Single Phase Block Filter

FMAB NEO



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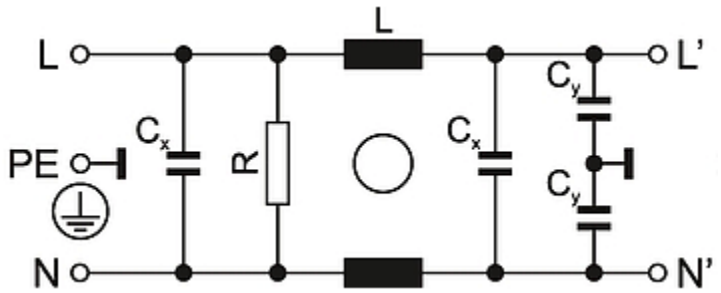


- Excellent symmetrical attenuation
- Compact and cost optimized
- Rated currents 1 – 30 A @ 40°C
- Optional wire leads

FMAB NEO - Family

SCHURTER ELECTRONIC COMPONENTS

- 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

FMAB NEO - Specifications

SCHURTER ELECTRONIC COMPONENTS

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

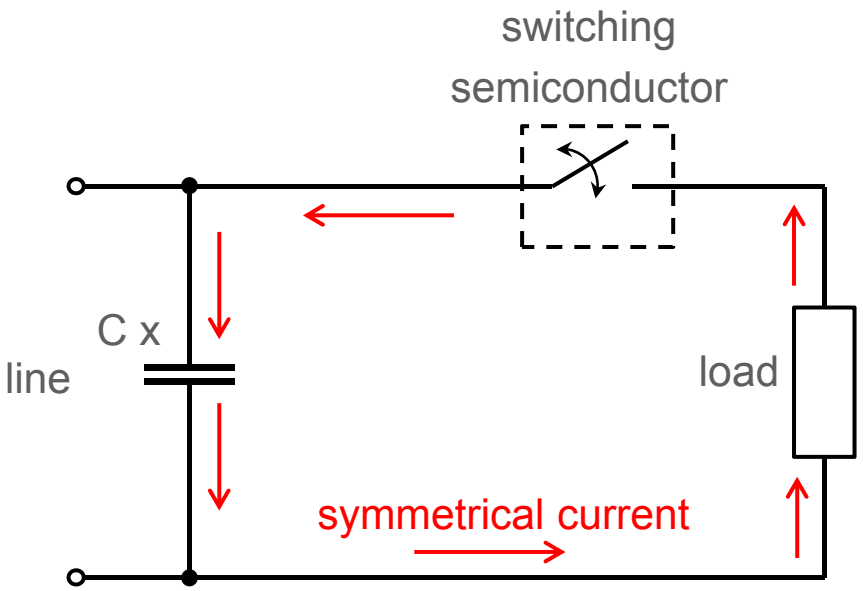






FMAB NEO – Symmetrical Noise

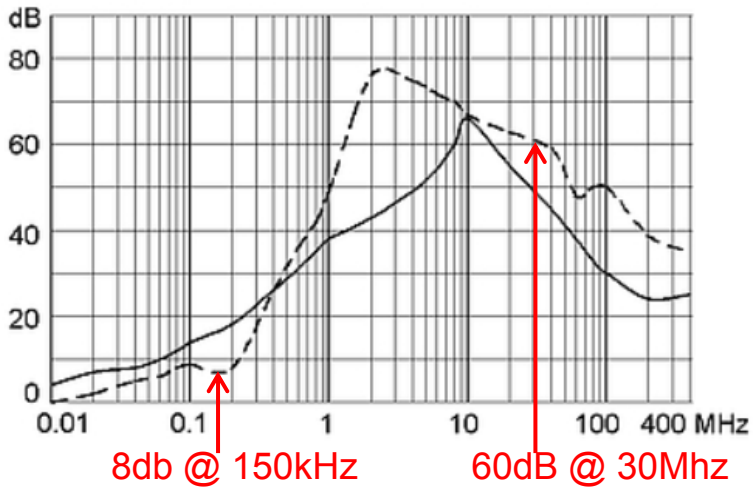
- Symmetrical noise is between line and neutral
- It's typically caused by switching semiconductors such as phase angle control or rectifier
- Symmetrical noise can effectively be suppressed by capacitors between the lines (Cx)



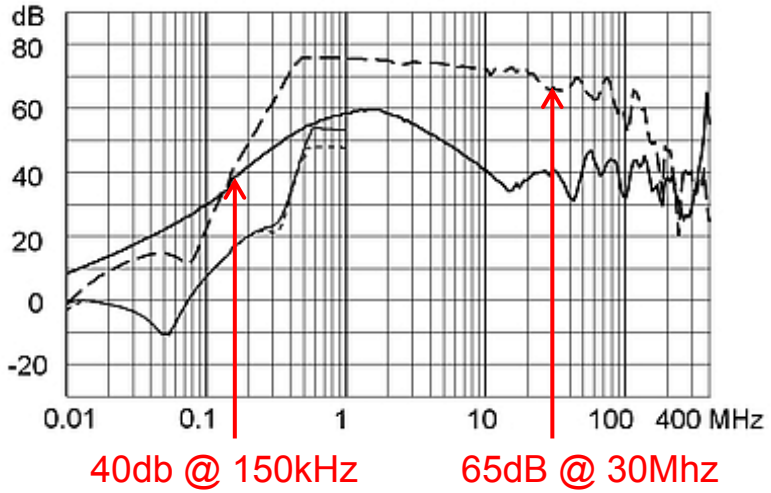
FMAB NEO – Symmetrical Noise

- The new FMAB NEO series has two large X-capacitors with a capacity up to 1µF 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 0.1µF



FMAB NEO 16A
Cx 2x 1.0µF



Attenuation loss - - - symmetrical (differential mode) _____ asymmetrical (common mode)

FMAB NEO – Market Position

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)

FMAB NEO – Ordering Information

SCHURTER ELECTRONIC COMPONENTS

> Order Code:
> 5500.263x.0x

1	=	standard filter, quick connect terminals
3	=	standard filter, bolt and nut terminals (only 30A)
4	=	medical M5 filter, quick connect terminals
6	=	medical M5 filter, bolt and nut terminals (only 30A)
7	=	medical M80 filter, quick connect terminals
9	=	medical M80 filter, bolt and nut terminals (only 30A)
0 – 9	=	rated current

> 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

FMAB NEO – Applications

SCHURTER ELECTRONIC COMPONENTS

Medical Equipment





Medical laboratory equipment

Industrial Applications





Welding machines

Household appliances



Commercial coffee machines

Datacom Equipment





Datacom analysis equipment

FMAB NEO – Cross reference

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

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