

# PREO Power Line EMI Filters

A Division of Eastek International Corporation

# Series ER

High Performance  
Two-Stage



UL Recognized  
CSA Certified  
VDE Approved

## Introduction

The ER series are high performance EMI filters with multi-stage design for both common mode and differential mode noise suppression. This series is most useful when attenuation is required for compliance with stringent EMI emission regulations such as FCC-B and VDE-B. Available in wide range of current ratings and terminal styles.

## Minimum Insertion Loss in dB

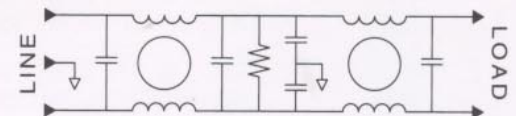
Common mode (line to ground) in 50 ohm system:

MODEL	Frequency in MHz								
	0.02	0.05	0.10	0.15	0.50	1.0	5.0	10	30
02ER11/33	12	7	13	40	65	65	65	65	60
03ER11/33/M1	14	7	15	40	65	65	65	65	60
06ER11/33/M1	10	7	10	30	55	65	65	65	60
10ER11/33/66/M1		5	5	5	40	52	60	60	50
20ER11/66		5	5	5	40	52	60	60	50
30ER66		7	5	10	45	55	60	60	50

Differential mode (line to line) in 50 ohm system:

MODEL	Frequency in MHz								
	0.05	0.10	0.15	0.50	1.0	3.0	5.0	10	30
02ER11/33	8	5	5	45	70	65	65	60	50
03ER11/33/M1	6	5	12	55	70	65	65	60	50
06ER11/33/M1	8	5	5	40	70	65	65	60	50
10ER11/33/66/M1	10	12	5	12	50	65	65	60	55
20ER11/66	10	12	5	12	50	65	65	60	55
30ER66	20	15	15	65	65	65	65	60	55

## Schematic



## Electrical ratings

Maximum operating voltage: 250 VAC

Operating frequency: 50/60 Hz

Hipot rating (one minute):

Line to Ground: 1500 VAC  
Line to Line: 1450 VDC

Maximum leakage current (each line to ground):

@ 120 VAC / 60 Hz: 0.25 mA  
@ 250 VAC / 50 Hz: 0.45 mA

Rated current at 40°C ambient temperature:

02ER11, 02ER33 2 A  
03ER11, 03ER33, 03ERM1 3 A  
06ER11, 06ER33, 06ERM1 6 A  
10ER11, 10ER33, 10ER66, 10ERM1 10 A  
20ER11, 20ER66 20 A  
30ER66 30 A

Now in Stock at

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