



# POWER PRO

## EMC-RFI HIGH CURRENT LINE FILTERS FOR 1-PHASE SYSTEMS

PP1SW Series, all purpose filters to Protection Class I, conform to EN 133200, UL 1283 and IEC 60950

The Power Pro range of filters represents an ideal solution for the most demanding EMC requirements. High noise attenuation, low leakage current, compact housing and full CE approval are only some of the advantages offered by this new generation of advanced filters



All these filters are ideally suited for applications with EN55011, EN55014 and EN55022 requirements.

- All versions include insulated safety screw terminals.
- Key features of the high current filter range include:
  - easy, space saving installation
  - high symmetrical and asymmetrical mode attenuation (from 10kHz to 300 MHz)
- To maximize the filter performance in the application, the following EMC rules should be considered:
  - physical separation of filter input and output lines
  - physical separation of the interference source itself
  - dedicated earth connection for the filter

Nominal current:	6-30 A, 40°C
Rated voltage (U <sub>max</sub> ):	250 Vac, 50/60 Hz
Attenuation:	High
Leakage Current:	For Industrial applications
Test Voltages for 480V	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 <sub>n</sub> @ 20°C
Inrush current:	1,5 x I <sub>n</sub> 1 min. per hour
MTBF at 40°C/U <sub>max</sub> acc. to MIL-HB-217 F:	> 200'000 h

Conception conforms to EN133200, UL1283 and CSA 22.2 Nr.8 1996

The PowerPro high current filter family PP3SW was developed for the following industrial applications:

- Frequency Converters
- Stepper Motor Drives
- UPS-Systems
- Inverters

## Technical data

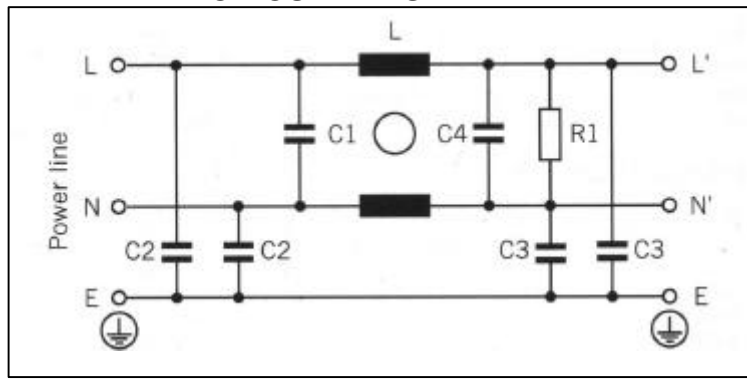
Type	In (A) 40°C (1)	Umax 50/60Hz (V)	Ln (mH) (2)	Resistance L-L' (mΩ)	Max leakage current 250V, 50Hz (mA)	C1 (iF)	C2 (nF)	C3 (nF)	C4 (iF)	R1 (MΩ)	Case	Terminal blocks (mm <sup>2</sup> )
PP1SW12	12	250	2x10	14,2	< 5,2	2,2	10	47	1,0	1	1	4
PP1SW20	20	250	2x3,5	5,8	< 5,2	2,2	10	47	1,0	1	1	4
PP31W30	30	250	2x1,5	2,4	< 5,6	2,2	15	47	1,0	1	2	6

(1)Current derating over 40°C:  $I=I_n \cdot (100 - \theta)/60$

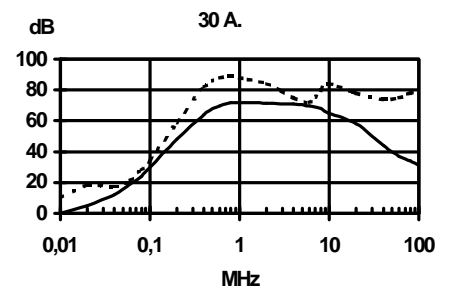
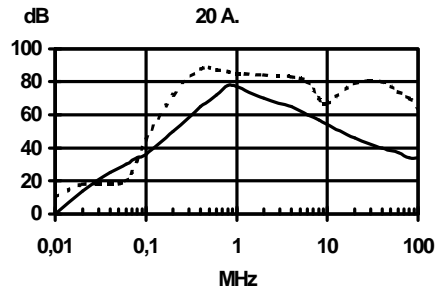
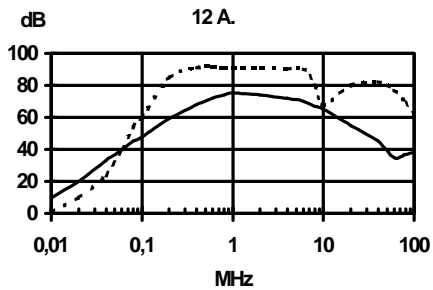
(2)Nominal inductance measured according EN138100

(3)Measured according to IEC60950,

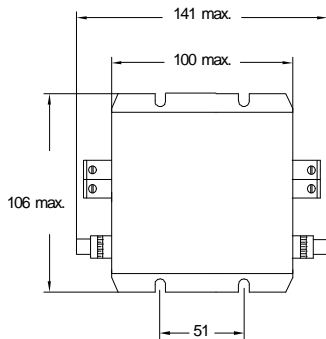
## CIRCUIT DIAGRAM



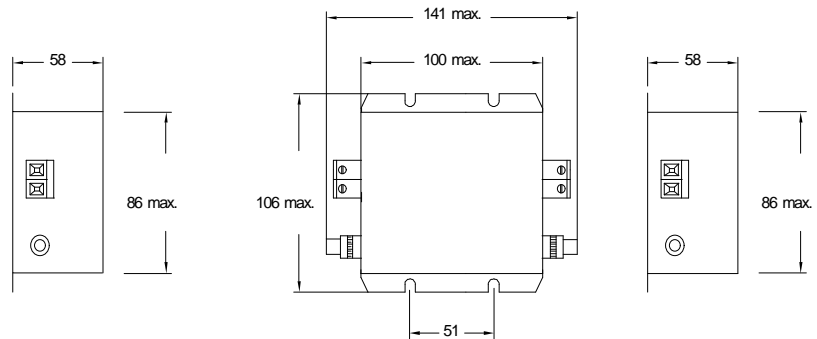
## INSERTION LOSS



CASE 1



CASE 2



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[www.efinet.com](http://www.efinet.com)