

PRODUCT DATA SHEET**■ Introduction**

The MAC 10[®] LEDC 4x4 is a versatile fan filter unit that is designed for the most challenging cleanroom applications. It offers significant cost savings and electrical efficiencies for large cleanrooms.

The MAC 10[®] LEDC 4x4 maximizes energy efficiencies with its exclusive backward blower wheel design. It provides 90 fpm airflow up to 1.0" wg static pressure levels enabling cleanroom projects to operate cost effectively.

Fewer components mean lower installed costs. With use of the MAC 10[®] LEDC 4x4 unit, additional savings are captured in the ceiling plenum because less grid is required and fewer electrical connections are needed. Even better, this model also provides a lower sound level than most competitive 2x4 fan filter units.

■ Standard Features

- » Low sound, low watts, low profile, and low operating costs.
- » Energy efficient EC motor.
- » Universal control card offering local, Modbus, or analog options.
- » High Efficiency Particulate Air (HEPA) filter, 99.9% efficient at 0.3 micron particle size.
- » 1.0" wg external static pressure capability at 90 FPM with HEPA filter.
- » Aluminum construction with mill finish for durability.
- » Meets IEST recommended practices.
- » cUL listed (115V/208-240V/277V) with standard UL 900 filter, File number E152685 (UL507)
- » Protective inlet ring.
- » IBC and OSHPD Certification (OSP-0634-10)*
*Additional hardware required, see submittal 8000024.

■ Optional Features

- » Ultra Low Penetration Air (ULPA) filter - 99.9995% efficient at 0.12 micron particle size.
- » DC Monitoring and Control System - Enables facility to adjust speed levels as required and assures that units are operating properly.
- » CE Marked - 230v units available.
- » Exterior is available powder-coated or stainless steel for chemical resistance in corrosive environments.
- » Pressure switch with indicator light to show filter loading.
- » Green indicator light showing motor failure.
- » Roomside Replacement (RSR) available with gel seal filter element; filter is replaceable from the roomside.
- » RSRE provides filter and motor/blower assembly replacement from the roomside.

*MAC 10[®] LEDC 4x4.***■ Specification****Construction**

Welded aluminum cabinet with exterior finished in corrosion resistant polyurethane enamel.

- Walkable Plenum 250 lbs

Filters

Aluminum framed High Efficiency Particulate Air (HEPA) type, with a minimum efficiency of 99.99% @ 0.3 micron, aerosol challenged (zero probed).

Airflow

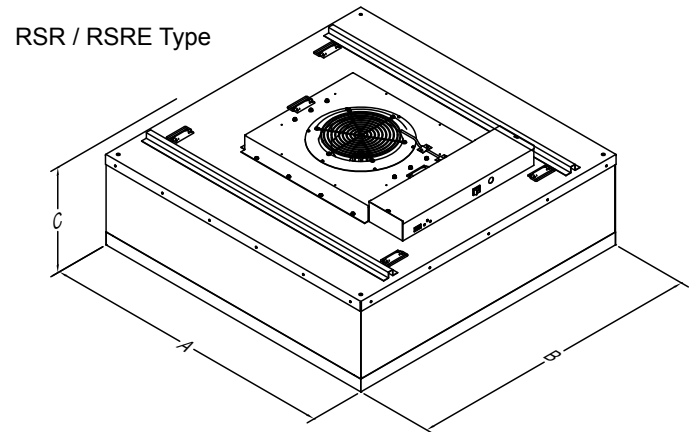
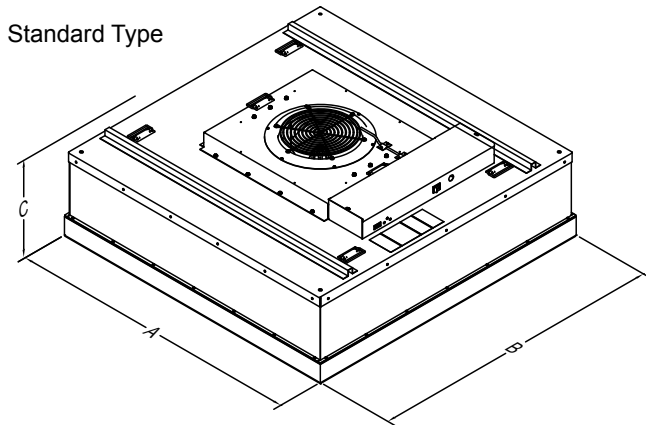
90 FPM ± 10 FPM average velocity, 6" from diffuser screen. Uniformity ± 20% of average or better.

Motor/Blower Assembly

Direct drive, continuous duty motor with sealed-for-life bearings and inherent overload protection. The blower assembly is electronically (dynamically) balanced and is designed to provide rated airflow through a 50% increase in initial static pressure.

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■ Dimensions



■ Performance 4x4 Standard, RSR, and RSRE

| Nominal Unit Size | Active Filter Face Area (Sq. Ft.) | Max. CFM | Watts @ Max. CFM | CFM @ 90 FPM | Watts @ 90 FPM | Unit Weight | Dimensions AxBxC (in) |
|-------------------|-----------------------------------|----------|------------------|--------------|----------------|-------------|--|
| 4x4 Standard | 14.4 | 1950 | 580 | 1300 | 220 | 135 | 47.63 x 47.63 x 16.67 (1210 x 1210 x 424) |
| 4x4 RSR/RSRE | 12.1 | 1900 | 610 | 1100 | 150 | 150 | 47.63 x 47.63 x 17.92 (1210 x 1210 x 455) |

Notes:

Performance tested in accordance with the (ANSI/AMCA 210-07), (ANSI/ASHRAE 51-07) test standards for Certified Aerodynamic Performance Rating.

Max CFM rating based on free air volumes @ high speed motor setting.

90 fpm values based on active filter face area.

BTU = Watts x 3.413.

MAC 10[®] LEDC:

MAC 10[®] LEDC 115V, 50/60HZ 1 Phase = 5.20 F.L.A., 208-240V 50/60HZ 1 Phase = 3.20 F.L.A., 277V 60 HZ 1 Phase = 4.50 F.L.A.