

PRODUCT INFORMATION & INSTALLATION GUIDE 2023

Airius Model EC (Fixed Speed) PEARL SERIES



www.airius.co.uk



MODEL EC DIMENSIONS AND PROPERTIES



COVERAGE	Heating	Cooling
Nozzle Height =	Up to 7.5 m (24 ft) Up to 6.5 m (21 ft) Up to 111 m ² (1200 ft ²)	Up to 6 m (19 ft) Up to 5 m (16 ft) Up to 88.8 m² (955 ft²)

All data is indicative only and can change subject to application. For more accurate design please contact Airius.

MOTOR

Single Phase

Electrically commutated, variable speed 92% efficient motor

German EBM Papst EC motor

230 Volt @ 50/60 Hz

OPERATING TEMPERATURES

Operating Temperature

<u>HOUSI</u>NG

PC/ABS Resin - Inc. internal fixed blade stator, nozzle and cowl

= -30°C (-22°F) - 50°C (122°F)

5VA flame resistance rating

Applicable to Titan Series Upgrade - Chemical resistant ABS resin housing and stator blades with stainless steel fixings

INGRESS PROTECTION

IP55 Rated

UN	T S	IZE

Weight: Height to Rim: Total Height: Diameter:

MOTOR

Watts*:	
RPM*:	
L/S*:	
m³/hr:	
Centre Line Velocity ¹ :	
AMPS*:	

229 mm (9.0 in) 335 mm (13.2 in) 286 mm (11.3 in)

STANDARD

3.0 kgs (7 lbs)

230V @ 50 Hz

30 1700 235 (499 CFM) 847 1.59 m/s @ 6 m 0.26

*Motor data provided by motor manufacturer and is subject to change at anytime 'Velocity profile tested in situ

NOISE LEVELS

Sound Pressure Level

= 37.1 dB(A)

Calculated from nozzle of unit to head height when installed at maximum ceiling height

For additional noise level information contact Airius

COLOUR

Cool gray 2C - Off white as standard Can be tailor painted to your colour specifications

Titan Series Upgrade - Black as standard

ACCESSORIES & OPTIONS

Airius suspended ceiling kit - Allows Airius unit to be mounted in a suspended ceiling grid

Fixed Speed

For horizontal installations Airius recommend the use of a cradle, a second cable or a rod attachment to support the fan nozzle

WARRANTY

5 years parts and workmanship from shipping date 120 day money back guarantee (T's & C's apply)



VELOCITY PROFILE

1.5 m—



UNIT PLACEMENT

PREPARATION

Install electrical circuit(s) and outlet(s) in accordance with national and local electric codes.

Outlets should generally be mounted vertically unless a "twist/locking" type is being used.

Wall switch may be installed in circuit to disable power and prevent electrical hazards when servicing.

Confirm electrical continuity of Airius unit on the ground before permanently mounting in the ceiling.

MAINTENANCE

Frequency of cleaning will vary by application and environment.

You may clean the plastic housing with a damp warm cloth, using mild household detergents.

Do not use petroleum products, thinners or solvents to clean any part of the Airius unit.

If the Airius unit fails, contact manufacturer.

MATERIALS & PROPERTIES

Constructed from recyclable materials.

The outer shell, stator and fan blades are fire rated 5VA materials.

Power cord is a 1.8 m, 3 wire, 1.02 mm diameter 300VAC rated electrical cord - CE/EU compliance rated as HO5VV (PLUG NOT SUPPLIED).

Electrically commutated, fixed speed 92% efficient motor.

Motor is thermally protected. Shutoff is at 110°C & reset is at 90°C.

No lubrication required. Bearings are sealed.

OPERATION

Designed to operate 24 hours-a-day, 7 days-a-week to maintain air circulation/thermal equalization/humidity equalization.

Use optional speed control to fine tune RPM if needed.

INSTALLATION

Do not hard connect fans in excess of 10 kgs unless agreed with Airius prior to Installation. When attaching it is preferred if some chain or cable is used between fan and the support. However it is not imperative.

Hang from the ceiling, typically 300 mm (12") - 450 mm (18") from the roof deck to fan intake.

For cooling applications fans can be installed slightly lower. Contact Airius for design details and assistance.

The Airius unit performs best when air column from the nozzle is unimpeded to the floor.

The Airius unit should not be mounted directly in front of heat ducts, vents or any other high heat source.

Use professionally installed hardware, capable of supporting a minimum of five times the weight of the fan unit.

Hardware to hang the unit includes but is not restricted to: Hooks, chains, cables, carabiners, bridle rings, beam clamps and bolts.

Density of the placement is directly related to the effectiveness, performance and savings.

Mount out of reach from people and animals.

Floor plans, mezzanines, office locations, machinery, people placement, plumbing, lighting, duct work, electrical systems, natural light/air systems, cranes, doors, windows, ventilation and fire suppression systems are all factors in properly locating the Airius system within the ceiling.



CHAIN HUNG (STRAIGHT)



CEILING FIXED (STRAIGHT)





CHAIN HUNG (ANGLED)



CEILING HUNG (ANGLED)





Airius Europe, Middle East & Asia

Airius Europe Ltd Holwell Farm, Cranborne Dorset BH21 5QP, UK Tel - +44 (0) 1202 554200 Fax - +44 (0) 1202 554396 Email - info@airius.co.uk Web - www.airius.co.uk

Airius Americas

811 South Sherman Street Longmont Colorado 80501 USA Tel - (00) 1 888 247 7327 Email - Info@airiusfans.com Web - www.airiusfans.com

Airius Oceania & S.E. Asia

P.O. Box 1812 Byron Bay NSW 2481 AUSTRALIA Tel - +61 (2) 6608 2736 Email - info@airius.com.au Web - www.airius.com.au

USA and foreign Patents granted to AIRIUS LLC, USA, further patents pending. AIRIUS & AIRIUS SYSTEMS is the copyright property of AIRIUS LLC, USA. All material issued by, or emanating from, Airius Europe Ltd is the Copyright property of Airius Europe Ltd, UK.

