



# Single Phase Block Filter

## FMAB NEO



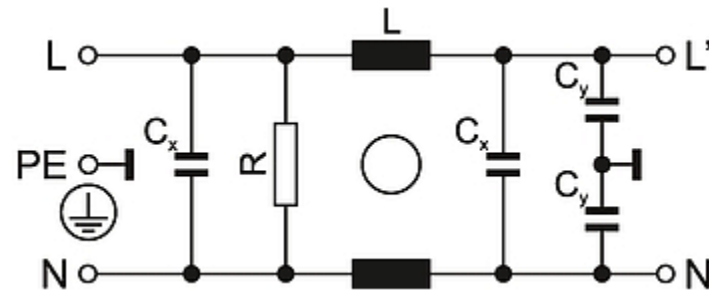
## Single Phase Block Filter FMAB NEO



- > Excellent symmetrical attenuation
- > Compact and cost optimized
- > Rated currents 1 – 30 A @ 40°C
- > Optional wire leads



- > New family of compact single phase filters
- > Cost effective single stage filters
- > New shiny metal housing with closed filter base
- > Electrical schematic



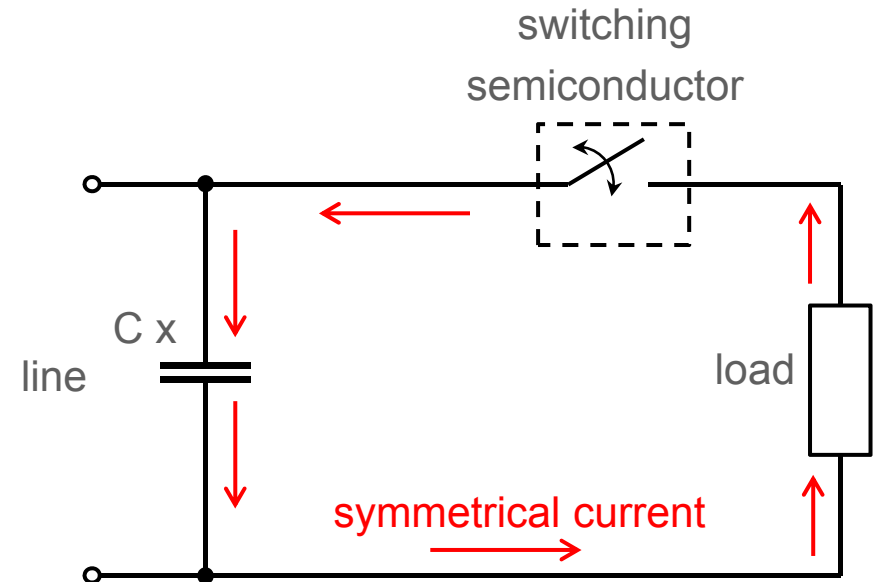
Design	Attenuation	Technical specification	Schaffner equivalent	Launch
N	excellent symmetrical	2 large Cx	FN 2030	Q2 2015
P	good symmetrical	2 standard Cx	FN 2020	Q4 2015
Q	standard	1 standard Cx	FN 2010	Q4 2015

## Design N

- > Compact single phase block filter
- > Full metal housing
- > Current ratings: 1 - 30A @ 40°C
- > Operating temperature: -25 to 100°C
- > Filter medical M5 / M80 versions
- > Terminals:
  - 1 – 20A: quick connect 6.3 x 0.8mm
  - 30A: nut and bolt M4
  - optional: wire leads
- > Approvals according IEC 60939, UL 1283, CSA C22.2 no. 8
- > Designed to meet IEC 60950 and IEC 60601-1

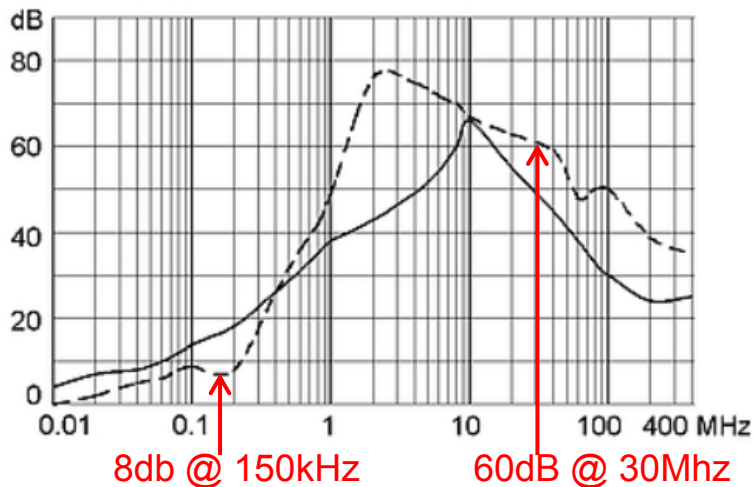


- > Symmetrical noise is between line and neutral
- > It's typically caused by switching semiconductors such as phase angle control or rectifier
- > Symmetrical noise can effectively be suppressed by capacitors between the lines ( $C_x$ )

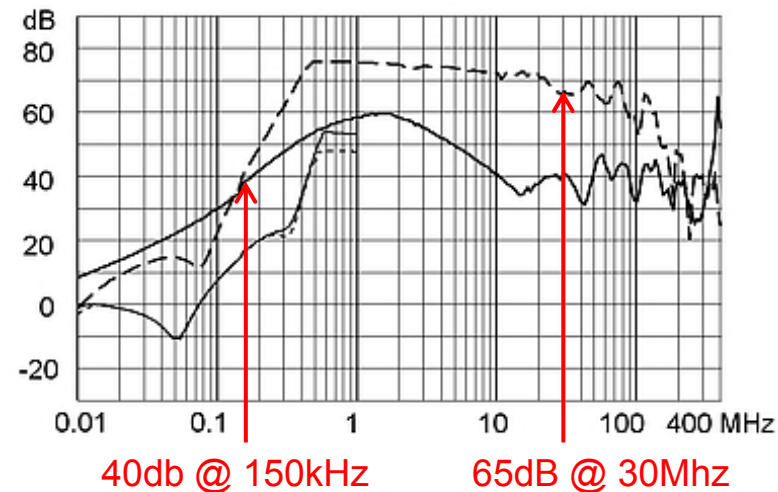


- > The new FMAB NEO series has two large X-capacitors with a capacity up to  $1\mu\text{F}$  each
- > Comparison of standard filters with different X-capacitors
  - > The symmetrical attenuation curve for the FMAB NEO 16 A is much higher over a wide frequency range

**FMLB-09 16A**  
Cx 2x 0.1 $\mu\text{F}$



**FMAB NEO 16A**  
Cx 2x 1.0 $\mu\text{F}$



Attenuation loss - - - symmetrical (differential mode) \_\_\_\_\_ asymmetrical (common mode)

## Strategic Positioning

- > Extension of SCHURTER's single phase filter range
- > First series of a new filter family made in China
- > Cost effective solution: single stage filter with big capacitors

## Applications

- > Applications with high symmetrical noise
  - > Industrial applications
  - > Household appliances
  - > Commercial kitchen equipment
  - > Datacom equipment
  - > Medical equipment

## Competitors

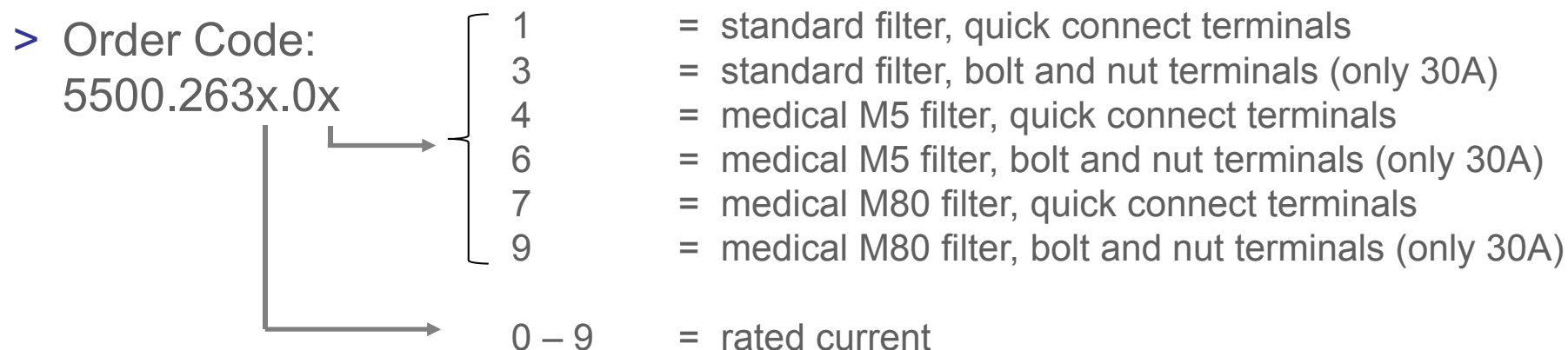
- > Schaffner FN 2030, Corcom K series  
Radius Power RP120/RP135 series

## Price Position

- > Competitive with Schaffner

## USP (Customer Focus)

- > Compact with full metal case
- > Wide current range
- > Optional wire leads
- > -40°C operating temperature  
(coming with the launch of Design Q,P)



## > Part numbers on the data sheet

Rated current	Filter-Type	Terminal	Design	Leakage Current	Ri	Power Loss	Weight	Housing	Packaging	Order Number
[A]				[mA]	[mΩ]	[W]	[g]		[ST]	
1	Standard Version	Quick connect terminal 6.3 x 0.8 mm	N	0.5	475	1	72 g	PG	20	5500.2630.01
3	Standard Version	Quick connect terminal 6.3 x 0.8 mm	N	0.5	83	1.5	104 g	PH	15	5500.2631.01
4	Standard Version	Quick connect terminal 6.3 x 0.8 mm	N	0.5	53	1.7	108 g	PH	15	5500.2632.01
6	Standard Version	Quick connect terminal 6.3 x 0.8 mm	N	0.5	32.5	2.4	109 g	PH	15	5500.2633.01
8	Standard Version	Quick connect terminal 6.3 x 0.8 mm	N	0.5	29.2	3.8	190 g	PI	10	5500.2634.01
10	Industrial Version	Quick connect terminal 6.3 x 0.8 mm	N	1	22.8	4.6	200 g	PI	10	5500.2635.01
12	Industrial Version	Quick connect terminal 6.3 x 0.8 mm	N	1	13.2	3.8	201 g	PI	10	5500.2636.01
16	Industrial Version	Quick connect terminal 6.3 x 0.8 mm	N	1	7.2	3.7	308 g	PK	10	5500.2637.01
20	Industrial Version	Quick connect terminal 6.3 x 0.8 mm	N	1	6	4.8	322 g	PK	10	5500.2638.01
30	Industrial Version	Bolt and nut M4	N	1	2.9	5.2	355 g	PK	10	5500.2639.03



## Medical Equipment



Medical laboratory equipment

## Industrial Applications



Welding machines

## Datacom Equipment



Datacom analysis equipment

## Household appliances



Commercial coffee machines

<b>Manufacturer</b>  <b>1 Phase Filter single stage</b> <b>Technical Features</b>	<b>Schurter</b> <a href="http://www.schurter.com">www.schurter.com</a>  <b>FMAB NEO</b>    <b>Part no.</b>	<b>Schaffner</b> <a href="http://www.schaffner.com">www.schaffner.com</a>  <b>FN 2030</b>    <b>Part no.</b>	<b>Corcom</b> <a href="http://www.corcom.com">www.corcom.com</a>  <b>K Series</b>    <b>Part no.</b>	<b>Radius Power</b> <a href="http://www.radiuspower.com">www.radiuspower.com</a>  <b>RP120 / RP 135 Series</b>    <b>Part no.</b>
1 A @ 40°C, 250 VAC 3 A @ 40°C, 250 VAC 4 A @ 40°C, 250 VAC 6 A @ 40°C, 250 VAC 8 A @ 40°C, 250 VAC 10 A @ 40°C, 250 VAC 12 A @ 40°C, 250 VAC 16 A @ 40°C, 250 VAC 20 A @ 40°C, 250 VAC 30 A @ 40°C, 250 VAC	5500.2630.01 5500.2631.01 5500.2632.01 5500.2633.01 5500.2634.01 5500.2635.01 5500.2636.01 5500.2637.01 5500.2638.01 5500.2639.03	FN2030-1-06 FN2030-3-06 n/a FN2030-6-06 n/a FN2030-10-06 n/a FN2030-16-06 FN2030-20-08 FN2030-30-08	1VK1 3VK1 n/a n/a n/a 10VK1 n/a n/a 20VK6 30VK6	n/a n/a n/a n/a n/a RP120-10-4.7-QD n/a RP135-20-10-QD RP135-20-10-S n/a

## Additional Information

- > Website enables quick access to sales and marketing materials
- > Click on [Partner Services](#) to download:
  - > Latest press releases
  - > Training presentations
  - > Price lists
  - > High and low resolution product photos
- > Samples can be ordered from the standard product inventory
- > Microsite: <http://fmab-neo.schurter.com>

## Technical Assistance

- > For general product questions, contact your Inside Sales Representative.
- > For technical assistance or specific design configurations, contact Herbert Blum at:  
[herbert.blum@schurter.ch](mailto:herbert.blum@schurter.ch)  
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