



## Sound Insulated Centrifugal Fans

# AM-IF-EC ECM Technology (Square Outlet)

### APPLICATION

**AM-IF-EC** Insulated duct fans incorporating **EC Direct Driven** Centrifugal Backward Curved Fan with Digital Controller suitable for BMS Integration to be specially designed for supply and exhaust ventilation of premises requiring high requirements to noise level, efficiency and limited mounting space. The use of EC motors allows reduce the electricity consumption while providing the high capacity and low noise level.

### AREAS OF APPLICATION

Best Solution for Ventilation in libraries, conference halls, educational institutions, kindergartens, health care and child care facilities etc. where noise is a major criteria with limited mounting space.

### DESIGN

- The fan Casing made of Zero Spangle galvanized sheet steel / Powder coated
- The casing is internally filled with 25 mm thermal- and sound insulating layer made of non-flammable foamed polyurethane.
- Access door provided for ease of cleaning and maintenance.
- Flanges provided both end for ease of ducting.
- Mounting brackets on the fan casing for mounting to the ceiling.

### MOTOR

- The motor should be an **EC** external rotor motor equipped with built in thermal overload protection with automatic restart, with low energy demand and maintenance-free ball bearings for 40,000 hour's non-stop operation.
- Motor ball bearings with selective lubricating oil ensure low noise and maintenance-free fan operation.
- The motor is installed on specially designed rubber vibration damping mounts to absorb vibration and noise.
- Motor has IP X4 ingress protection rating.

### SPEED CONTROL

- Smooth speed control with potentiometer is provided along with the unit.

### DIGITAL CONTROLLER (Optional)

- The controller to be designed/programmed to control EC-fan speed, with an analog (0—10 VDC) signal and also to be equipped to take feedback from fan and display it on screen. Any change in feedback can be directly shown with display screen. The controller to be equipped with **Modbus RTU (RS485) communication** for integration with BMS.
- The digital controller to be provided with remote which works as **wireless potentiometer**.

### TECHNICAL PARAMETERS

- Supply input: 230V AC
- Variable output :0-10V
- Indoor use only
- Tech input for EC fan RPM
- Temp range 0-60 degree C

### DISPLAY PARAMETERS

- RPM
- Flow % in case of fan
- Controlling volt

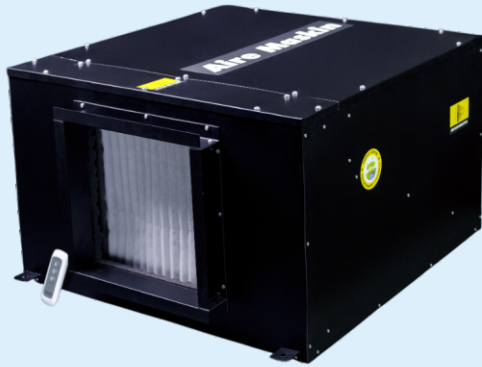


### MOUNTING

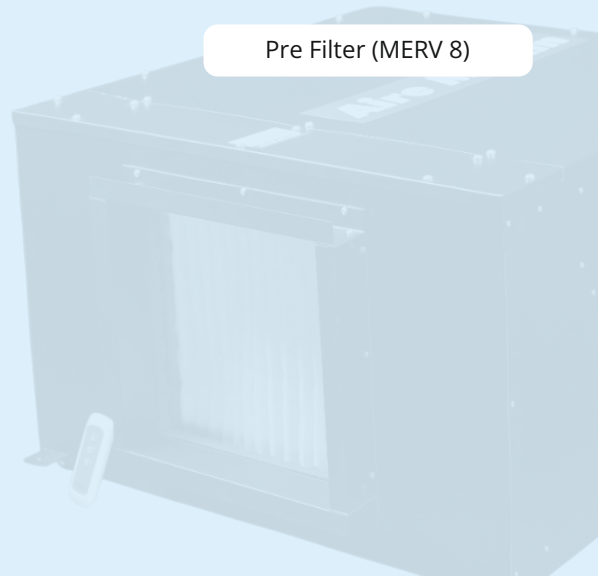
- Due to compact design the fan is the ideal solution for mounting in limited spaces.
- The fan can be installed in any position with respect to air flow direction as indicated with a pointer on fan casing.
- Wall or ceiling mounting with a fixing bracket supplied as a standard.
- Flexible air ducts are fixed on fan spigots with clamps.
- Power is supplied through an external terminal box.

## AM-IF-EC FILTRATION SERIES

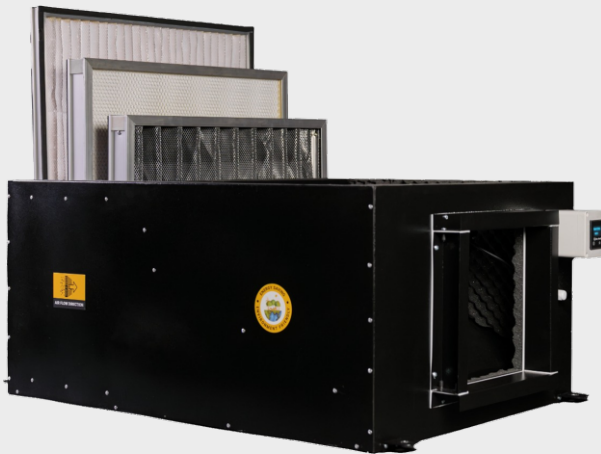
### AM IF EC Fresh Air Series



Pre Filter (MERV 8)



### AM IF EC Clean Air Series



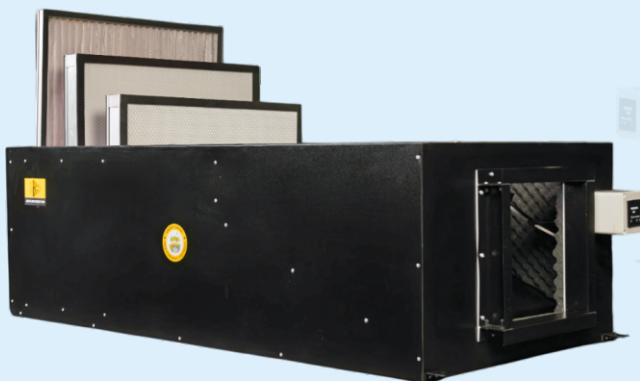
Pre Filter (MERV 8)

Fine Filter (MERV 13)

Activated Carbon Filter



### AM IF EC Purification Series

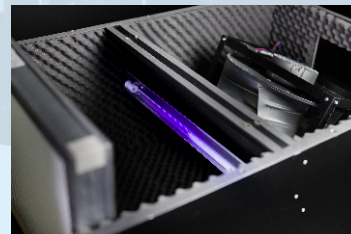


Pre Filter (MERV 8)

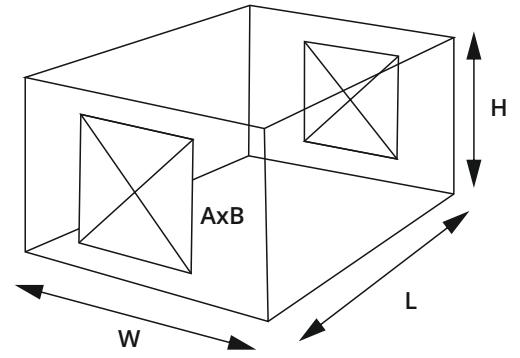
Fine Filter (MERV 13)

HEPA Filter (H 13)


UV Light



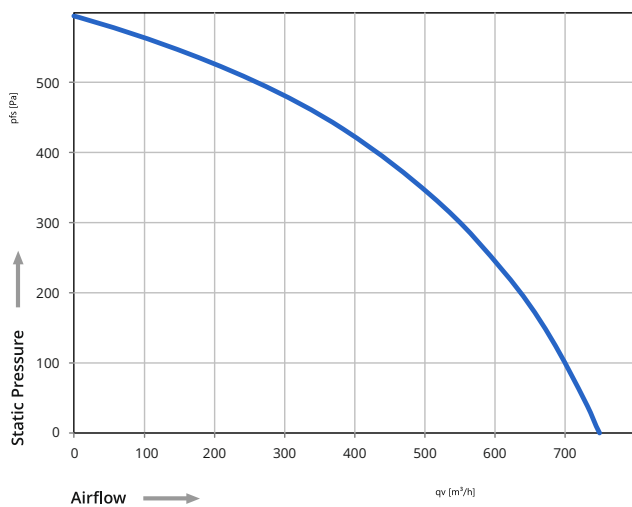
MODEL AM-IF-EC	AxB	L	W	H
192	150x150	450	450	210
225	200x200	550	530	285
310	250x250	600	600	395
355	300x300	700	700	445
35X	300x500	700	700	550
400	300x600	800	800	500
40X	400x600	800	800	600



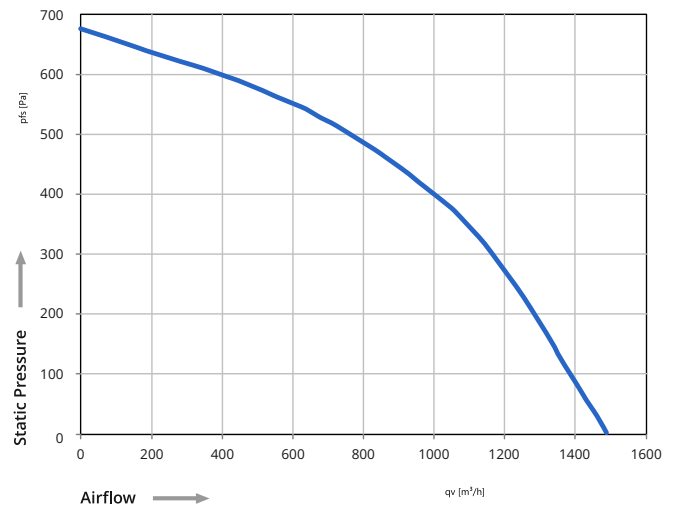
## SPECIFICATIONS

MODEL AM-IF-EC	Voltage [V]	Power [W]	Current [A]	Frequency [Hz]	dBA 3MT	Effeciency Rating	RPM	Weight [Kgs]	
192	230	95	0.73	50	<40	IE4	3570	11	IP 54
225	230	160	1.1	50	<40	IE4	3000	13	IP 54
310	230	175	1.3	50	<40	IE4	1770	20	IP 44
355	230	330	1.5	50	<40	IE4	1900	24	IP 44
35X	230	725	3.46	50	<48	IE4	2100	35	IP 44
400	230	330	1.5	50	<40	IE4	1430	26	IP 44
40X	230	1250	2.1	50	<48	IE4	2150	36	IP 54

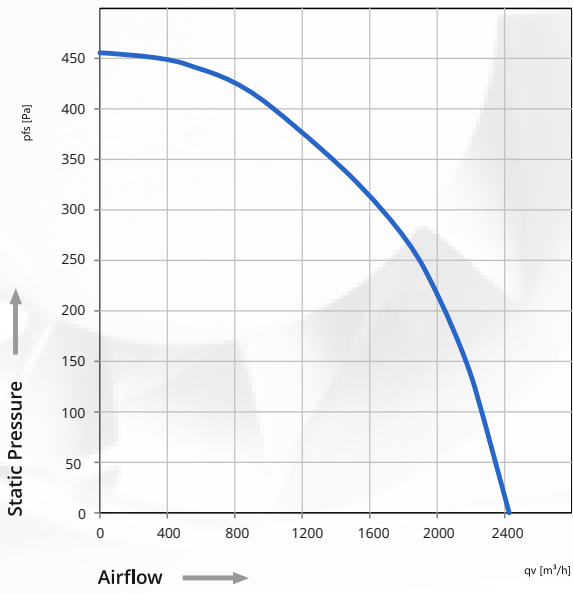
### AM-IF-EC - 192



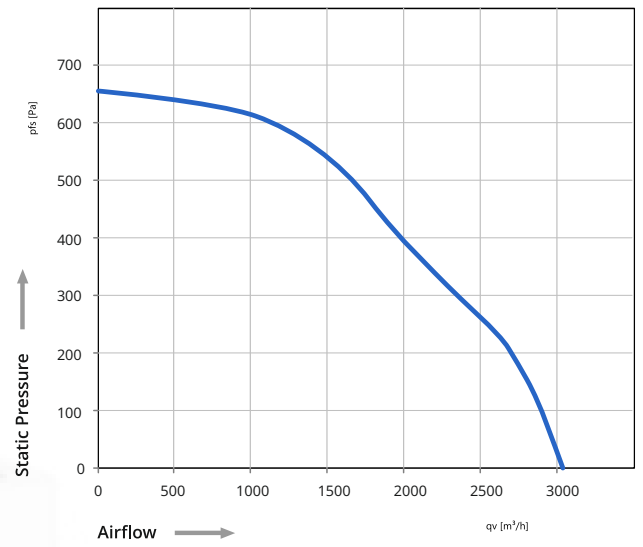
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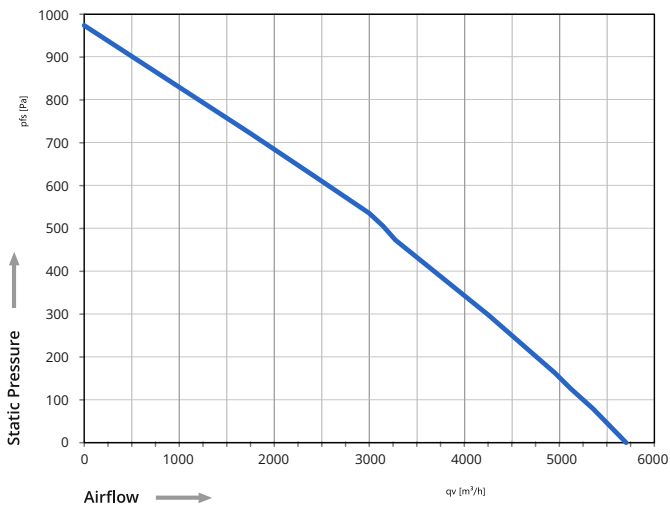
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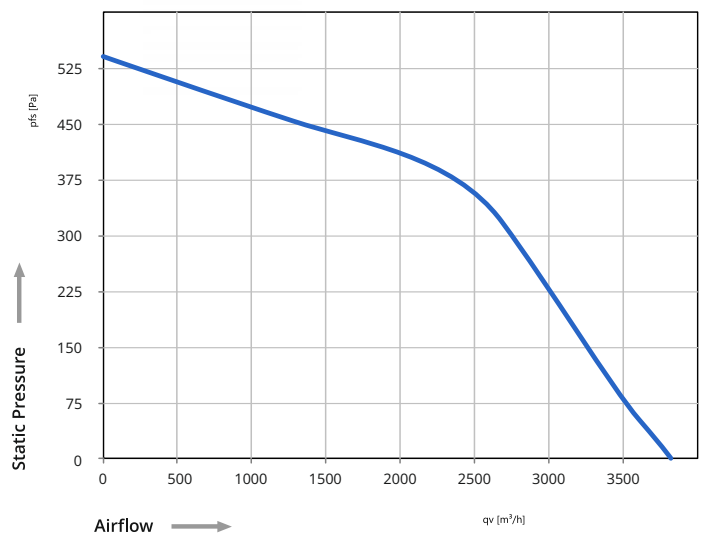
### AM-IF-EC - 355



### AM-IF-EC - 35X



### AM-IF-EC - 400



### AM-IF-EC - 40X

