# FLLE2 – R

**Single phase EMI Filter** 



# Overview

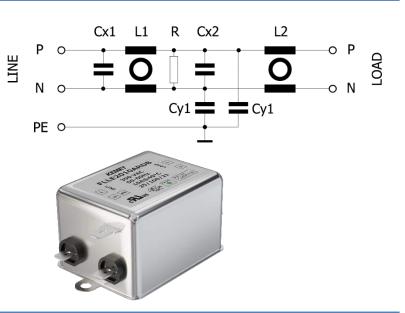
General purpose, single phase filter series with high attenuation. Chassis mount for fast mounting, metal case filled with self-extinguishing resin. Fast-on or screw terminals available and options with flexible wire connections. Medical versions available without y-capacitors for no leakage current.



# Technical specifications

Item	Parameters/ Characteristics				
Rated Voltage	300 VAC/ VDC				
Rated Frequency	50 - 60 Hz				
Rated Current	1 - 32 A				
Rated Temperature	40°C				
Temperature range	-25°Cto 100°C				
Climate Category	25/100/21				
Voltage Test	P -> N 1300 VDC P/N -> E 2250 VDC				

# Typical electrial schematics



# Components

Part Number	Rated Current @40°C	Leakage Current *)	C <sub>x</sub> 1	R	L1	C <sub>Y</sub> 1	C <sub>x</sub> 2	L2
	<b>(A)</b>	(mA)	(μF)	(MΩ)	(mH)	(nF)	(μF)	(mH)
FLLE2001AR(1)(2)	1	0.37	0.22	1	12	4.7	0.22	12
FLLE2003AR(1)(2)	3	0.37	0.22	1	2.5	4.7	0.22	2.5
FLLE2006AR(1)(2)	6	0.37	0.22	1	1	4.7	0.22	1
FLLE2010AR(1)(2)	10	0.37	0.47	0.47	1	4.7	0.47	1
FLLE2013AR(1)(2)	13	0.37	0.47	0.47	0.6	4.7	0.47	0.6
FLLE2016AR(1)(2)	16	0.37	0.47	0.47	0.6	4.7	0.47	0.6
FLLE2020AR(1)(2)	20	0.37	1	0.22	0.8	4.7	1	0.8
FLLE2025AR(1)(2)	25	0.37	1	0.22	0.8	4.7	1	0.8
FLLE2032AR(1)(2)	32	0.79	1	0.22	0.8	10	1	0.8

(1) D = Standard, M = Medical

(2) B = Fast-on (1-16A), I = Threaded (20-32A), D = Wire (1-32A)

\*) Leakage current @250 VAC/ 50 Hz acc. to IEC60939-3. Medical version without Cy-capacitors, no leakage current.



# Approvals (pendning)

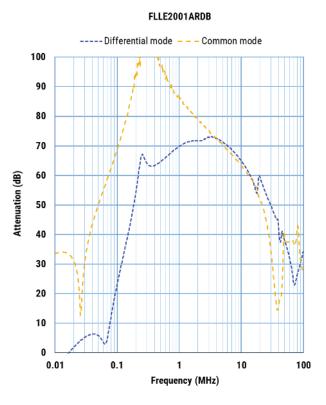
**Standard** IEC/EN 60939-3 ANSI/UL 60939-3-2016 **Certification Body** UL-Demko UL **File** Pending Pending

Attenuation (dB)

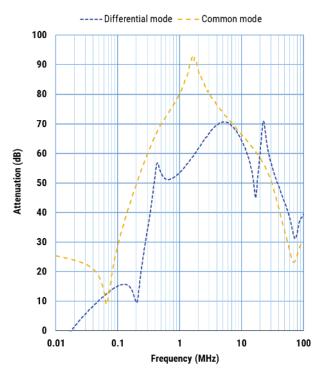


FLLE2003ARDB

Typical insertion loss

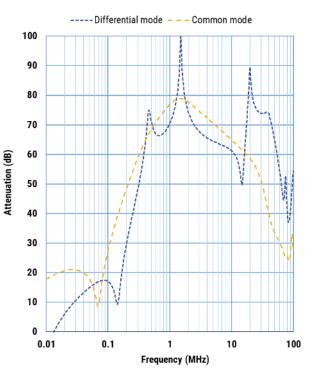


### FLLE2006ARDB



----- Differential mode ---- Common mode 100 90 80 70 60 50 40 30 20 10 0 0.01 0.1 10 100 1 Frequency (MHz)

### FLLE2010ARDB



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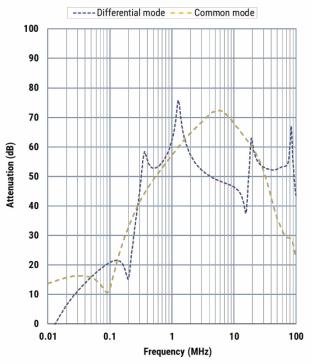
**Single phase EMI Filter** 

Attenuation (dB)

0.01

0.1





# -----Differential mode - - - Common mode

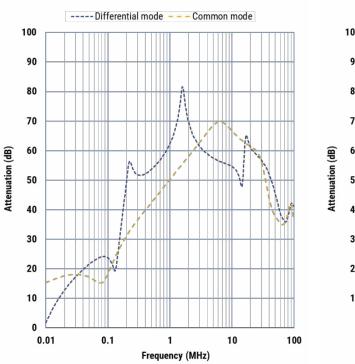
## FLLE2025ARDI

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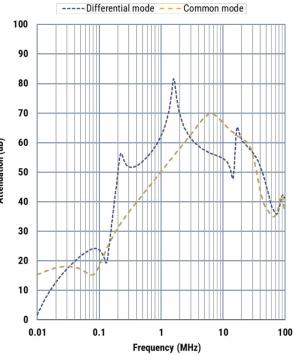
Frequency (MHz)

10

100



FLLE2020ARDI

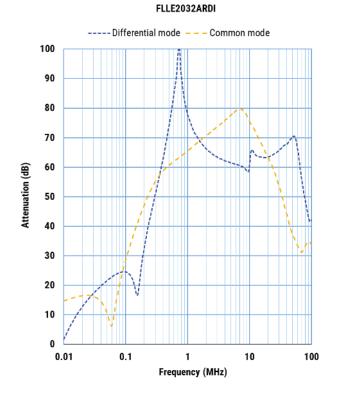


FLLE2013ARDB

FLLE2016ARDB

Single phase EMI Filter





# Mechanical dimensions

Part Number	L (mm)	W (mm)	H (mm)	Weight (g)	Fast-on Terminal	Threaded Terminal	Flexible Wire (mm <sup>2</sup> )	
FLLE2001AR(1)(2)	51	45	28	155	6.3 x 0.8		0.75	
FLLE2003AR(1)(2)	51	45	28	155	6.3 x 0.8		0.75	
FLLE2006AR(1)(2)	51	45	28	155	6.3 x 0.8		1.5	
FLLE2010AR(1)(2)	65	50	40	190	6.3 x 0.8		1.5	
FLLE2013AR(1)(2)	65	50	40	200	6.3 x 0.8		1.5	
FLLE2016AR(1)(2)	65	50	40	200	6.3 x 0.8		2.5	
FLLE2020AR(1)(2)	91	51	45	350		M4 x 0.7	2.5	
FLLE2025AR(1)(2)	91	51	45	350		M4 x 0.7	2.5	
FLLE2032AR(1)(2)	130.5	56.5	48.5	475		M4 x 0.7	4	

(1) D =Standard, M =Medical

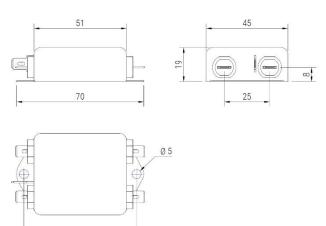
(2)  $B = Fast-on, I = Threaded, D = Wire (Lenght = 140\pm5 mm)$ 

# FLLE2 – R

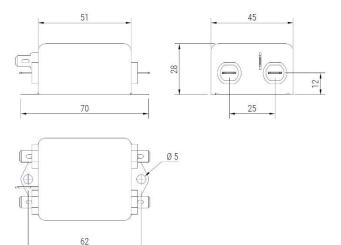
**Single phase EMI Filter** 



# 1A, 3A and 6A

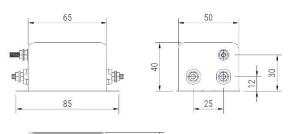


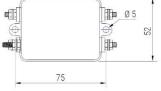
10A, 13A and 16A

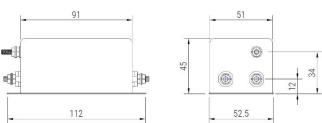


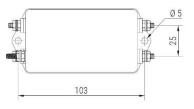
20A and 25A

62

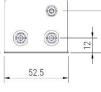








32A



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