

EMC-Power Line Filters

FP Series, industrial-mains-filters to Protection Class I, in plastic case, conform to EN 133200, UL 1283 and IEC 60950

Nominal current: 0.5 - 25 A @ ϑ_a 40°C
Rated voltage U_R (U_{max}): 250 VAC 50/60 Hz *
Attenuation: Standard
Leakage current: for Standard applications
Test voltages: * L/N → E 2.7 kVDC, 2 sec
 L → N 1.7 kVDC, 2 sec
Climatic category: 25/085/21 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
Plastic case: UL 94 V-0
Potting resin: UL 94 V-0

* for FPD4... see "filter for 3-phase systems"

Approvals obtained
or pending:



CCA-NTR
EN 133200



Interference suppression filter in plastic housing are low-priced suppressors, active over a large frequency range.

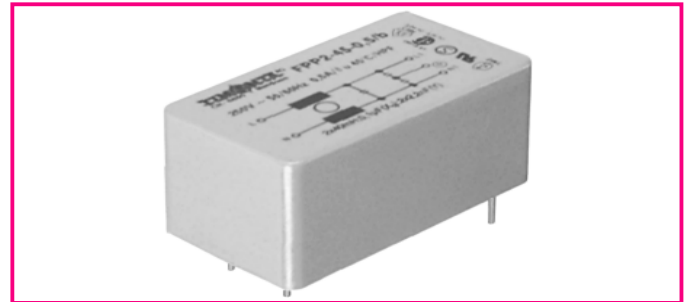
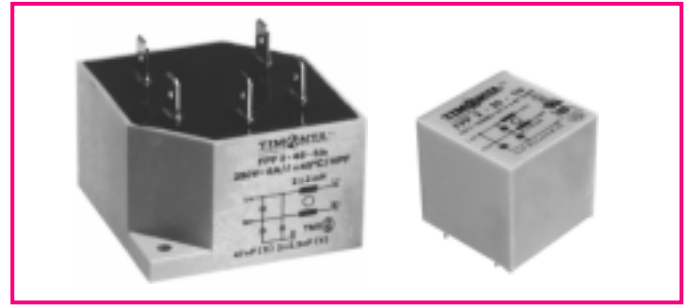
A large program of various filter types with regard to nominal voltage, rated current, number of phases and type of connection is available. They are all in accordance with the international prescriptions of the radio interference filters like e.g. EN 133200.

Thanks to the simple construction, the plastic filters either with solder pins as PCB version or with faston respectively wire-connection as mounting-version, are mainly suitable for later installation in case of interference.

Provided that the right type of filter is selected, a double-faced effect can be achieved, namely from the apparatus outwards as noise suppression filter and in the other direction as power-transient-protective-filter.

2 lines are available:

- square type
- flat type



Codes

	FPP 2-40 - 3 / a	
Filter	_____	_____ version
Plastic case	_____	_____ nominal I_N
P printed circuit	_____	_____ size of case
F faston	_____	_____ lines
D wire connection	_____	

Technical Data

Type		I _N (1) @ ϑ_a 40°C [A]	U _R (U _{max}) [V]	L _N (2) -30% / +50% [mH]	Leakage curr. (3) @ 250 V/50 Hz [mA]	Co/C2(X2) [μF]	C1(Y2) [nF]	Circuit diagram	Case
S Q U A R E	FPP2-25-0.6/a	0.6	250	2 x 40	< 0.25	0.015	2.2	S1	13P
	FPP2-25-1/a	1	250	2 x 10	< 0.25	0.015	2.2	S1	13P
	FPP2-25-2/a	2	250	2 x 4	< 0.25	0.015	2.2	S1	13P
	FPP2-30-0.7/a	0.7	250	2 x 40	< 0.25	0.015	2.2	S1	18P
	FPP2-30-1/a	1	250	2 x 20	< 0.25	0.022	2.2	S1	18P
	FPP2-30-2/a	2	250	2 x 6	< 0.25	0.022	2.2	S1	18P
	FPP2-30-3/a	3	250	2 x 3	< 0.25	0.022	2.2	S1	18P
	FPP2-40-1/a	1	250	2 x 30	< 0.25	0.047	2.2	S1	24P
	FPP2-40-3/a	3	250	2 x 4	< 0.25	0.047	2.2	S1	24P
	FPF2-48-1.5/a	1.5	250	2 x 20	< 0.25	0.047	2.2	S1	29P
	FPF2-48-6/a	6	250	2 x 3	< 0.25	0.047	2.2	S1	29P
	FPD4-120-25/a	25	250/440	4 x 2.5	—	0.47	—	S4	34P
F L A T	FPP2-45-0.5/b	0.5	250	2 x 40	< 0.25	0.1	2.2	S2	27P
	FPP2-45-1.0/b	1.0	250	2 x 10	< 0.25	0.1	2.2	S2	27P
	FPP2-45-1.6/b	1.6	250	2 x 6	< 0.25	0.1	2.2	S2	27P
	FPP2-45-2.5/b	2.5	250	2 x 2	< 0.25	0.1	2.2	S2	27P
	FPP2-45-4.0/b	4.0	250	2 x 1	< 0.25	0.1	2.2	S2	27P
	FPP2-45-6.5/b	6.5	250	2 x 1	< 0.25	0.1	2.2	S2	27P
	FPP2-45-0.8/a	0.8	250	2 x 20	< 0.25	0.068/0.015	2.2	S3	27-1P

(1) Current derating over 40°C: $I = I_N \times \sqrt{(85 - \vartheta_a)/45}$

(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