

# MAC-21VFD

## RPS PART NUMBER FM37VFD

### VENTILATION UNIT



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The MAC-21VFD is a modular ventilation unit capable of providing High Efficiency Particulate Air (HEPA) filtration with 99.97% efficiency @ 0.3 microns, at flow rates ranging from 500 CFM at 2 inches of static pressure to 390 CFM at 4 inches of static pressure. The MAC-21VFD is an assembly of three modules: 1) Power Module– a direct drive blower/motor and base assembly; 2) Filter Module- prefilter & HEPA filter housing assembly; 3) Quick-mount handling cart and mounting platform for the power module and filter module.

This unit has been evaluated to the applicable CSA standards for use in the United States under product Class 3812-81 (US - Fans and Blowers). Please call for information on VFD units that are CSA approved for use in Canada.

#### FEATURES:

- Power module includes a 3/4 HP motor with direct-drive cast-aluminum blower. The motor/blower is mounted to a stainless-steel base with attached manual starter (with thermal overload protection), Start/Stop toggle switch, and hard-wired power cord & plug.
- The blower is rated at 500 CFM @ 2" static pressure water gage (sp.wg.) and 390 CFM @ 4" sp.wg.
- Filter module consists of a portable stainless-steel housing that holds one AK78 HEPA filter and one pre-filter (AK66 MERV-9 3-ply pre-filter or AK93 carbon-impregnated pre-filter or AK67 spark-arresting pre-filter). Additional filter modules (sold separately) can be joined in series to provide a custom inline-filter combination to meet specific end-user application requirements.
- The selected pre-filter is inserted (and removed) via a dedicated access door at the top of the filter module. This allows for quick-and-easy change-outs without disturbing the HEPA filter seal. Pre-filter change-outs can be performed while the vent unit is still running. No need to shut it down.
- The filter module is equipped with an inlet-plenum "Accessory Track" which accepts one of several flex-duct inlet adapters or special attachments. The MAC-21 comes standard with an 8" diameter duct collar (with roll bead) welded to a SS plate secured within the Accessory Track. If desired, the end-user could (for example) replace that 8" dia collar plate with a 6" or a 10" dia collar plate (sold separately). The accessory is also used to connect the MAC-21 to a 55-gallon drum-inspection hood (PN GU11/BC03) or an 85-gallon drum-inspection hood (PN GU12/BC03), both sold separately.
- The quick mount cart functions as the mounting platform and handling device for the Modular Air Cleaning system. Components are constructed from stainless steel tubing resembling a "hand truck" in design.
- 99.97% HEPA filter, 350 CFM @ 1" static pressure water gage. Element nominal 12.5" x 12.5" x 8" with 3/4" flanged lip on inlet face. DOP tested at 100% and 20% of rated flow.
- Prefilter, Polyester with internally heat sealed wire ring, 13.5" x 13.5", MERV 9.
- Minihelic gage: 0-10" water gage.
- Dimensions: 20" L x 19" W x 46" H. Weight: approx. 140 lbs.
- Electrical Rating: 120/230V, 11/5.5A, 1 phase, 60 Hz.

#### SPARE PARTS:

- [HEPA Filter - AK78](#)
- [Prefilter - AK66](#)

#### OPTIONS:

- [Spark Arresting Prefilter - AK67](#)
- [Carbon Impregnated Pre-filter - AK93](#)

**NOTE:** Information provided is subject to change. Please contact RPS directly for recent modifications.



MAC-21VFD FAN CURVE

