



## 3-PHASE EMC POWER LINE FILTER



### Reduce High Frequency Distortion

KRF filters use a combination of high frequency inductors and capacitors to reduce noise in the critical 150 kHz to 30 MHz frequency range. The inductors act as open circuits and the capacitors act as short circuits at high frequencies while allowing the lower power line frequencies to pass untouched.

KRF filters assist with cost effective compliance to EMC directives, in a compact, efficient, light-weight design. The high common mode and differential mode reduction in the critical 150 kHz to 30 MHz frequency range ensures that potential interference from AC drives is reduced or eliminated.

### Features of the KRF

- Reduces interference
- Protects sensitive equipment
- Eliminates drive cross-talk
- Meet FCC Regulation 15, Subpart J

### Typical Applications

- Motor Drives
- Elevators
- Commercial Buildings
- Wind Farms
- Photovoltaics
- UPS
- Power Supplies



## Technical Specifications

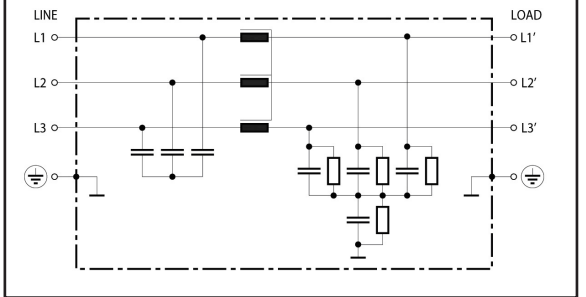
System Voltage	480 VAC (applied to 240 VAC - 520 VAC)
	690 VAC (applied to 600 VAC - 760 VAC)
Amp Ratings	480 V: 8 - 2500
	690 V: 25 - 2500
Number of Phases	3-Phase
Short Term Overload Rating	150% rated I for 3 minutes/60 minutes or 250% for 3 seconds/60 minutes
Tested Value	100% tested for Hipot, ground continuity, input-output continuity and insertion loss characteristic
Fundamental Frequency	50/60 Hz
Warranty	1 year
Environmental Conditions	
Ambient Temperature	-25° to 100° C
Maximum Altitude	Up to 1,000 m (3,300 ft) without derating
Reference Technical Standards	
Agency Approvals	ENEC, UL Recognized

## Part Numbering

**K RF 0180 A CB**

K-Series: \_\_\_\_\_  
 3-Phase EMI/RFI Filter: \_\_\_\_\_  
 Max Current (amps): \_\_\_\_\_  
 Voltage Rating: \_\_\_\_\_  
 A - 480 V  
 V - 690 V  
 Termination: \_\_\_\_\_  
 TB - Termination Block  
 CB - Copper Bus

## Typical Circuit Diagram

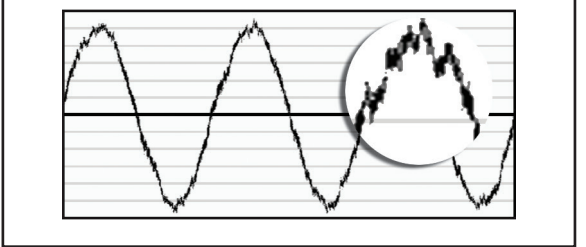


## Equipment Interference and Failure

The power line noise emissions associated with variable frequency drives can cause disturbances in nearby equipment. Typical disturbances include:

- Dimmer and ballast instability
- Lighting disturbances such as flashing
- Poor radio reception
- Instability of control systems
- Flow metering fluctuation
- Computer system failures
- Remote I/O glitches
- Encoder feedback errors
- Nuisance faults PLC
- Analog meter bouncing
- Thermostat control problems

## Before KRF



## After KRF

