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OEM Equipment

OEM Equipment

Applications

- On-site testing avoids the difficulty of shipping OEM equipment to laboratory
- System integrator

Features

- On-site, real time solution
- Both in lab and on-site testing available

Benefits

- Protects the entire machine instead of only the drive
- Fixed cost per project – no extra charges
- Solution guaranteed

Introduction

This white paper discusses Enerdoor's approach when customers need to select an EMI-RFI filter in conjunction with single or multiple variable frequency drives (VFDs) and servo drives.

Following the VFD and servo-drive specs is not always sufficient to guarantee a system complies with the CE Certification and IEC Standards. This is because less strict Standards are set for individual components than systems as a whole. Often times, if a system is not meeting the correct Standard, installing an Enerdoor EMI-RFI filter will not only solve the issue, it often exceeds expectations.

The Challenge

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

Drive manufacturers often recommend installing a single EMI-RFI filter for each individual drive. This results in increased cost, more space being used inside the cabinet, and a higher leakage current. Typically, drive manufacturers do not stock EMI-RFI filters, due to the fact they view the filters as an accessory and feel they are not responsible for supplying all necessary components in the final system. This tends to make it difficult to purchase these devices.

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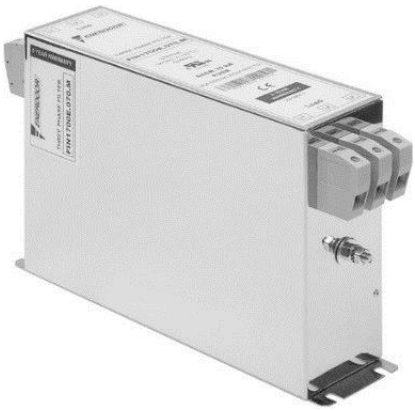

The Solution

Enerdoor's goal is to propose one filter per machine instead of one filter per drive. Using a single filter per machine instead of one per drive offers the following advantages:

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

Economical: Using only one filter requires less mechanical space, reduces potential quality issues due to faulty wiring and accelerates installation time. Decreases cost associated with purchasing multiple filters.

Enerdoor has been manufacturing EMI-RFI filters since 1992; creating a wide variety of models for our customer's needs. Enerdoor filter selection exceeds customer's expectations, especially in terms of attenuation of the radio-frequency interference.

The Result

Enerdoor's unique combination of being an EMI-RFI filter manufacturer and decades of experience with the Enerdoor EMC mobile laboratory has allowed us 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 Filter

Filters vs. Drive Manufacturers

Drive Manufacturer	Single Drive Application	Multiple Drive Application
ABB	FIN538S1	FIN1700
ALLEN BRADLEY/ROCKWELL	FIN538S1	FIN1500
BOSCH REXROTH	FIN538S1	FIN1500
CONTROL TECHNIQUES/NIDEC	FIN538S1	FIN1700
DELTA	FIN3755	FIN1700E
GE FANUC	FIN538S1	FIN1500
HEIDENHAIN	FIN538S1	FIN1500
HITACHI	FIN1700E	FIN1900
KOLLMORGEN	FIN1700E	FIN1700E
LENZE	FIN3755	FIN1700E
MITSUBISHI	FIN3755	FIN538S1
PANASONIC	FIN3755	FIN1700
SCHNEIDER ELECTRIC	FIN1700E	FIN538S1
SIEMENS (MICROMASTER or MASTERDRIVE)	FIN1700E	FIN1900
SIEMENS (SIMODRIVE)	FIN538S1	FIN1500
YASKAWA	FIN3755	FIN1700E

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