

## Undersized SAM<sup>®</sup> 24 MicroSound

SAM 24 MicroSound Undersized Series Fan Filter Units are designed for ceiling T-Bar openings of 22" x 46". Actual size of the units is 23-1/8" x 47-1/8".

SAM MicroSound Fan Filter Units include a 99.99% efficient HEPA filter, 30% ASHRAE pleated type prefilter, seismic clip suspension points, safety switch which disables the unit while servicing, and solid state variable speed control with RFI suppression, allowing the airflow to be fine tuned.

Housings are fabricated from steel with a white powdercoat finish and include seismic clip suspension points.

The energy efficient N310 motor blower is a low watt backward curved impeller, single phase, permanent split capacitor type motor blower assembly with thermal overload protection. Units are available in 115 Volt (60 Hz), 208-230 Volt (50/60 Hz) and 277 Volt (60 Hz).

Final filters are protected with a white epoxy diamond pattern grille and are tested according to accepted procedures as described by the Institute of Environmental Sciences (IEST) and/or ISO standards. The standard HEPA filter is 99.99% eff. and an ULPA grade 99.9995% eff. filter is available as an option.

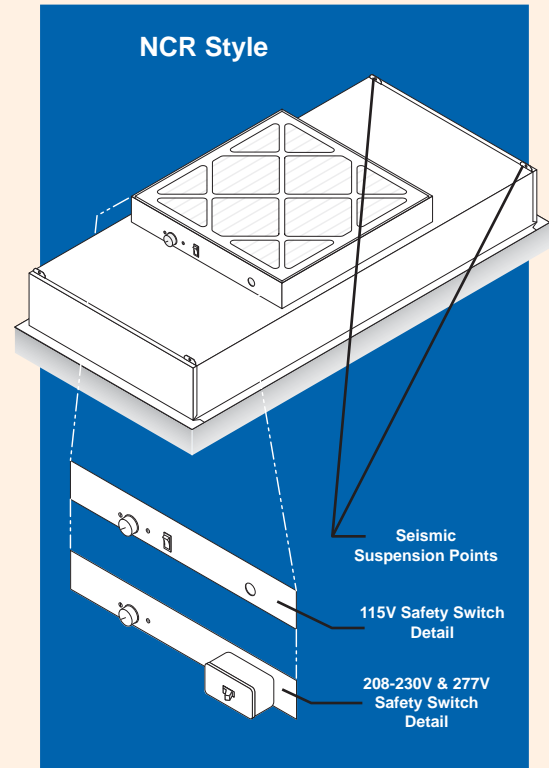
GS style units feature a polystyrene eggcrate grille in an anodized aluminum frame hinged to open, permitting removal of the filter without removing the unit from the ceiling. Optional perforated stainless steel or aluminum grilles are available.

Other popular options include an 8' power cord (115 Volt only), 99.9995% eff. ULPA grade final filter, UL 900 filters and duct collar adapters. Refer to the back of this section for more options and accessories.

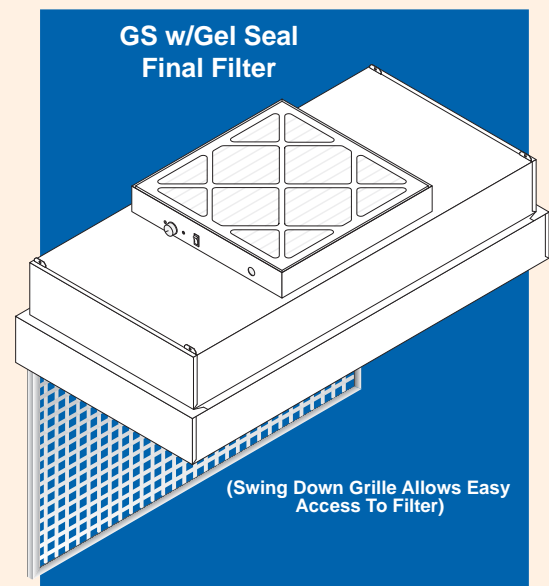
For horizontal flow applications consult with one of our cleanroom experts in your area, or call the factory for more information.

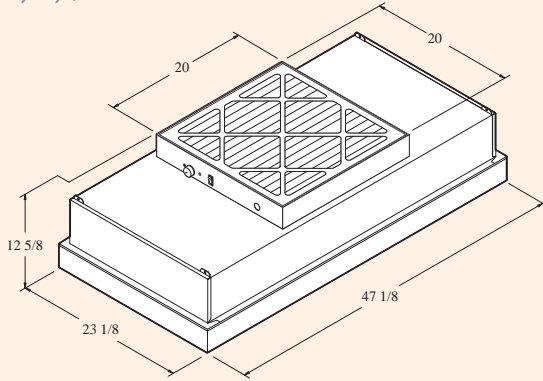


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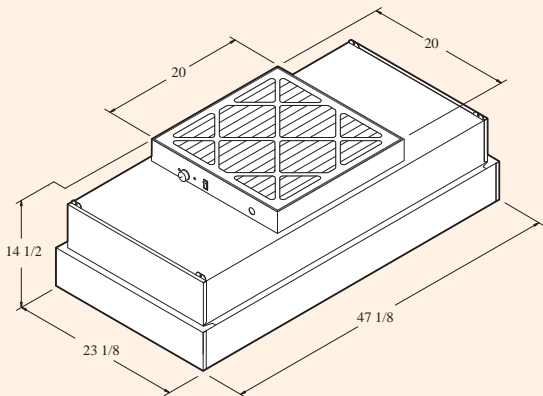


- **Energy Efficient Motor:** Operating Amps Low As .6 For 277 Volt And 1.6 For 115 Volt
- **Safety Switch:** Disables Unit While Servicing
- **Variable Speed Control:** Allows Air Flow To Be Fine Tuned For Room Requirements





**Undersized SAM 24 MicroSound  
NCR Style**



**Undersized SAM 24 MicroSound  
GS Style**

**NCR Style Filter Data: Size:** The HEPA Filters are designed for 90 FPM average face velocity @ initial 0.47 w.g. and have a rated efficiency of 99.99% @ 0.3 micron or larger. An anodized aluminum frame holds the 53mm media which is protected by a diamond pattern white epoxy coated steel grille.

**Air Flow:** Airflow ranges from 400 to 750 CFM for a 2 x 4 unit and 250 to 400 CFM for a 2 x 2 unit. At 90 FPM, CFM is nominal 632 on a 2 x 4 and 300 on a 2 x 2 unit respectively. Airflow for units running at 50 Hz will be about 20% less.

**Popular Options:** Refer to back of this section for a list of popular options.

**GS Filter Data:** The HEPA Filter with upstream gel channel is designed for 90 FPM average face velocity @ initial 0.47 w.g. and has a rated efficiency of 99.99% @ 0.3 micron or larger. An access port with removable plug is located in the center of the filter element face for introducing an upstream challenge or measuring static pressure.

**Air Flow:** Airflow ranges from 340 to 640 CFM for a 2 x 4 unit and 220 to 340 CFM for a 2 x 2 unit. At 90 FPM, CFM is nominal 510 on a 2 x 4 and 220 on a 2 x 2 unit respectively. Airflow for units running at 50 Hz will be about 20% less.

**Popular Options:** Refer to back of this section for a list of popular options.

### Base Model (Ordering Information)

Mfg. Code	Model or Description	Style	Size	Voltage	Motor	Variable Speed Control	HEPA Filter	Weight
12240*	SAM 24 MS US	NCR	2 x 4	115	N310	703084	302018	73 lbs. (33.1 kg.)
12241	SAM 24 MS US	NCR	2 x 4	208/230	N310	703912	302018	73 lbs. (33.1 kg.)
12242*	SAM 24 MS US	NCR	2 x 4	277	N310	703915	302018	73 lbs. (33.1 kg.)
12243*	SAM 24 MS GS US	GS	2 x 4	115	N310	703084	302200	87 lbs. (39.5 kg.)
12244	SAM 24 MS GS US	GS	2 x 4	208/230	N310	703912	302200	87 lbs. (39.5 kg.)
12246*	SAM 24 MS GS US	GS	2 x 4	277	N310	703915	302200	87 lbs. (39.5 kg.)

\* UL Listed

Note: Consult with the factory for horizontal flow applications

#### Motor Data

Motor	Voltage	Hz	Watts	Running Amps	Start-Up Amps
N310	115	60	185	1.6	4.1
N310	208-230	50/60	170	0.8-0.7 <sup>(1)</sup>	1.5 <sup>(2)</sup>
N310	277	60	165	.6	1.5

(1) Running amps will be less on 50Hz

(2) Line voltage can affect actual start-up amperage

#### Replacement Filters

Mfg. Code	Description
302018	2 x 4 NCR Style HEPA Filter, 99.99% eff. @ 0.3 micron
302019	2 x 4 NCR Style ULPA Filter, 99.9995% eff. @ 0.12 micron
302200	2 x 4 GS Style HEPA Filter, 99.99% eff. @ 0.3 micron
302203	2 x 4 GS Style ULPA Filter, 99.9995% eff. @ 0.12 micron
302190	Prefilter 20" x 20" x 1", 30% ASHRAE efficient, pleated type