

## Single Phase EMI Filters

### Applications

- Power supplies
- AC sensors
- Medical equipment
- Automated machinery

### Benefits

- Minimize RF interference
- Protect equipment from voltage spikes coming in from surrounding equipment
- Increase machinery life
- Compact design

### Features

- Rated current from 3 to 20A
- DIN rail mounting
- High differential and common mode attenuation



# Single-Phase EMI Filters Protect the Power Supply

## Introduction

This white paper discusses a recent success story using an EMI-RFI filter to protect the power supply installed in an automated machine.

Switching devices within a machine generate radio frequency (RF) noise which travels back to the power line of the facility. When an EMI-RFI filter is installed, it blocks this RF noise.

However, did you know that EMI-RFI filters can also protect equipment from RF interference and voltage spikes that could be coming in from surrounding equipment?

## The Challenge

A power supply requires clean power in order to avoid noise or interference that could affect sensor life or machinery performance. Larger facilities have several different types of equipment which create RF interference and voltage spikes that affect other devices.

Imagine a power supply installed inside a machine located in a large facility surrounded by other large pieces of equipment. How do you think the output supply and sensors are affected?

## The Solution

To eliminate the risk of interference, install an EMI-RFI filter on the input side of the power supply. Enerdoor's FIN26 and FIN27 series have proven to be very effective in this type of application, allowing the AC port to be free of high frequency electrical noise.



## The Result

A compact EMI-RFI filter on the power supply input reduces the risk of noise interference in the field, increases component life, reduces equipment down-time and ultimately saves money. Whether you mount it on the din-rail or opt for panel mounting, Enerdoor has the single-phase solution for you.

## About Enerdoor

Founded in 1992, The Enerdoor Group is an international leader in the development and production of power quality and electromagnetic solutions for automated machinery and industrial plants. The Group's broad range of products include: EMI-RFI filters, motor protection filters, harmonic filters, line reactors, surge arresters, voltage stabilizers, and customized solutions.

Unique to the industry, Enerdoor offers a global distribution and R&D network that provides flat rate on-site CE Certification at one set fee, with a guarantee to find a solution.

For additional information, please contact your local Enerdoor representative.