



# POWER PRO

## EMC-RFI HIGH CURRENT LINE FILTERS FOR 3-PHASE + NEUTRAL SYSTEMS

PP3SWN 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:	6-250 A, 40°C
Rated voltage (U <sub>max</sub> ):	275/480 Vac, 50/60 Hz
Attenuation:	High
Leakage Current:	For Industrial applications
Test Voltages:	L E 3 kVDC, 2 sec L L 2,25 kVDC, 2 sec L N 1,7 kVDC, 2 sec N E 2,7 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 PP3SWN was developed for the following industrial applications:

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

## Technical data of the high performance version – Umax 480 Vac

Type	In (A) 40°C (1)	Umax 50/60Hz (V)	Ln (mH) (2)	Resistance L-L' (mΩ)	Max leakage current 440V, 50Hz		C1 (iF)	C2 (iF)	C3 (nF)	C4 (nF)	C5 (iF)	C6 (iF)	R1 (MΩ)	R2 (MΩ)	Terminal blocks (mm <sup>2</sup> )	
					3-Phase systems (mA) (3)	Worst case (mA) (4)										
PP3SWN6	4x6	275/ 480V	4x9	27	< 5	40	1,0	-	100	10	2,2	-	-	1	4	
PP3SWN8	4x8		4x8	35		40	1,0	-	100	10	2,2	-	-	-	1	4
PP3SWN16	4x16		4x5	15		40	1,0	-	100	10	2,2	-	-	-	1	4
PP3SWN25	4x25		4x2,6	4,6		156	4,4	1	10	47	4,4	1	1	1	1	6
PP3SWN36	4x36		4x1,8	4		156	4,4	1	10	47	4,4	1	1	1	1	10
PP3SWN50	4x50		4x0,8	2		160	4,4	1	10	100	4,4	1	1	1	1	10
PP3SWN64	4x64		4x0,6	1,6		160	4,4	1	10	100	4,4	1	1	1	1	25
PP3SWN80	4x80		4x0,9	1,5		167	6,6	1	47	100	6,6	1	1	1	1	25
PP3SWN110	4x110		4x0,5	1,2		167	6,6	1	47	100	6,6	1	1	1	1	50
PP3SWN180	4x180		4x0,25	0,39		167	6,6	1	47	100	6,6	1	1	1	1	95
PP3SWN250	4x250		4x0,2	0,25		175	11	1	100	100	11	1	1	1	0,5	240

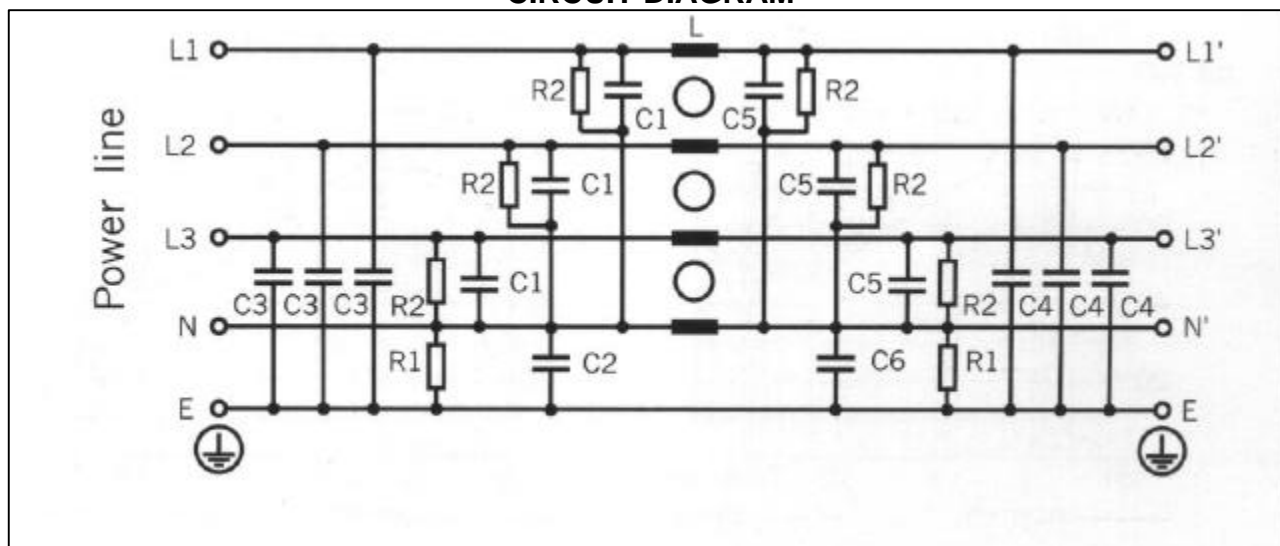
(1)Current derating over 40°C:  $I=I_n \cdot (100 - \theta)/60$

(2)Nominal inductance measured according EN138100

(3)Measured according to IEC60950, valid for TT and TN mains with regular Sinus

(4)Measured according to IEC60950, valid for IT mains

### CIRCUIT DIAGRAM



For company and product information, please visit

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MODEL	In	Case	DIMENSIONS (mm.)							Cable Ø (mm <sup>2</sup> )
			A	B	C	D	E	F	G	
PP-3SWN-6	6 A.	1	141	101	106	5.3	51	58	86	4
PP-3SWN-8	8 A.	1	221	181	116	6.5	115	61	86	4
PP-3SWN-16	16 A.	1	241	201	151	6.5	115	66	121	4
PP-3SWN-25	25 A.	1	241	201	151	6.5	115	66	121	6
PP-3SWN-36	36 A.	2	251	201	151	6.5	115	66	121	10

Vn: 3x440 V 50/60Hz

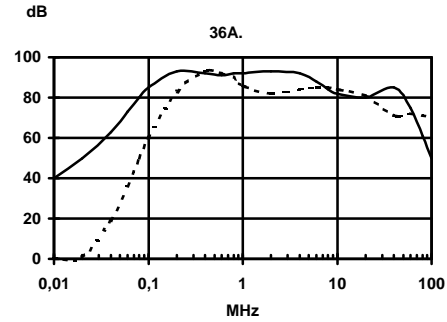
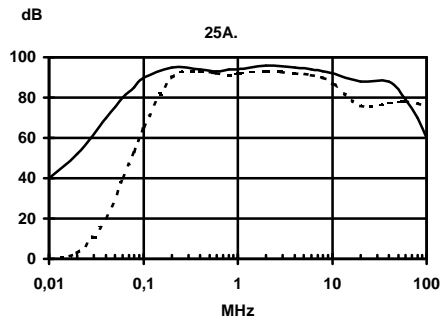
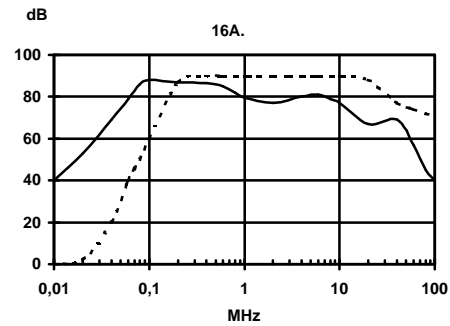
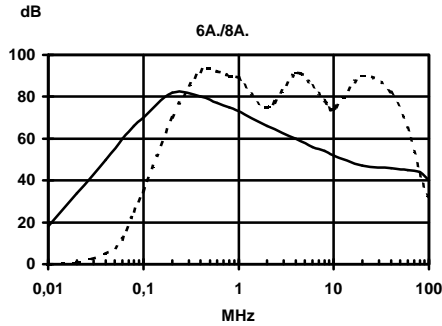
Max. Leakage Current < 5mA.

3-phase + neutral + ground

Climatic Conditions : - 25°C / +85°C 95% RH , 30 days

Overload Current : 1,5 x In 1 min. per hour

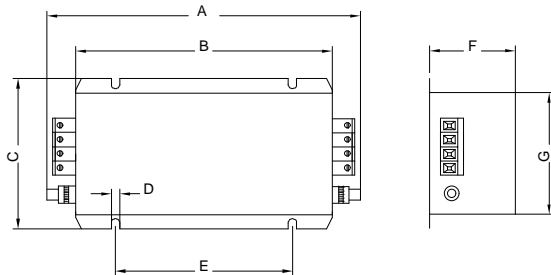
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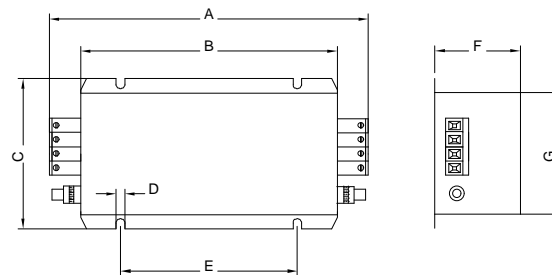
ASYMM. ———

SYMM. - - - - -

CASE 1



CASE 2



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MODEL	In	Case	DIMENSIONS (mm.)							Cable Ø (mm <sup>2</sup> )
			A	B	C	D	E	F	G	
PP-3SWN-50	50 A.	1	251	201	151	6.5	115	66	121	10
PP-3SWN-64	64 A.	1	308	231	151	6.5	115	66	121	25
PP-3SWN-80	80 A.	2	378	301	151	6.5x15	110	81	325	25
PP-3SWN-110	110 A.	2	387	301	151	6.5x15	110	81	325	50

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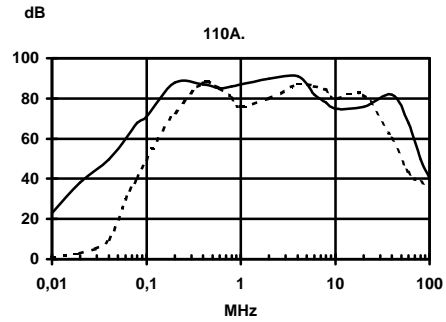
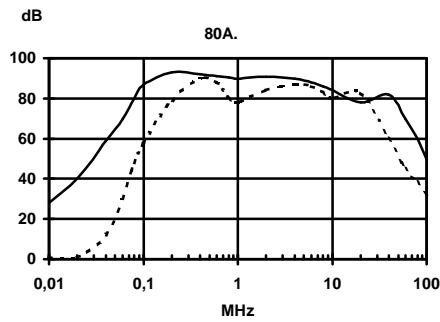
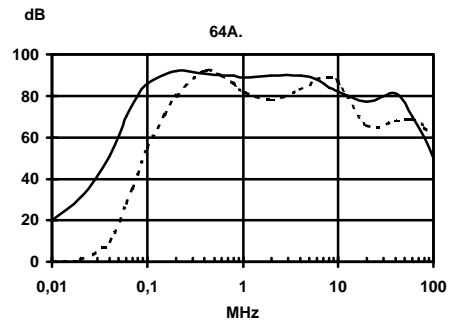
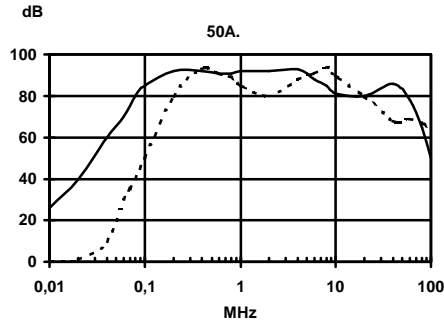
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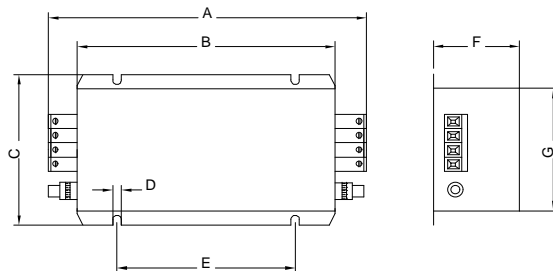
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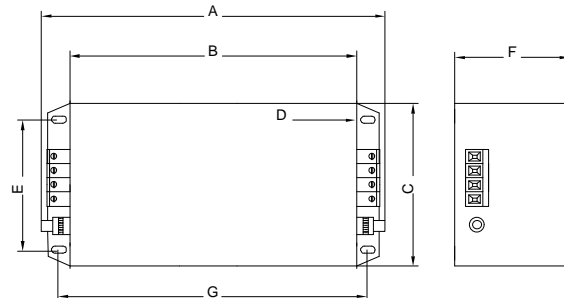
ASYMM.

SYMM.

CASE 1



CASE 2



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MODEL	In	Case	DIMENSIONS (mm.)							Cable Ø (mm <sup>2</sup> )	WEIGHT (Kg)
			A	B	C	D	E	F	G		
PP-3SWN-180	180 A.	1	591	400	232	9	280	169	171	95	21.000
PP-3SWN-250	250 A.	1	615	400	232	9	280	169	171	240	23.000

Vn: 3x440 V 50/60Hz

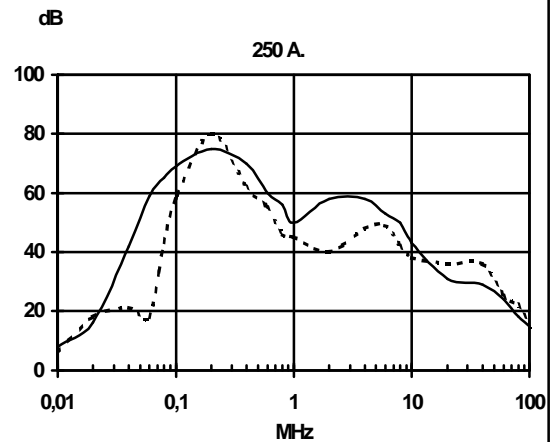
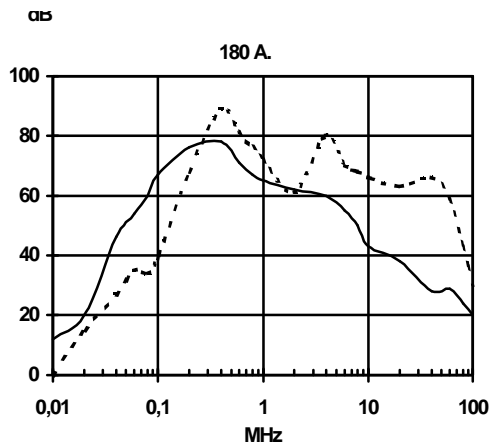
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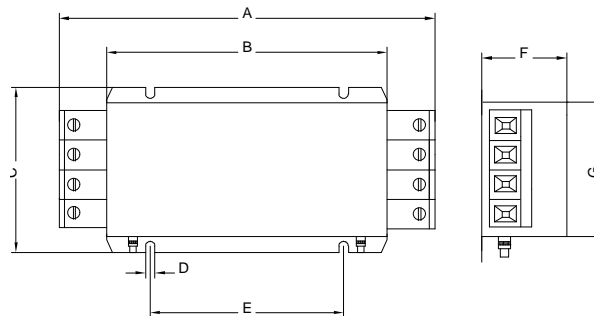
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ASYMM. ———

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CASE 1



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