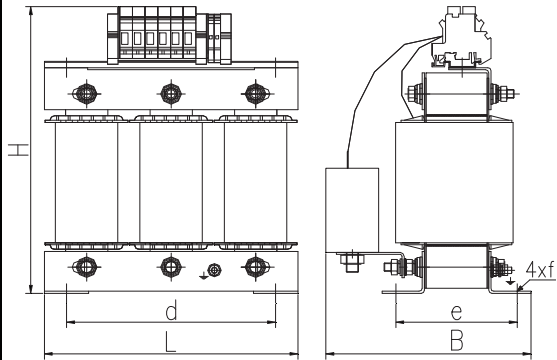


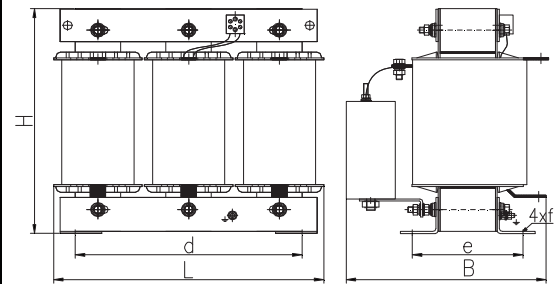


Three-phase LC filters for various frequency converters

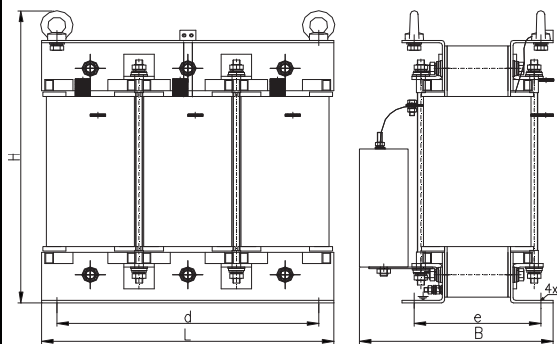
EF3LC



Design A



Design B



Design C

Technical data:	
Design	LC filters are produced according to : EN/IEC 61558-2-20; EN/IEC 60076-6
Insulation class	F(155°C) - standard
Ambient temperature	40°C - land design 45°C - maritime design
Climatic class /environmental class	C1/E0 - land design C2/E1 - maritime design
Rated frequency	50 Hz
Keying frequency	≥ 4 kHz
Rated voltage	$U_n=400$ V
Harmonics content THDu in output voltage	≤5%
Continuous overload capacity	110% I_n
Instantaneous overload capacity	150% I_n 1 min/h 200% I_n 0,5 min/h
Short circuit voltage	8 %
Protection degree	IP 00
Terminals	screw terminal blocks or cable lugs or copper bus bars
Fastening	by means of angles

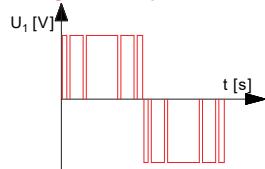
EF3LC filters are used to protect the insulation of the motor and to increase its reliability. They also reduce noise level. These filters convert the output voltage signal of PWM inverter for sine wave at the same time eliminating the higher harmonics, which cause additional losses in both the mains cables of the motor and in the same motor. Sinusoidal output current and voltage of the filter allows for using of considerable lengths of cable without the need for shielding and full use of the active power of the drive system.

There is a possibility to produce the filter with various coil terminals like screw terminal blocks, cable lugs or copper bus bars depending on the rated current.

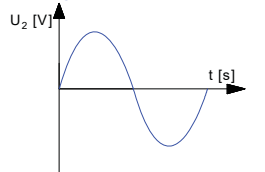
It is important to connect the filter properly, since the direct connection of capacitors to the inverter output may damage the system.

If agreed beforehand, it is possible to manufacture filters with parameters other than those given in the table.

Voltage at the input of the filter



Voltage at the output of the filter

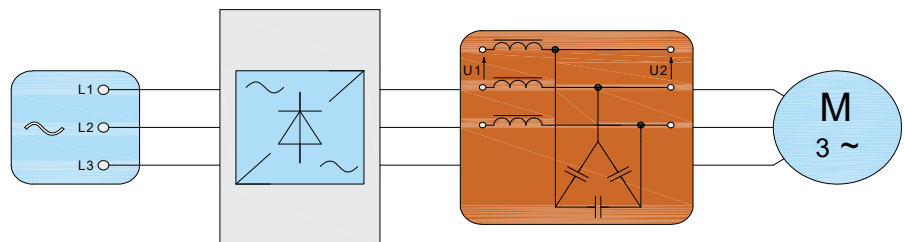


ELECTRICAL
MAINS

INVERTER

EF3LC SINE WAVE
FILTER

MOTOR



Drive system with the output sinusfilter type EF3LC

Note:

Manufacturer reserves the right to make changes resulting from the continuous development of products offered.

If requested in advance, it is possible to manufacture a filter in other version.

For designs with climatic/environmental class C2/E1 the letter "M" ought to be added

Manufacturer: **ELHAND TRANSFORMATORY Sp. z o.o.**
PL 42-700 Lubliniec, ul. Klonowa 60
tel.: (34) 34 73 100, fax: (34) 34 70 207
<http://www.elhand.pl> e-mail: info@elhand.pl



EF/2016/VI/01

Technical data of three-phase LC filters EF3LC

Item	Filter type	Inductance [mH]	Current [A]	L [mm]	B [mm]	H [mm]	d [mm]	e [mm]	f [mm]	Weight [kg]	Design
1.	EF3LC-17/3	17	3	155	135	160	100	55	5x8	2,5	A
2.	EF3LC-12,5/4	12,5	4	155	135	185	130	57	8x11	3	A
3.	EF3LC-8,5/6	8,5	6	155	125	185	130	57	8x11	3,5	A
4.	EF3LC-6,5/8	6,5	8	155	140	185	130	72	8x11	5	A
5.	EF3LC-5,5/10	5,5	10	195	125	220	173	72	8x11	6	A
6.	EF3LC-4,0/15	4,0	15	195	160	220	173	92	8x11	10	A
7.	EF3LC-3,0/20	3,0	20	208	160	240	173	85	8x11	13	A
8.	EF3LC-2,1/28	2,1	28	240	180	275	198	95	11x29	15	A
9.	EF3LC-1,75/34	1,75	34	240	200	275	198	115	11x29	22	A
10.	EF3LC-1,5/40	1,5	40	240	210	275	198	120	11x29	25	A
11.	EF3LC-1,1/54	1,1	54	240	220	275	198	129	11x29	27	A
12.	EF3LC-0,9/66	0,9	66	261	240	300	198	126	11x29	32	A
13.	EF3LC-0,75/80	0,75	80	300	240	340	240	133	11x15	38	A
14.	EF3LC-0,6/100	0,6	100	300	270	255	240	160	11x15	54	A
15.	EF3LC-0,55/110	0,55	110	300	280	355	240	171	11x15	59	A
16.	EF3LC-0,45/140	0,45	140	340	270	315	300	146	11x21	64	B
17.	EF3LC-0,4/160	0,40	160	340	300	315	300	161	11x21	73	B
18.	EF3LC-0,32/200	0,32	200	420	315	420	370	186	11x15	110	C
19.	EF3LC-0,27/240	0,27	240	480	310	495	430	198	13x18	122	C
20.	EF3LC-0,22/290	0,22	290	480	320	520	430	208	13x18	146	C
21.	EF3LC-0,18/360	0,18	360	480	345	520	430	218	13x18	162	C
22.	EF3LC-0,14/450	0,14	450	540	400	545	490	248	13x18	210	C
23.	EF3LC-0,12/570	0,12	570	540	410	605	490	248	13x18	235	C

Note:

Manufacturer reserves the right to make changes resulting from the continuous development of products offered.

If requested in advance, it is possible to manufacture a filter in other version.

For designs with climatic/environmental class C2/E1 the letter "M" ought to be added