

# CleanSweep® EG Series Single Phase AC Power Line High Performance EMI Filters

**BONDLINE**  
STATIC CONTROL SOLUTIONS

AFxxxxEG CleanSweep® filter family provides high level of attenuation for the worst type of EMI — at the lower end of the spectrum, under 1MHz, where most of conducted noise is originated— switched mode power supplies (SMPS), servo and variable frequency motors and alike. Regular EMI filters may provide adequate attenuation at higher frequencies (tens of MHz), but at lower end of the spectrum they offer little relief and often amplify noise in real-life installations.

CleanSweep® EG-series filters offer very good attenuation in both differential mode (i.e. between live and neutral) and in common mode, i.e. noise live and neutral on power lines and ground. More specifically, OnFILTER® CleanSweep® EG-series EMI filters provide “uncommonly” high levels of attenuation for common-mode noise at the lower end of the spectrum while preserving acceptable levels of leakage currents.

CleanSweep® EG-series filters are wired to provide the best noise attenuation from its “output,” i.e. outlet, to the power line, and are very easy to install - just plug them into the wall outlet and plug your equipment into the outlet on the filter.



## Applications

- EMC compliance
- Electronic manufacturing
- Semiconductor fabrication
- Test and measurements
- Data centers
- Industrial robotics
- Medical
- Military and aerospace
- Wherever EMI is an issue

## Features

- Easy plug-in installation
- Optimized for power lines
- Effective noise suppression for all types of noise
- Models for up to 250V AC 20A

## “Instant Compliance”

OnFILTER® CleanSweep® EG series filters provide substantial attenuation for both differential and common mode emission and typically help to reduce conducted emission limits to below regulations limit the moment they are plugged in.

## Real-Life Applications

Unlike regular filters designed for compliance measurements in a laboratory environment, CleanSweep® filters are optimized for effective suppression of noise in actual applications providing superb attenuation where regular filters do not perform.

## Exceptional Low Frequency Attenuation

OnFILTER® CleanSweep® filters provide high levels of attenuation at lower end of the spectrum in both differential (between power line wires) and common-mode (between power line and ground) modes maintaining low leakage current.

## Advanced Surge Protection

OnFILTER CleanSweep® series filters add substantial performance improvements to conventional surge protection by reducing residual high-voltage “spikes” down to a negligible level

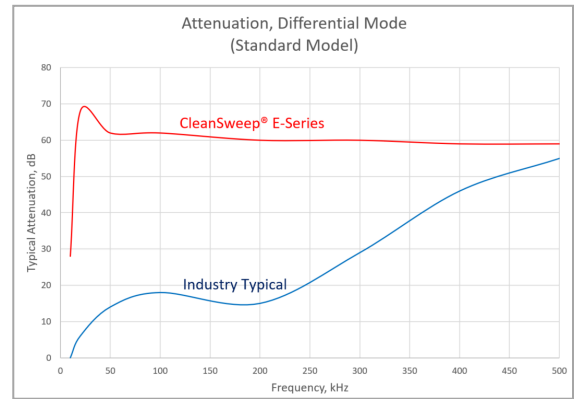
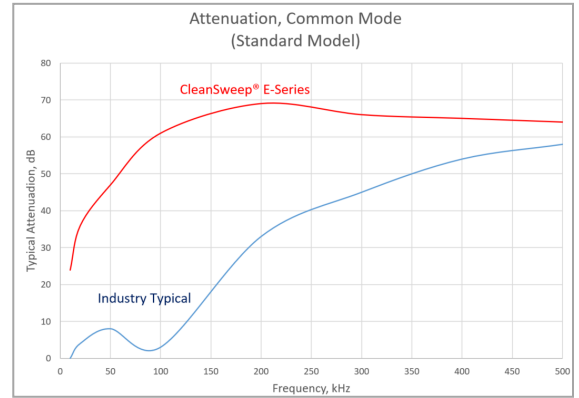
CleanSweep®  
AFxxxxEG  
High Performance  
EMI Filters  
13...20A Single Phase



# Specification

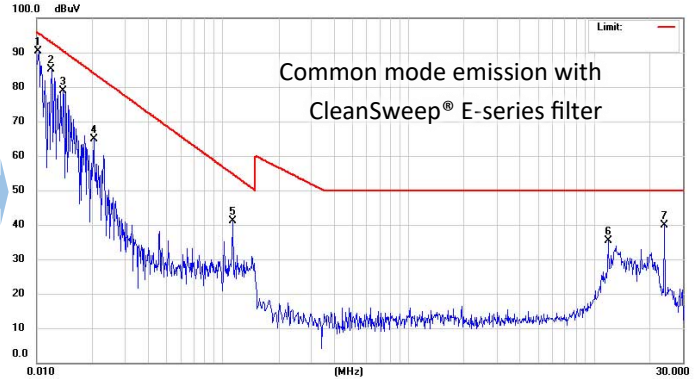
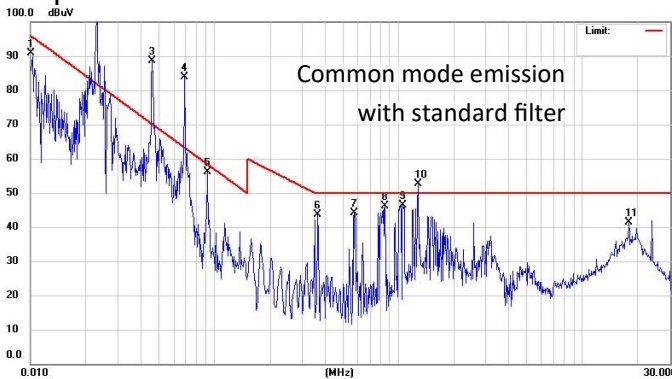
OnFILTER CleanSweep® filters utilize proprietary technology to provide maximum noise suppression where regular filters do not perform well, especially at lower end of the spectrum.

| Parameter   | AFxxxEG Series Filters           |
|---|----------------------------------|
| Rated Voltage, RMS  | 110...250V                       |
| Rated Current, RMS  | 13...20A                         |
| Actual max. rated voltage and current depend on the type of the outlet per safety regulations |                                  |
| Leakage Current   |                                  |
| Standard models   | <3.5mA                           |
| Medical version   | <0.5mA                           |
| Power Indication  | LED                              |
| Dimensions (WxDxH)<br>(rubber feet mount)   | 6.15"*7.0"*3.30"<br>157*155*81mm |



All data in 50 Ohms termination, outlet to inlet

# Example of Performance



# Ordering Information

Please select the type of filter most suitable for your application. Most important parameter you need to select is the type of an outlet. Note that although the filter base itself may be rated for 250VAC 20A, the maximum voltage and current rating for a particular model is defined by the type of the outlet. More details available in the App. Note "How to Specify CleanSweep® AC Power Line Filter" on our web site [www.onfilter.com](http://www.onfilter.com).

This example is for an AC single-phase filter for US-type 125V 20A outlet for EMC application for EMC application, with rubber feet mount

Part Number: **AF N520 E G**

Type of Filter: 20A AC family - AF

Outlet Code (see table): N520

Configuration: EMC Application - E

Application: General - G

Mount: Rubber Feet - Blank

| CleanSweep AF Series 20A Family |   |        |   |        |   |
|---------------------------------|---|--------|---|--------|---|
| OUTLET                          | ORDERING CODE                                   | OUTLET | ORDERING CODE                                 | OUTLET | ORDERING CODE                                 |
|                                 | N515<br>~125V 15A                               |        | N615<br>~250V 15A                             |        | EUSK<br>~250V 16A                             |
|                                 | N520<br>~125V 20A                               |        | N620<br>~250V 20A                             |        | EUUK<br>~230V 13A                             |
|                                 | 309A1<br>IEC60309<br>2W3P (yellow)<br>~120V 20A |        | 309B1<br>IEC60309<br>2W3P (blue)<br>~250V 16A |        | 309B2<br>IEC60309<br>2W3P (blue)<br>~250V 20A |
|                                 | L515<br>~125V 15A                               |        | L520<br>~125V 20A                             |        | BS546<br>~250V 15A                            |
|                                 | L615<br>~250V 15A                               |        | L620<br>~250V 20A                             |        | TS03A   |

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