



# PRODUCT INFORMATION & INSTALLATION GUIDE 2025

Airius Model 45  
**DESIGNER SERIES**  
EX-D-45-SP-STD-230

[www.airius.co.uk](http://www.airius.co.uk)

**AIRIUS**<sup>®</sup>  
saving you energy

## MODEL 45 DIMENSIONS AND PROPERTIES



### UNIT SIZE

Weight:	8.6 kgs (19 lbs)
Height to Rim:	452 mm (17.8 in)
Total Height:	610 mm (24.0 in)
Diameter:	373 mm (14.7 in)

### STANDARD

### MOTOR

Watts*:	45.7
RPM*:	1344
L/S*:	238 (505 CFM)
m <sup>3</sup> /hr:	858
Centre Line Velocity <sup>1</sup> :	1.52 m/s @ 9 m
AMPS*:	0.20

### 230V @ 50 Hz

\*Motor data provided by motor manufacturer and is subject to change at anytime  
<sup>1</sup>Velocity profile tested in situ

### COVERAGE

#### Heating

#### Cooling

Ceiling Height =	Up to 11 m (36 ft)	Up to 8 m (26 ft)
Nozzle Height =	Up to 10 m (32 ft)	Up to 7 m (23 ft)
Floor Area =	Up to 111 m <sup>2</sup> (1200 ft <sup>2</sup> )	Up to 88.8 m <sup>2</sup> (955 ft <sup>2</sup> )

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

### MOTOR

Single Phase  
PSC - Permanent Split Capacitor motor  
230 Volt @ 50 Hz

### OPERATING TEMPERATURES

Operating Temperature	= -20°C (-4°F) to 70°C (158°F)
Thermal Cut Off	= 70°C (158°F)

### HOUSING

Aluminium powder coated  
Internal PC/ABS Resin fixed blade stator, nozzle and cowl  
**Applicable to Titan Series Upgrade - Chemical resistant ABS resin housing and stator blades with stainless steel fixings**

### INGRESS PROTECTION

IP44 Rated

### NOISE LEVELS

Sound Pressure Level = 32.7 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 - Off white as standard**

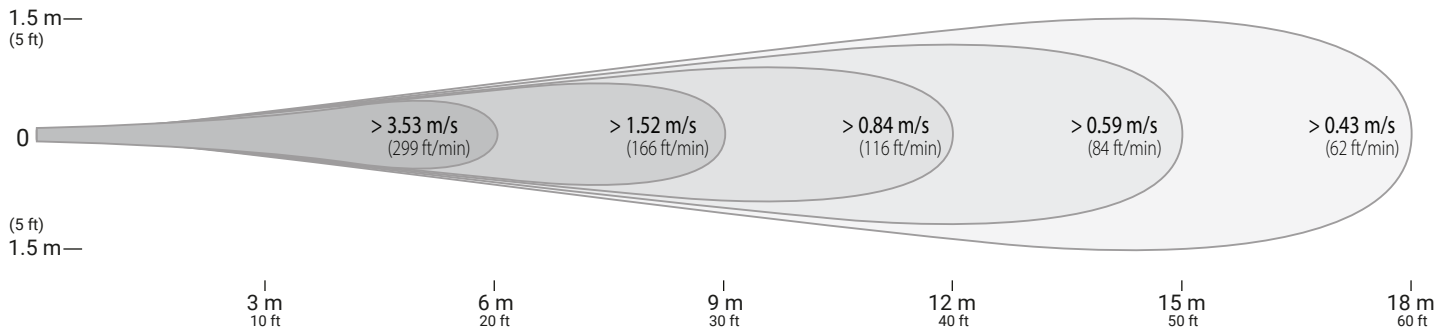
### ACCESSORIES & OPTIONS

Optional speed controls allow for variable output from Airius unit.  
1 AMP and 5 AMP controls available  
Air & Surface Purification - Used to mitigate contaminants:  
- PHI kit - Photohydroionization - Advanced oxidation technology  
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



## 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 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).

Single phase, shaded pole, single speed, axial motor.

Motor is thermally protected. Shutoff is at 135°C & reset is at 125°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.

Chains MUST be secured from 2 fixing points at a minimum of 45° angle to ensure unit does not spin during operation.

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.

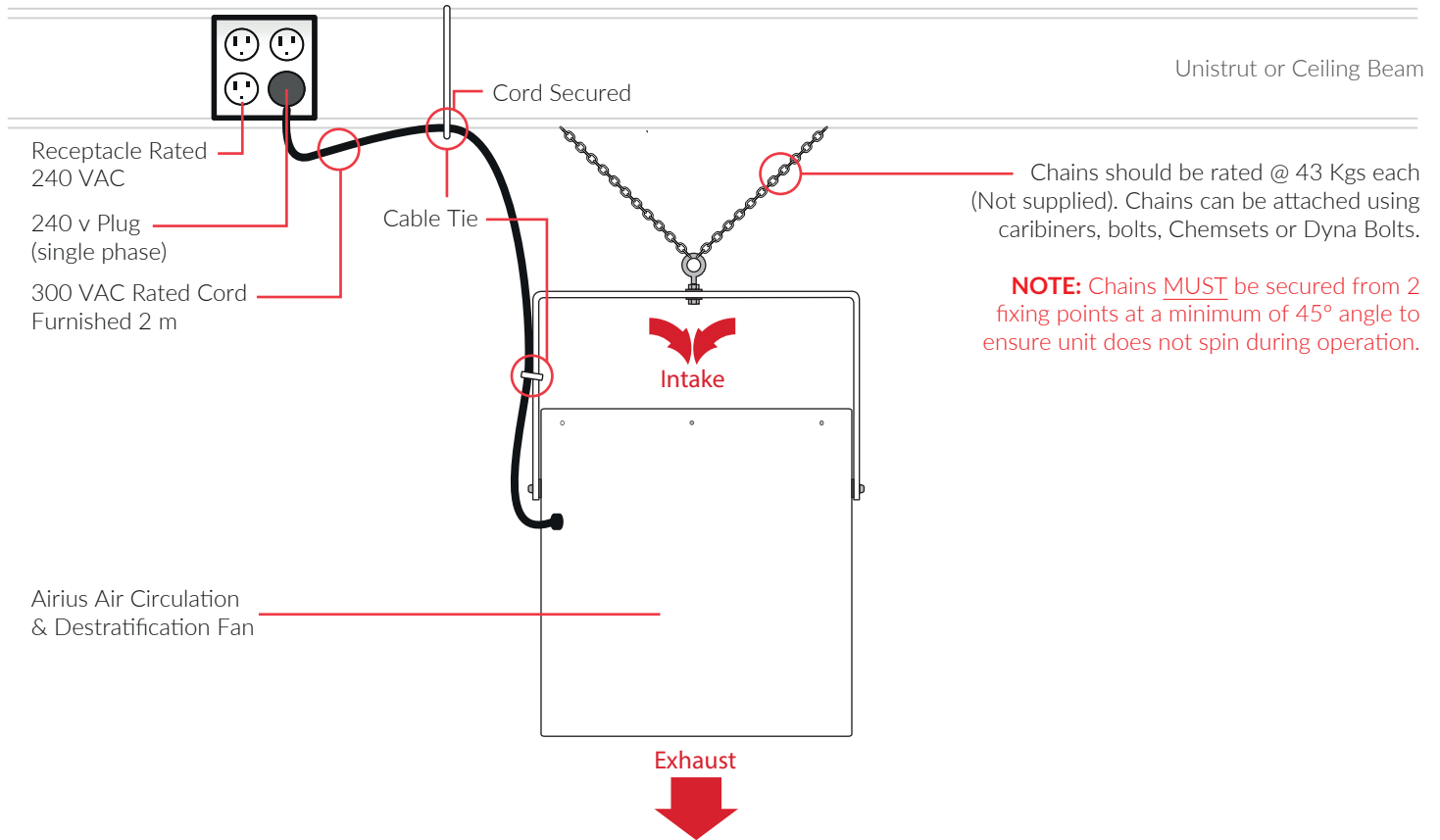
Density of the placement is directly related to the effectiveness, performance and savings.

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.

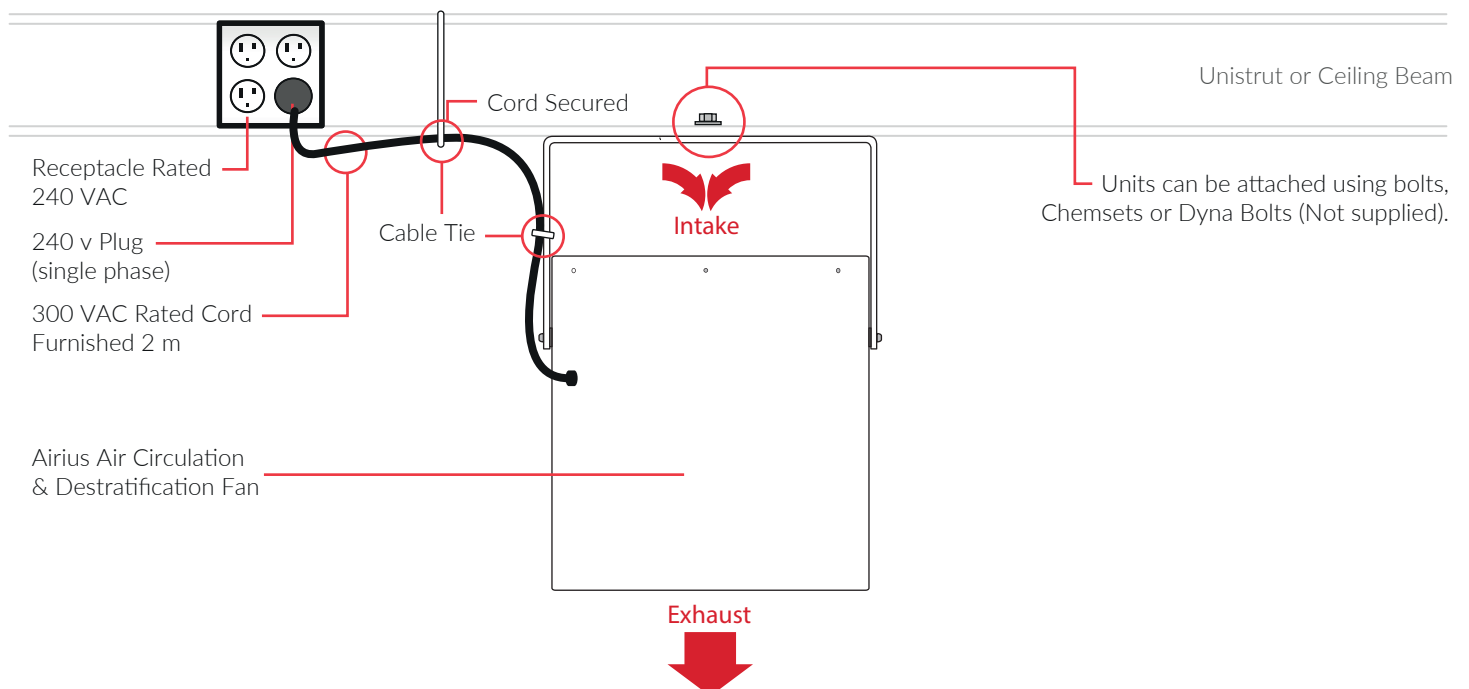
**CHAIN HUNG (STRAIGHT)**

PLUG NOT SUPPLIED



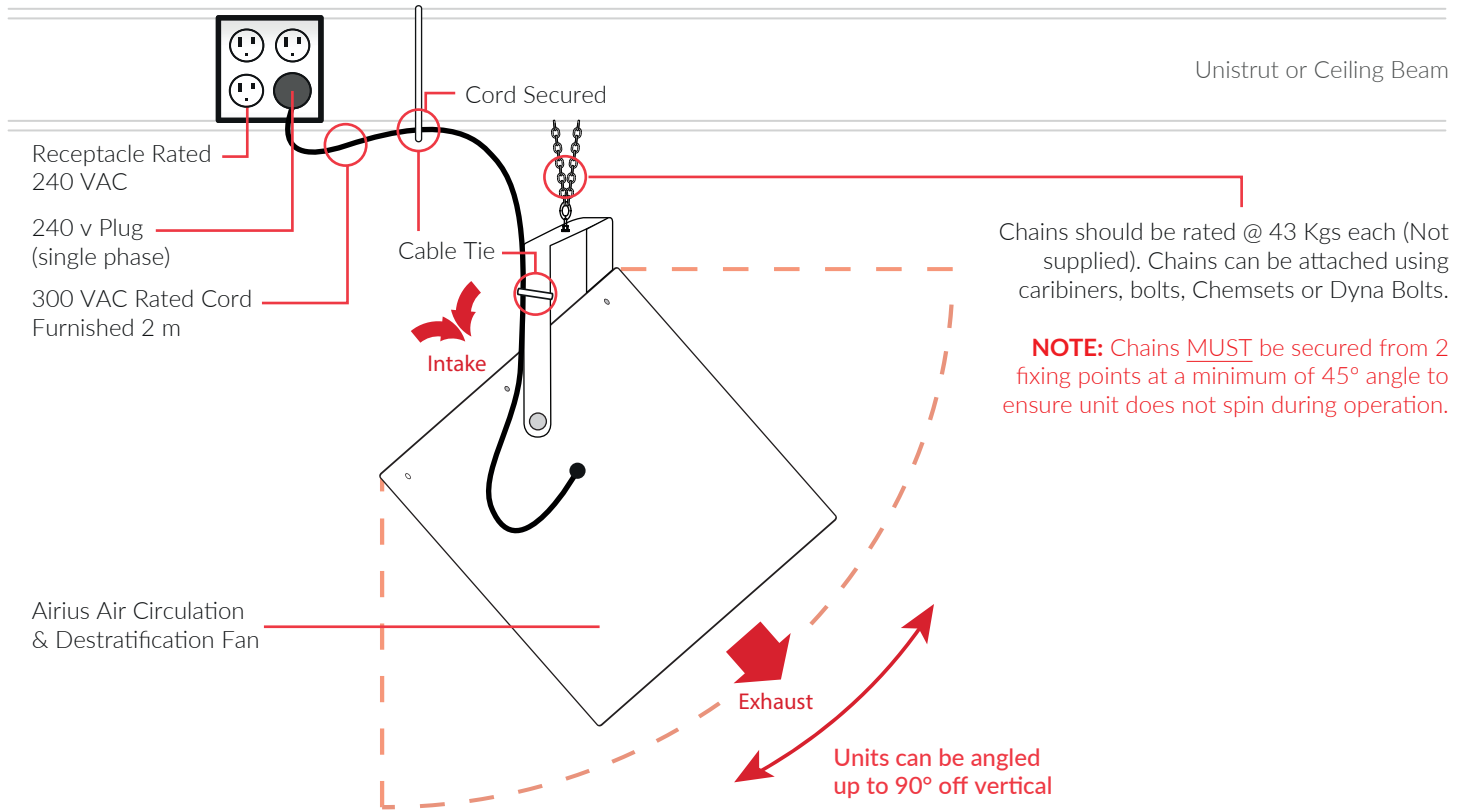
**CEILING FIXED (STRAIGHT)**

PLUG NOT SUPPLIED



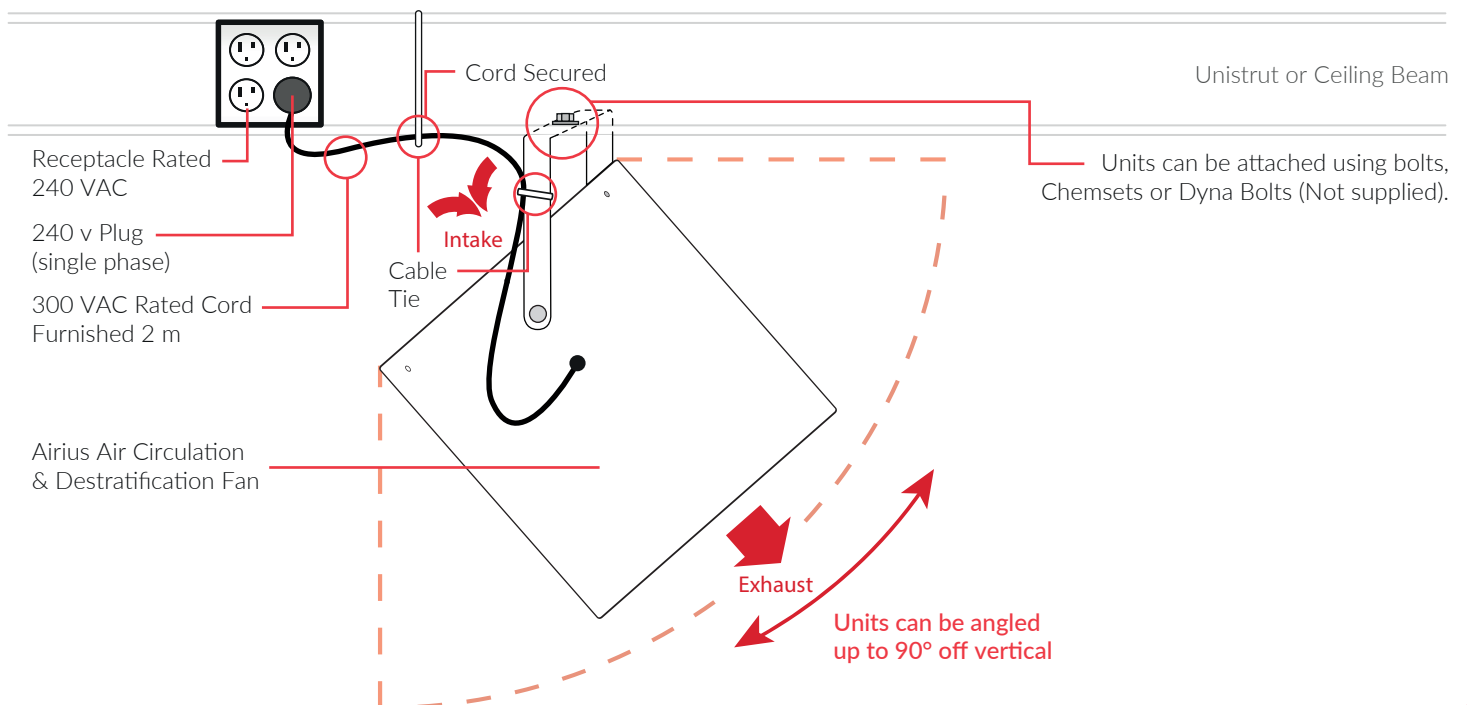
## CHAIN HUNG (ANGLED)

PLUG NOT SUPPLIED



## CEILING HUNG (ANGLED)

PLUG NOT SUPPLIED





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