

High Performance Mains Filter A11x73

Features

- Mains Filter for single and three phase systems
- Insertion transmission loss
100 dB @ 14 kHz
- Double- π circuit
- Rod cores allow asymmetrical load
- Self-healing effect of foil capacitors

For a clean mains supply into a shielded room, high performance filters are indispensable. Usually, these filters are directly mounted on the shielding wall. It is recommended to route filtered lines into the shielded room through the wall with an optional flexible metal conduit.

Description

The A11x73 high performance filter is a superior mains filter housed in a three compartment casing that achieves 100 dB insertion transmission loss at 14 kHz.

The circuit is designed as a symmetrical double- π circuit with high quality rod cores providing inductance. These cores do not saturate due to their large air gap and they are insensitive to asymmetrical load.

Foil capacitors ensure a long operating life by their self healing feature even after voltage transients.

A seamless fixing of the filter casing to the shielded room is very important to ensure correct operation. The filter is housed in a casing that has a base flange which provides stable mounting and excellent earthing when bolted to the shielded room via the mounting bolts.

This series is offered as a two line filter (phase and neutral) or as a four line filter (three phases and neutral). The neutral line is always attenuated and all conductors are decoupled from each other. This allows the conductors to operate independently without attenuation loss.

Input and output terminals are accessible under high frequency shielding caps. EMP protection is available on request.



Technical Data

Mains voltage	250/440 V _{AC} ; 50/60 Hz; 600 V _{DC}
Current rating	relative to 50 Hz and 40 °C ambient temperature
Current rating	1,4 I _N for 15 min
Ambient temperature	-40 °C to + 40 °C
Test voltage	1200 V _{DC} for 2 s (line / line; line / earth)

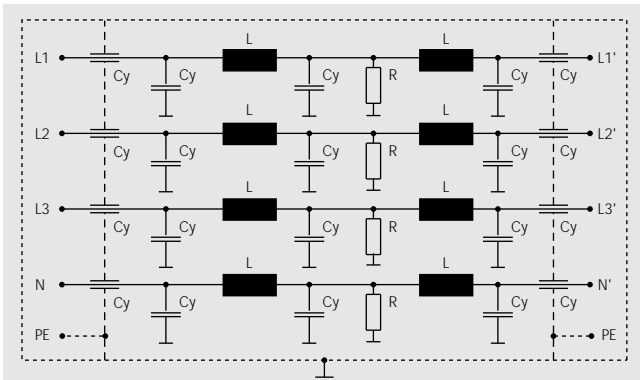
Models and Ordering Data

Order No.	Type	Number of lines	Rated Current	Voltage drop	Leakage current per line	Weight
012 00043	73/2x 6 A	2	6 A	1.6 V _{DC} , 2 V _{AC}	0.9 A	10 kg
012 00052	73/4x 6 A	4	6 A	1.6 V _{DC} , 2 V _{AC}	0.9 A	20 kg
012 00044	73/2x 10 A	2	10 A	1.5 V _{DC} , 2 V _{AC}	1.1 A	10 kg
012 00053	73/4x 10 A	4	10 A	1.5 V _{DC} , 2 V _{AC}	1.1 A	20 kg
012 00045	73/2x 16 A	2	16 A	1.5 V _{DC} , 2 V _{AC}	1.7 A	12 kg
012 00054	73/4x 16 A	4	16 A	1.5 V _{DC} , 2 V _{AC}	1.7 A	24 kg
012 00046	73/2x 25 A	2	25 A	1.0 V _{DC} , 2 V _{AC}	2.5 A	14 kg
012 00055	73/4x 25 A	4	25 A	1.0 V _{DC} , 2 V _{AC}	2.5 A	28 kg
012 00047	73/2x 40 A	2	40 A	1.0 V _{DC} , 2 V _{AC}	3.5 A	19 kg
012 00056	73/4x 40 A	4	40 A	1.0 V _{DC} , 2 V _{AC}	3.5 A	38 kg
012 00048	73/2x 63 A	2	63 A	0.7 V _{DC} , 2 V _{AC}	5.9 A	39 kg
012 00057	73/4x 63 A	4	63 A	0.7 V _{DC} , 2 V _{AC}	5.9 A	78 kg
012 00049	73/2x 85 A	2	85 A	0.6 V _{DC} , 2 V _{AC}	6.4 A	48 kg
012 00058	73/4x 85 A	4	85 A	0.6 V _{DC} , 2 V _{AC}	6.4 A	96 kg
012 00050	73/2x125 A	2	125 A	0.5 V _{DC} , 2 V _{AC}	8.4 A	57 kg
012 00059	73/4x125 A	4	125 A	0.5 V _{DC} , 2 V _{AC}	8.4 A	114 kg
012 00051	73/2x200 A	2	200 A	0.5 V _{DC} , 2 V _{AC}	9.0 A	66 kg
012 00060	73/4x200 A	4	200 A	0.5 V _{DC} , 2 V _{AC}	9.0 A	132 kg

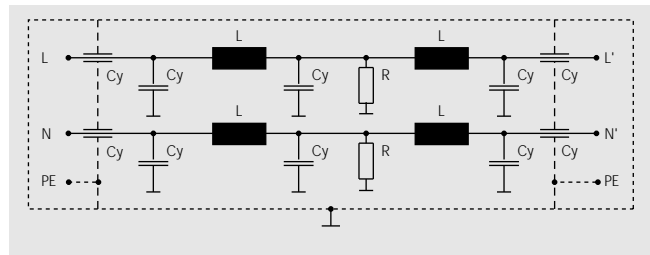
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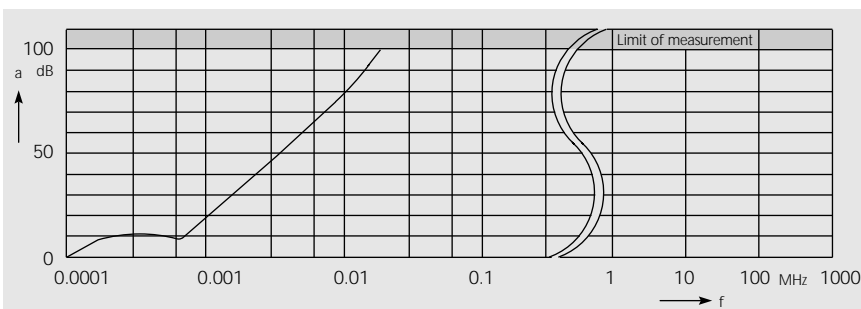
Circuitry A11x73/4x...



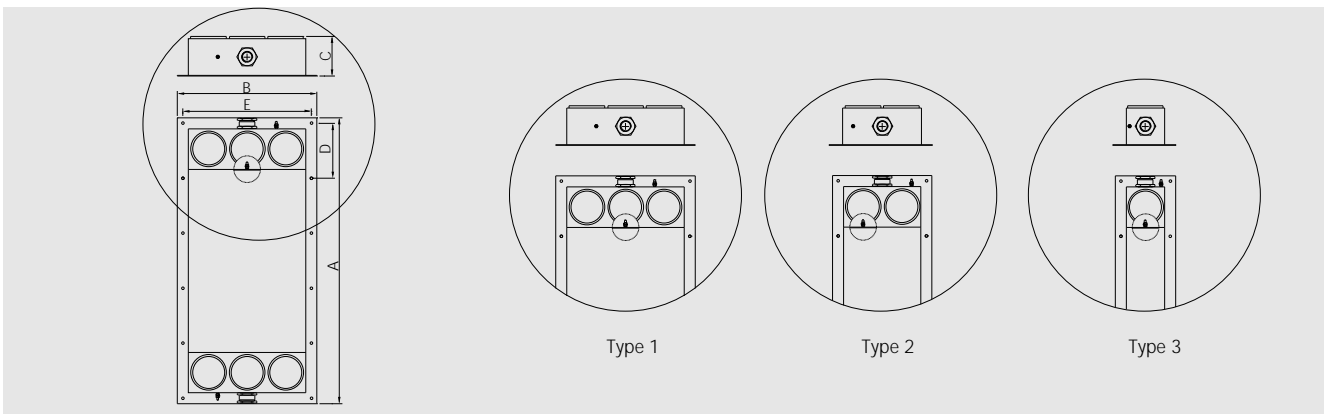
Circuitry A11x73/2x...



Suppression Characteristics



Dimension Drawing



Mechanical Dimensions

Type	Drawing Ref.	Dimensions					Fixing hole diameter	Screened cable gland	cable diameter	terminal thread size
		A	B	C	D	E				
73/2x 6/10/16 A	3	570	150	102	110	130	∅ 7	Pg 21	∅ 22	M 5
73/4x 6/10/16 A	2	570	260	102	110	240	∅ 7	Pg 21	∅ 22	M 5
73/2x 25/ 40 A	2	780	260	102	150	240	∅ 7	Pg 21	∅ 22	M 5
73/4x 25/ 40 A	1	780	380	102	150	350	∅ 7	Pg 21	∅ 22	M 5
73/2x 63/ 85 A	3	1200	350	150	230	300	∅ 11	Pg 29	∅ 30	M 8
73/4x 63/ 85 A	2	1200	550	150	230	500	∅ 11	Pg 29	∅ 30	M 8
73/2x125/ 200 A	3	1500	350	150	290	300	∅ 11	Pg 42	∅ 46	M 12
73/4x125/ 200 A	2	1500	550	150	290	500	∅ 11	Pg 42	∅ 46	M 12

