EMC-Power Line Filters for 1-Phase Systems

FMAB Series, PCB-mounted all pourpose filters in aluminium case to Protection Class I

Nominal current:	2 – 16 A @ 40 °C
Rated voltage U_R (U_{max}):	125/250 VAC 50/60 Hz
Attenuation:	Standard
Leakage current:	for Standard and Medical applications
Test voltages:	L/N → E 2.7 kVDC, 2 sec
	L → N 1.7 kVDC, 2 sec *
Climatic category:	25/100/21 acc. to IEC 60068-1
50% saturation typ.:	2 to 3 x I_N @ 20 °C
Inrush current:	1.5 x I_N 1 min. per hour
MTBF @ 40 °C / U_R (U_{max}):	> 200'000 h acc. To MIL-HB-217 F

* without resistor

Approvals:

Space saving filters for direct mounting on printed circuit boards. Generally used as protection against interference voltage from the mains but, at the same time, possible interferences generated in the equipment are also attenuated. They must be mounted inside the equipment as close as possible to the mains input.
Aluminium case provides a good shielding.

Optional version:

- Medical version M80 with leakage current < 80µA

Contact Schurter for minimum order quantity

Order Numbers and Technical Data

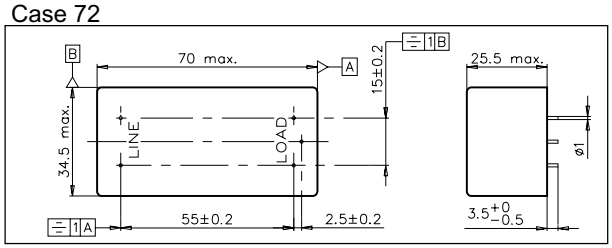
Type **FMAB** Standard	I_N (1) @ ϑa 40 °C [A]	U_R (Umax) [VAC]	L_N (2) -30% / +50% [mH]	Leakage current (3) @ 250 V / 50 Hz [mA]	Cx(X2) [nF]	Cy(Y2) [nF]	R [MΩ]	Case
5500.2021	2	250	2 x 8	< 0.5	100	4.7	1	72
5500.2022	4	250	2 x 3.5	< 0.5	100	4.7	1	72
5500.2023	6	250	2 x 1.8	< 0.5	100	4.7	1	72
5500.2024	10	250	2 x 0.82	< 0.5	100	4.7	1	72
5500.2025	16	250	2 x 0.65	< 0.5	100	4.7	1	72
Type FMAB Medical M5	**I_N (1) @ ϑa 40 °C [A]**	**U_R (Umax) [VAC]**	**L_N (2) -30% / +50% [mH]**	**Leakage current (3) @ 250 V / 50 Hz [µA]**	**Cx(X2) [nF]**	**Cy(Y2) [nF]**	**R [MΩ]**	**Case**
5500.2106	2	250	2 x 8	< 5	100	-	1	72
5500.2107	4	250	2 x 3.5	< 5	100	-	1	72
5500.2108	6	250	2 x 1.8	< 5	100	-	1	72
5500.2109	10	250	2 x 0.82	< 5	100	-	1	72
5500.2110	16	250	2 x 0.65	< 5	100	-	1	72

(1) Current derating over 40°C : $I = I_N \times \sqrt{(100-\vartheta a)/60}$

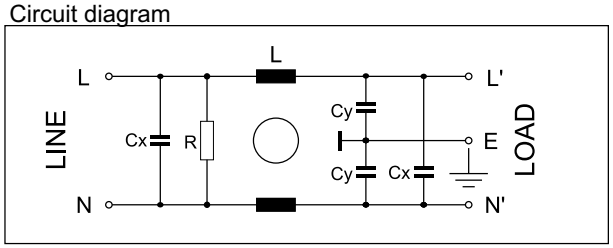
(2) Nominal inductance measured according to EN 138100, see introduction of this catalog, paragraph 3.4

(3) Measured according to IEC 60950 5.2.3 Annex D, see introduction of this catalog, paragraph 3.5

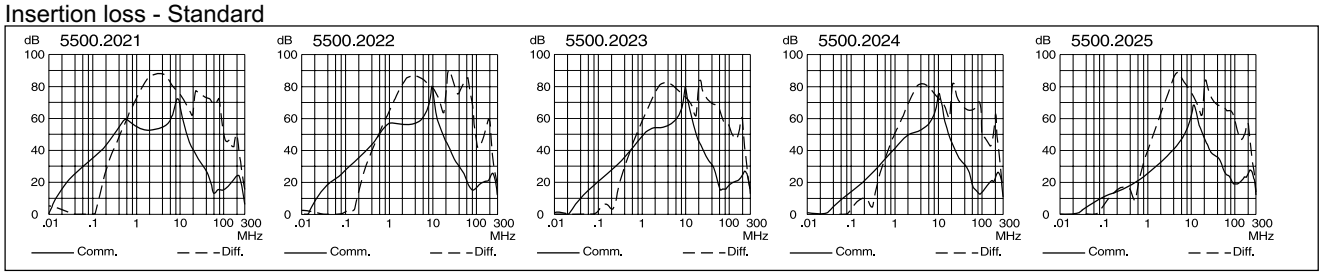
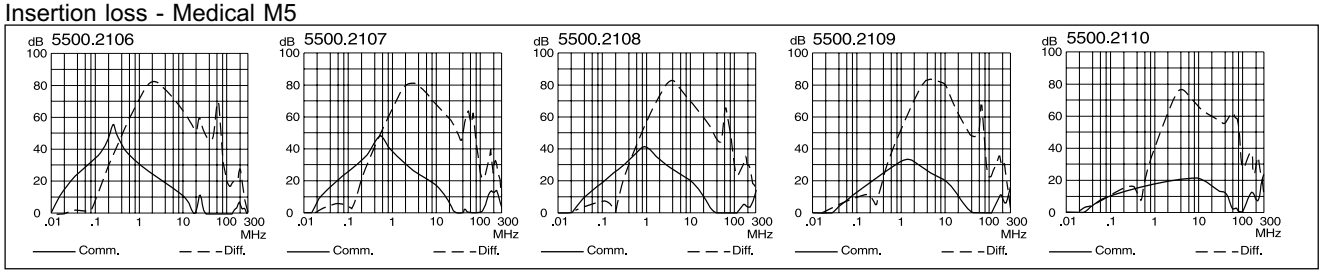
Case 72



Circuit diagram



Insertion loss - Standard



Insertion loss - Medical M5