

EMC-Power Line Filters for 1-Phase Systems

FSS2 Series, 2-stage all-purpose filters to Protection Class I, with high symmetrical insertion loss, conform to EN 133200, UL 1283 and IEC 60950

Nominal current: 1 - 10 A @ 40 °C Rated voltage U_R (U_{max}): 125/250 VAC 50/60 Hz Medium / Widerange Attenuation:

for Standard and Industrial applications Leakage current:

Test voltages: $L/N \rightarrow E 2.7 \text{ kVDC}, 2 \text{ sec}$ $L \rightarrow N$ 1.7 kVDC, 2 sec * 25/100/21 acc. to IEC 60068-1 Climatic category:

50% saturation typ.: 2 to 3 x I $_{\rm N}$ @ 20 $^{\circ}C$ $1.5 \times I_N 1 \text{ min. per hour}$ Inrush current:

MTBF @ 40 °C / U_R (U_{max}): > 200'000 h acc. To MIL-HB-217 F

* without resistor

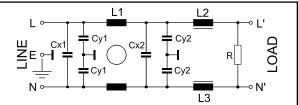


The filter series are specially suitable for use in switching power supplies. These 2-stage filters are particularly effective against symmetrical interference.

Use e.g. in power supplies, ultrasonic generators, static d.c. converter, generally in all those equipments where electronic switching processes with high repetition rate occur. Rated currents 1 to 16 A with leakage currents 0.25mA to 1.4mA.



Circuit diagram

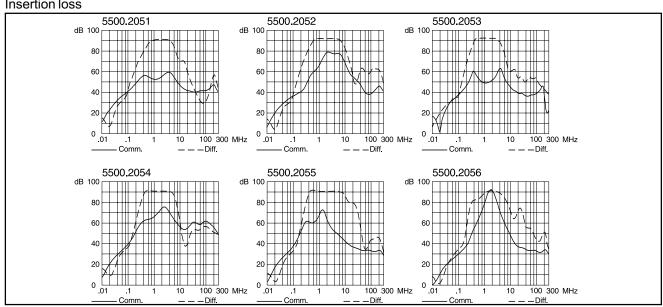


Order Numbers and Technical Data

| Type FSS2 | In (1) | UR | L1 (2) | L2 (2) | L3 (2) | Leakage current (3) | Cx1 | Cx2 | Cy1 | Cy2 | R | Case |
|-----------|------------|--------|-----------|--------|--------|---------------------|------|------|------|------|------|------|
| | @ ∂a 40 °C | (Umax) | -30%/+50% | ± 15% | ± 15% | @ 250 V / 50 Hz | | | | | | |
| | [A] | [VAC] | [mH] | [mH] | [mH] | [mA] | [µF] | [µF] | [nF] | [nF] | [MΩ] | |
| 5500.2051 | 1 | 250 | 2 x 15 | 1 | - | < 0.25 | 0.1 | 0.47 | 1.5 | 1 | 1 | 10 |
| 5500.2052 | 2 | 250 | 2 x 10 | 0.4 | 0.4 | < 0.25 | 0.1 | 0.47 | 1.5 | 1 | 1 | 10 |
| 5500.2053 | 3 | 250 | 2 x 12 | 1 | - | < 0.25 | 0.1 | 0.68 | 1.5 | 1 | 1 | 48 |
| 5500.2054 | 4 | 250 | 2 x 10 | 0.8 | - | < 1.4 | 0.1 | 0.68 | 10 | 4.7 | 1 | 48 |
| 5500.2055 | 6 | 250 | 2 x 6 | 0.5 | - | < 1.4 | 0.1 | 0.68 | 10 | 4.7 | 1 | 48 |
| 5500.2056 | 10 | 250 | 2 x 5 | 0.2 | 0.2 | < 1.4 | 0.1 | 1 | 10 | 4.7 | 1 | 19 |

- (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

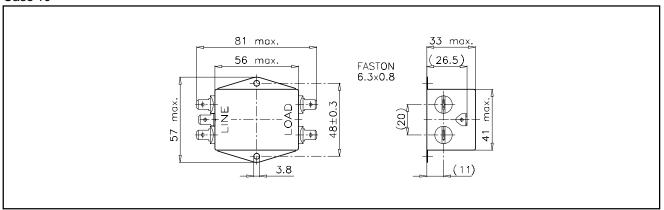
Insertion loss



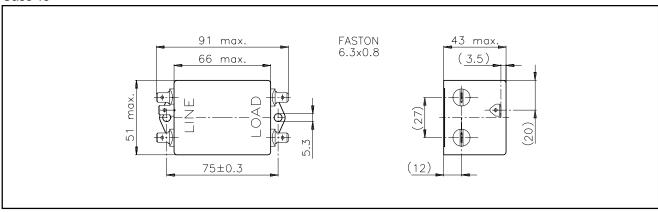
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FSS2 Series, Cases

Case 10



Case 48



Case 19

