not to over tighten and replace the front cover with the retention screw. Ensure free running of the fan impeller and that flexible duct connections are not over tightened to the fan outlet spigot.

Airflow recommends that rigid ducting is used instead of flexible ducting, this will ensure maximum performance.

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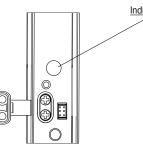
### Fan adjustment - Motion sensor/ Timer

The fan with motion sensor and timer function switches on when movement is detected between a distance of 1 and 4 meters from the fan. The sensor has a detection angle of 100° horizontally.

Once movement ceases, the fan continues to run for the set overrun period which is adjustable between 2 and 30 minutes.

### Operating indication, dependent upon model

For all Aria Quiet 100 models, a light indicator will glow red when the fan is running.



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### **Recommended Best Practice**

The Building Regulations 2010, Statutory Instrument Part 9, paragraph 42, imposes a requirement that testing and reporting of mechanical ventilation performance is conducted in accordance with an approved procedure.

Compliance with this requirement by an assessed and registered 'Competent Person' should follow a 'Best Practice' process and adopt air flow measurement, Method A – The Unconditional Method – using a suitable UKAS certified measuring instrument. Generically referred to as a 'Zero Pressure Air Flow Meter' or 'Powered Flow Meter'.

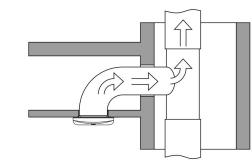
Further information on this method is detailed in NHBC Building Regulations Guidance Note G272a 10/13 and BSRIA 'A Guide to Measuring air flow rates' document BG46/2015

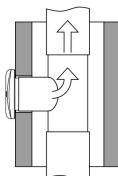
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Fan assembly - Timer and Humidity /Timer Dependant upon model

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### Ceiling Installation





To maximise airflow rigid ducting should be used. Where flexible ducting is used the diameter must be maintained and it is good ventilation practice that the ducting is extended to 90% of its possible length in order to maintain the best possible airflow. Ensure that flexible duct connections are not over tightened to the fan outlet spigot. The fan and ducting when installed should perform in accordance with the requirements of UK Building Regulations Part F Volume 1: Dwellings.

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### Warranty

Airflow guarantees the Aria for 2 years from date of purchase against faulty material or workmanship. Applicable to units installed and used in the UNITED KINGDOM.

Warranty covers the fan, not the reinstallation of this if required. In the event of any defective parts being found, Airflow Developments Ltd reserves the right to repair, or at our discretion replace without charge, provided the unit:

- Has been installed in accordance with the fitting and wiring instructions supplied with each unit.
- 2. Has not been connected to an unsuitable electrical supply.
- 3. Has not been subjected to misuse, neglect or damage
- Has not been modified or repaired by any person not authorised by Airflow Developments Ltd.
- Has been installed in accordance with latest Building regulations and IET wiring regulations by a person who is recognised as a competent installer who is part of a competent scheme provider (e.g. NICEIC Ventilation Scheme).

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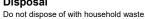
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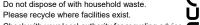


Airflow Developments shall not be liable for any loss, injury or other consequential damage, in the event of a failure of the equipment or arising from, or in connection with, the equipment excepting only that nothing in this condition shall be construed as to exclude or restrict liability for negligence. Full details at airflow.com/terms

This warranty does not in any way affect any statutory or other consumer rights.





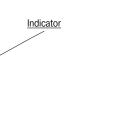


Check with your local authority for recycling advice.

AIRFLOW Aidelle Ho	amshire		ká 520 Iraha 10	Wolbe	/ Lufttechnik GmbH rsacker 16 Rheinbach
Tel:	+44 (0) 1494 525252	Tel:	+42 (0) 2 7477 2230	Tel:	+49 (0) 222 69205 0
Email: Web:	info@airflow.com airflow.com	Email: Web:	info@airflow.cz airflow.cz	Email: Web:	info@airflow.de airflow.de







### Maintenance

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SAFETY FIRST: ALWAYS ISOLATE THE FAN UNIT FROM THE POWER SUPPLY BEFORE DOING ANY WORK ON THE FAN / MODULE.

When installed by a competent installer, according to user instructions, the Aria Quiet range is completely safe. The materials used do not constitute a hazard.

### Cleaning

Fan and ducting should be inspected and cleaned on a regular basis to maintain fan performance. The external housing of the fan can be wiped with a damp cloth.

Do not use household cleaners containing abrasives. Cleaning of the internal parts such as the impeller should be carried out by using a soft brush. Never clean any parts of the fan assembly by immersing in water or using a dishwasher.

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