

MAC 10[®] RFAC

Reverse Flow Fan Filter Unit

PRODUCT DATA SHEET

■ MAC 10[®] RFAC Introduction

ENVIRCO® developed the MAC 10® RFAC for applications requiring negative pressure reverse flow FFUs. The RFAC is designed to pull contaminated air from the intake side of the filter, filter the air, and then exhaust it outside of the area required. The most common negative pressure applications are for modular cleanrooms, cleanroom garmenting rooms, healthcare contamination control, cleanroom workstations, clean workbench enclosures, and associated air hoods.

The RFAC is a versatile FFU capable of being used in ceiling grids, installed inside equipment, or wall-mounted. Alternatively, the RFAC can be designed into an AC-powered mobile cart to function as a portable negative pressure FFU.



RFAC FFUs are available in Standard or RSR style configurations.

To support increased HEPA filter life, RSR RFACs come standard with MERV 8 20"x20"x1" pleated roomside pre-filters. The 2x4 RSR RFAC has two pre-filters, and the 2x2 RSR RFAC has a single pre-filter. The pre-filter is intended to capture larger airborne particles and dust to filter them ahead of the more expensive HEPA filter media, which targets removal of much finer particulate matter. Pre-filters are accessible through a latching perforated door that swings open for easy roomside filter replacement.

The RFAC comes standard with an ON/OFF switch and a variable solid state speed control. Optionally, the RFAC can be equipped with an ENVIRCO TPC speed control card that enables support for serial MODBUS network control or external analog control input.

ENVIRCO's track record of supplying high quality FFUs is long standing, delivering long term reliable products that are designed and manufactured in the USA. To learn more about the RFAC, please contact your local ENVIRCO representative or visit us on the web at www.envirco.com.

Standard Features

- » Mill-finished aluminum exterior is available in a 2'x2' or 2'x4' Standard or RSR (roomside replaceable) configuration
- » Reliable internal knife edge/gel seal gasket filter mounting (RSR model only)
- » Type J HEPA filter (99.99% collection efficiency @ 0.3 μ m)
- » Supports more than 700 CFM airflow, higher than competitive models
- » 5" x 14" output is redirectable to support any one of four directions
- » Protective face screen on filter: expanded steel, powder coated white
- » Latching easy open/close pre-filter perforated door provides roomside access for replaceable low cost MERV 8 20"x20"x1" pre-filters (RSR only; 2x4 has two pre-filters, 2x2 has one pre-filter)
- » Aluminum filter diffuser screen on RSR filter
- » Highest quality, reliable, high efficiency motorized impeller assembly includes a PSC motor and backward-inclined impeller
- » ON/OFF switch and turn adjustable solid state speed control
- » Walkable plenum rated to 250 lbs. (excluding air output box)
- » Models available supporting: 115V or 277V
- » UL listed (115V or 277V) with standard UL 900 filter, file number E152685 (UL507)

Optional Features

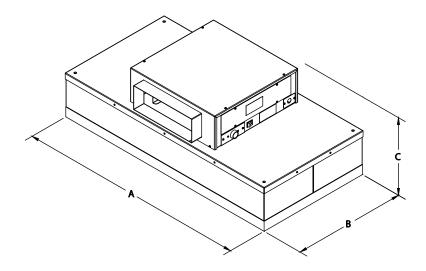
- » ENVIRCO TPC speed control card can support control from ENVIRCO controllers over a MODBUS RTU balanced serial network via RJ45
- » ENVIRCO TPC speed control card can support remote analog control input (0-5VDC or 4-20mA)
- » Powder coat white paint or stainless steel FFU housing
- » Powder coat white paint or stainless steel pre-filter door
- » Alternatively available with Type F ULPA filter (99.999% collection efficiency @ 0.12 µm) or more durable PTFE (Teflon™ filters)

WARNING THE RFAC DESIGN IS NOT EXPLOSION PROOF. The RFAC FFU is designed to support room air filtration requirements and is not designed to be used with or around hazardous materials and gases.



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Dimensions



Performance MAC 10[®] RFAC

Nominal Unit Size	Active Filter Face Area (sq ft)	Max. CFM	Watts @ Max. CFM	CFM @ 90 FPM	Watts @ 90 FPM	Unit Weight (lbs)	Dimensions A x B x C (in/mm)
2x4 RFAC	7.2	800	210	644	208	62	47.63 x 23.63 x 16.14 (1210 x 600 x 410)
2x2 RFAC	3.5	580	204	315	208	44	23.63 x 23.63 x 16.14 (600 x 600 x 410)
2x4 RFAC RSR	5.3	730	205	477	200	70	47.63 x 23.63 x 16.14 (1210 x 600 x 410)
2x2 RFAC RSR	2.3	530	200	207	200	49	23.63 x 23.63 x 16.14 (600 x 600 x 410)

Notes:

- All airflow is 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 at high speed motor setting.
- Do not operate 2x2 units above 400 SCFM. Damage to the filter and/or particle bleed-through may occur.
- All airflow data recorded at 0" external static pressure. 4.
- 5. Heat gain: $BTW = watts \times 3.413$.
- Factory testing can vary from field testing. 6.

MAC 10® RFAC:

MAC 10® RFAC 2x4 and 2x2 are available. 115V 50/60HZ 1 Phase = 2.26 F.L.A., 277V 60 HZ 1 Phase = 1.17 F.L.A.

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