

OEM Equipment Using VFDs and Servo Drives

EMI-RFI Filters

Applications

- OEM Equipment using VFDs or servo drives
- System integrators

Features

- One filter per machine instead of one filter per drive
- Low leakage current to avoid GFI interruption
- 5-Year warranty

Benefits

- Protects the entire machine instead of only the drive
- Helps pass international regulatory Standards
- Both in lab and on-site testing available
- Fixed cost per project - with a guaranteed solution



Introduction

Following the VFD and servo-drive specifications is not always sufficient to guarantee a system complies with CE Certification and IEC Standards because less strict Standards are set for individual components than for systems as a whole. Often enough, if a system is not meeting the correct Standard, installing an Enerdoor EMI-RFI filter will solve the issue and provide additional advantages.

The Challenge

It can be challenging for OEMs, system integrators, and distributors to find the proper EMI-RFI filter to use inside a cabinet with multiple VFDs or servo drives.

Drive manufacturers often recommend installing a single EMI-RFI filter for each individual drive. This results in increased costs, more space used inside the cabinet, and a higher leakage current.

The Solution

Enerdoor proposes one filter per machine instead of one filter per drive offering the following advantages:

Technical Benefits: Low leakage current, protects the entire machine instead of only the drive.

Economical Benefits: Using only one filter costs less, requires less mechanical space, reduces potential quality issues due to faulty wiring, and accelerates installation time.

The Result

Enerdoor has been manufacturing EMI-RFI filters since 1992. The unique combination of being an EMI-RFI filter manufacturer and decades of experience with Enerdoor EMC mobile laboratories has allowed Enerdoor to comprise a list of filters compatible with the major variable frequency drive and servo drive manufacturers of the world.

All filters listed below have been tested in systems utilizing single or multiple VFDs. If a drive manufacturer is not listed, please contact Enerdoor for the appropriate solution.

Solutions – EMI Filters					
Filters vs Drive Manufacturers					
Manufacturer	Enerdoor Filter Recommendation Single Drive	Enerdoor Filter Recommendation Multiple Drive	Manufacturer	Enerdoor Filter Recommendation Single Drive	Enerdoor Filter Recommendation Multiple Drive
ABB	FIN538S1	FIN1700	Kollmorgen	FIN1700EG	FIN1700EG
AMC	FIN3755	FIN1900	Lenze	FIN3755	FIN1700E
Applied Motion	FIN1700E	FIN1700E	LSIS	FIN3755	FIN1900
Bosch Rexroth	FIN538S1	FIN1500	Minarik	FIN3755	FIN538S1
Control Techniques/Nidec	FIN538S1	FIN1700	Mitsubishi	FIN3755	FIN538S1
Copley	FIN3755	FIN1700E	Omron	FIN3755	FIN1700E
Danfoss/Vacon	FIN538S1	FIN1500	Panasonic	FIN3755	FIN1700
Delta	FIN3755	FIN1700E	Parker	FIN3755	FIN1700E
Eaton	FIN538S1	FIN1500	Rockwell	FIN538S1	FIN1500
GE/Fuji	FIN3755	FIN1700	Schneider	FIN1700E	FIN538S1
GE Fanuc	FIN538S1	FIN1500	SEW	FIN538S1	FIN1900
Hitachi	FIN1700E	FIN1900	Siemens	FIN1700E	FIN1500
Infranor	FIN3755	FIN1500	TECO/ Westinghouse	FIN538S1	FIN1900
KB	FIN3755	FIN1900	WEG	FIN538S1	FIN1500
			Yaskawa	FIN3755	FIN1500