DC EMI Filters for PV Inverters



Overview

This filter series is intended to be used in Photo Voltaic applications between the solar panels and the inverter system. The filters are optimized in geometry and for power loss. They are also adapted to attenuate high frequency noise that may be degrading life time of the solar panels and will as well reduce the radiation of EMI noise that may emerge from the panels.

Filters without Y-capacitors to protective earth are available on request. As the Capacitance Company, KEMET is only using high quality capacitors in its filter series.

Technical specifications

Rated voltage 1200 VDC Rated current 25 – 1600 A

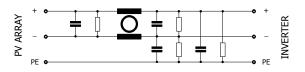
Rated temperature 55°C

Temperature range $-40^{\circ}\text{C to } +100^{\circ}\text{C}$ Climate category 40/100/21Voltage test $P \rightarrow P 3000 \text{ VDC}$ $P \rightarrow E 3600 \text{ VDC}$

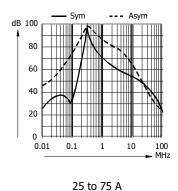
The FLLE2...PV-series is designed according to IEC/EN 60939 and UL 1283.

Filter	Rated current @ 55°C (A)	Power loss @ 25°C/DC (W)	Weight (kg)	
FLLE2025APVR1	25	8	1	
FLLE2050APVR1	50	12	2	
FLLE2075APVR1	75	16	2	
FLLE2100APVR1	100	20	3	
FLLE2150APVR1	150	30	4	
FLLE2250APVI1	250	10	5	
FLLE2400APVI1	400	15	7	
FLLE2600APVI1	600	25	7	
FLLE2800APVI1	800	30	10	
FLLE21K0APVI1	1000	45	10	
FLLE21K6APVI1	1600	70	16	



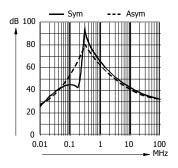


Typical insertion loss



dB 100 80 60 40 20 0.01 0.1 1 10 100 MHz

--- Asym



100 and 150 A

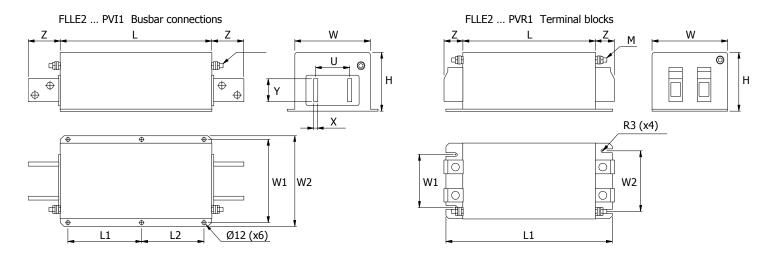
250 to 1600 A

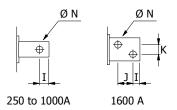
FLLE2 ... PV

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Mechanical dimensions





Terminal blocks - wire dimensions								
25A	16/10mm ²	solid/flexible						
50A	35/25							
75A	35/25							
100A	50/50							
150A	95/95							

Filter -	Dimensions in mm															
	L	W	Н	L1	L2	W1	W2	U	Χ	Υ	Z	I	J	K	N	М
FLLE2025APVR1	140	80	65	170		45	60				25					M5
FLLE2050APVR1	170	95	80	200		60	75				39					M6
FLLE2075APVR1	170	95	80	200		60	75				39					M6
FLLE2100APVR1	190	125	95	220		80	100				45					M8
FLLE2150APVR1	220	140	115	250		100	120				50					M10
FLLE2250APVI1	300	130	110	130	110	155	180	70	5	25	58	15			9	M10
FLLE2400APVI1	300	140	110	130	110	165	190	70	6	25	58	15			10.5	M10
FLLE2600APVI1	300	140	110	130	110	165	190	70	8	40	58	15			10.5	M10
FLLE2800APVI1	300	150	140	130	110	175	200	70	8	40	65	20			14	M12
FLLE21K0APVI1	300	150	140	130	110	175	200	70	8	40	65	20			14	M12
FLLE21K6APVI1	300	150	150	130	110	175	200	70	10	60	100	17	43	26	14	M12

Legal disclaimer notice

All product specifications, statements, information and data (collectively, the "information") are subject to change without notice.

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Although we design and manufacture our products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required