1. General Description

a. The 2' x 4' Standard self-powered Fan Filter Unit is designed to ***high durability***, ***quality*** and ***high performance Laminar Air Flow*** device.
b. The ***light weight*** modular and ***flexible*** unit fits on any ceiling system and in any laminar flow equipment.
c. The power supply to the unit is Single Phase - ***230 Vac, 50/60 Hz***.

2. Performance

a. The unit described exceeds the requirements of ***IEST*** recommended practice (IES-RP-CC-002).
b. Specially designed Baffle System provides highly Uniform ***Air Distribution*** at nominal flow with tolerance of ***± 10% all around***.
c. Low Sound Level approximately ***53 dBA*** and classified ***below NC-50***.
d. Vibration Level extremely low, stringent standard not exceeding ***0.003 rms*** displacement at 0.45 m/s air velocity.
e. ***Low power consumption*** with high efficiency centrifugal fan with ***backward-curved blades.***

3. Standard Features/Components

a. The unit was constructed to high durability and quality. The casing made of ***Aluminum Zinc Coated*** with Side Casing thickness of 0.8 mm and lid thickness of 1.2 mm for Structure Stability.
b. ***Steel handles*** on unit edges provide proper handling and installation. The zinc coating also provides ***extra protection to weather***.
c. The EBM blower operates at ***high efficiency***, achieving greater maximum flow and static pressure from its Backward Curved Blades Centrifugal profile. The design of ***External Rotor*** motor allows mounting of the blower beneath the opening reducing air flow friction and greater opening compared to conventional top mounted. The motor external design also helps to ***prevent heat rises*** in the motor as the air flow cools it down when operating. Effective cooling means a ***longer motor lifespan***.
d. The EBM motor equipped with ***thermal overload protection*** which cuts out the motor if the motor overheated; e.g. object preventing the blower from turning. It could be utilized for remote monitoring, tripping and alarm light indication for additional safety features (***optional features***). Motor insulation is ***Class 'B'*** type with minimum Bearing Life, L_{10}, ***greater than 40,000 hrs***. Upon request greater specification could be provided.
e. ***Class I*** protection in which protection against electric shock does not rely only on insulation but includes connection of exposed-conductive-parts to earth by provision of earthing conductor.
f. Standard Control System consists of respective ***individual speed controller***.
g. ***Eliminates out-gassing*** by neither use of Chemical Sealant nor polymer products.

Model : 24 AH

Model Designation :	24 AH
Fan Filter Unit : 1) Dimension (L x W x H) 2) Material / Thickness	 1223 mm x 614 mm x 285 mm Aluminum Zinc Coated / (0.8 - 1.2 mm)
Blower Type : Blower Make and Model : Impeller Material :	Backward Curved Blades Centrifugal EBM / R4E355-AK05-06 Aluminum
Motor Specifications: Make Type Insulation Class / Power Rating (50/60Hz) Rated Amps (50/60Hz) Supply Ratings (+6% / -10%) Bearings Rotational Speed (50/60 Hz) Power Factor Capacitor Protection	 EBM External Rotor, Permanent Split Capacitor. Class B / 180/250 W. 0.8 / 1.14 A Single Phase, 230 Vac, 50/60Hz. Maintenance Free-Ball Bearings, min L_{10} = 40,000 Hrs, max L_{10} = 100,000 Hrs 1420 / 1650 rpm rated 0.93 6 microfarads, 500Vac, Ducati Built-in Thermal Overload Contact
Speed Controller Type:	5 Step Auto-Trans Speed Controller
Maximum Static Pressure @ 0.45 m/s: Air Flow Uniformity :	250 Pa ± 10%
Power Consumption / Sensible Heat : 2) 0.45 m/s @ 120Pa	 93 W
Noise Level (Total Sound Level / NC Class)	53 dBA / NC-50 @ mid-filter 1.5 m
Vibration Level (rms displacement)	0.003 mm
Reference Standard	IES-RP-CC-002
Features : Controls Installation	 Voltage Free Contacts rated 5 A for Overload indication and Indication Light. Rest on Ceiling Grid or Suspended.
Total Weight w/o Filter	30 Kg

- Options:
  - Collar Duct.
  - Indicating Lights and/or Remote Indications.
  - Pre-Filter.

** Note : Fan Filter Unit performance stated above obtained by use of Camfil – Midilar (MDA) 66mm.*

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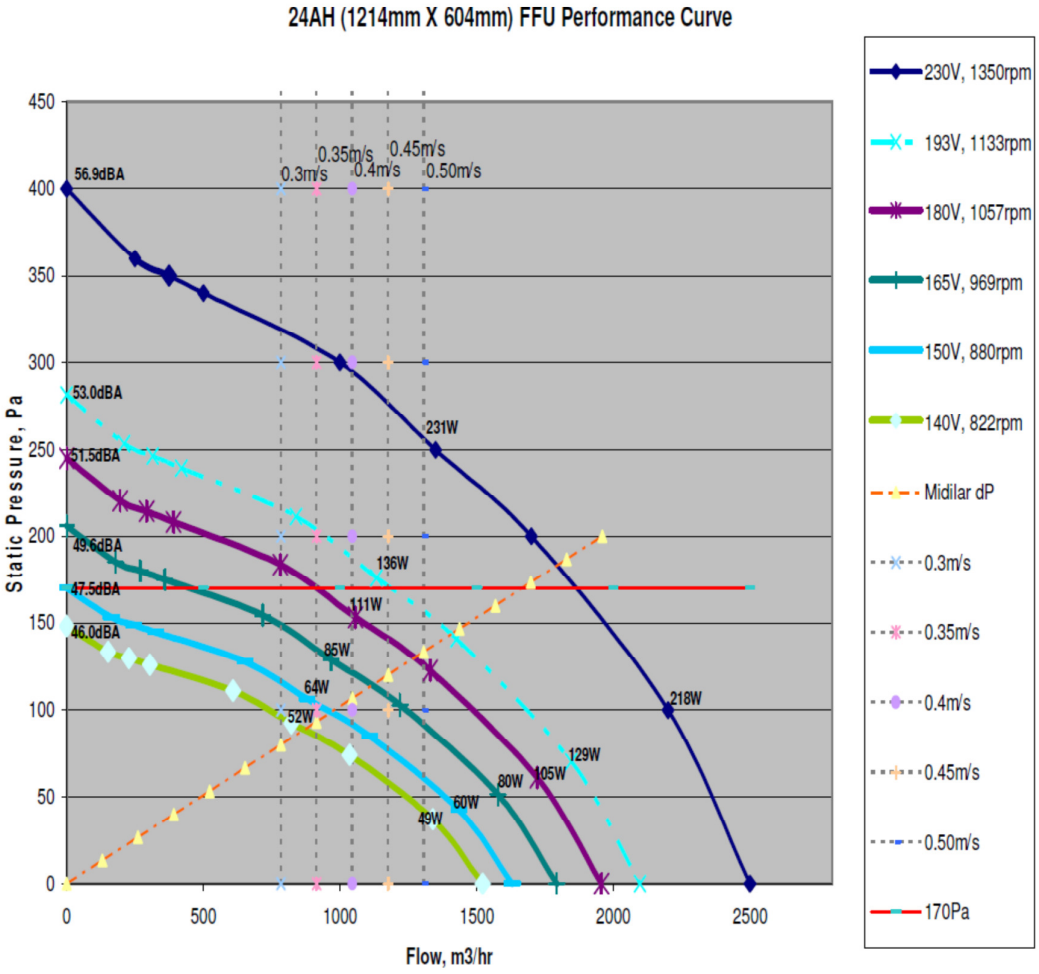

- Velocity Measured at 150 mm, Single FFU.
- Air Flow Uniformity within ± 10% within Grid Points recommended by IEST.

Power Consumption *:

Flow, m/s	0.30	0.35	0.40	0.45	0.69
Amps/Watts	0.21 / 44	0.27 / 58	0.33 / 70	0.43 / 93	1.08 / 231

** Achievable via Speed Controller and Amps are reflected on the 230 Vac 50Hz Supply.*