

HEPA Supply Air Fan Unit

H14 HEPA Fan Filtration System

Applications

- High Care / Food Manufacture / Food Preparation
- IAQ Filtration System incorporating a fan up to 0.8m³/s
- Retrofittable for Fan Coil / Air Conditioning Systems that require HEPA Filtration
- Can be used to attain HEPA Filtered Positive Pressure environment
- Improvement of Indoor Air Quality on systems not designed originally for HEPA Filters
- Control HEPA filtered supply air based on CO2 levels or constant pressure (Not fitted as standard)



Description

The HEPA Supply Air Fan Unit is a complete Fan-Filter air movement system incorporating HEPA Filtration up to grade H14 to EN1822. This Air Handling Unit can be fitted as a standalone supply or recirculation HEPA filtration system, or retrofitted and balanced to work with an existing mechanical ventilation system such as a fan coil system or air conditioning systems which do not have an existing ability to support HEPA filtered air.

The HEPA Supply Air Fan Unit is fitted with a high pressure and speed adjustable EC fan which is wired to an external terminal box to which power connections and speed adjustments can be made manually via a 0-10V signal potentiometer.

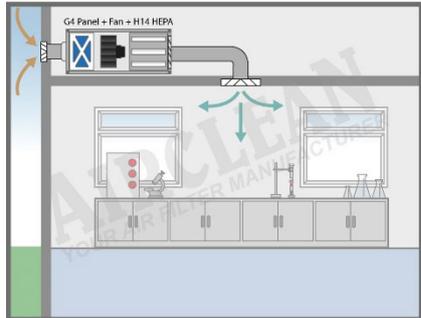
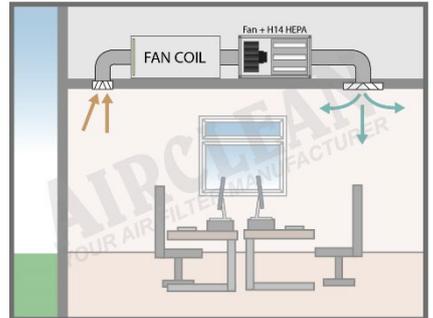
The HEPA Supply Air Fan Unit is manufactured in a standard Air Handling Unit construction with an anodised aluminium pentapost frame, fitted with double skinned mineral wool insulated panels. The unit is finished with a grey plastic-coated leatherette steel. A removable access door(s) provides access for changing the HEPA and any pre filters on a single side of the unit, and also allows for fan inspection and easy cleaning.

Optional Extras

Addition of Prefiltration: Pleated Panel Filters @ Coarse 75% (G4) to ISO16890. (HV+ UNIT)

Automatic Controls: Constant Pressure controls or Constant Volume controls (Part Number: 1908709).

Magnahelic gauges for filter pressure drops (supplied loose)

HEPA Supply Air Recirculation	HEPA Supply Air from outside	HEPA Supply Air With Fan Coil
		
<p>Recirculation HV+ unit including G4 Panel + Fan + H14 HEPA</p>	<p>Supply air HV+ unit including G4 Panel + Fan + H14 HEPA</p>	<p>HV unit including Fan + H14 HEPA, Fan coil system to include prefilter</p>

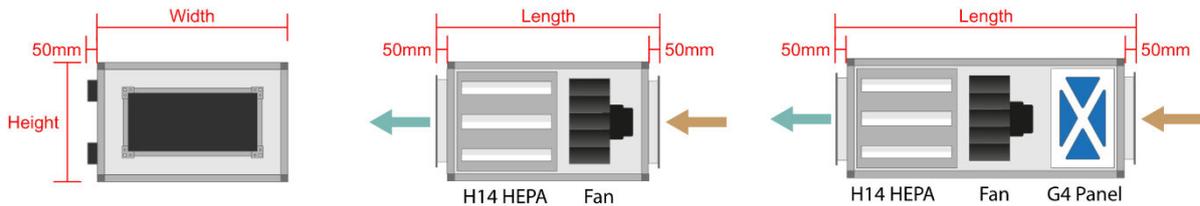
Technical

- Airflow operating Range: up to 0.8m³/s
- Single Phase 240 Volt 50 Hz operation
- Supplied with HEPA Grade H14 to EN1882
- Prefilters when fitted are G4 Pleated Panel Coarse 75% to ISO16890

UNIT	Flow Rates & Available Pressure		Unit Dimensions mm				Part Number
	Airflow (m ³ /s)	Clean External Pressure (Pa)*	Height	Width	Length	MEZ 20mm Flange Spigots **	
H14 HEPA + Fan							
HV33	0.15 – 0.2	100	450	450	1050	250 x 250	1908861
HV63	0.3 – 0.5	100	450	750	1050	550 x 250	1908863
HV66	0.5 – 0.8	100	750	750	1050	550 x 550	1908865
Prefiltration + H14 HEPA + Fan							
HV33+	0.15 – 0.2	100	450	450	1250	250 x 250	1908862
HV63+	0.3 – 0.5	100	450	750	1250	550 x 250	1908864
HV66+	0.5 – 0.8	100	750	750	1250	550 x 550	1908866

* External Pressures are calculated allowing for 100Pa for dirty filters.

** Spigots protrude main unit by 50mm (included in unit length).



Unit Weight

Units Excluding Pre Filters			Units Including Pre Filters		
	No Filters	Inc Filters		No Filters	Inc Filters
HV33	57 Kg	63 Kg	HV33+	74 Kg	80 Kg
HV63	71 Kg	81 Kg	HV63+	93 Kg	103 Kg
HV66	82 Kg	101 Kg	HV66+	115 Kg	135 Kg

Unit Approx Noise

HV33 / HV33+ / HV63 / HV63+

Working Point	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Breakout (High)	35	36	46	51	46	37	35	33
Breakout (Med/Low)	29	31	40	46	41	32	30	28

Sound power spectrum in dB(A)

Noise breakout figures standard 25mm double skin panel

HV66 / HV66+

Working Point	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Breakout (High)	36	40	59	59	58	51	44	39
Breakout (Low)	30	33	52	51	50	44	37	31

Sound power spectrum in dB(A)

Noise breakout figures standard 25mm double skin panel