
To:	Owners Sales Manual	Category:	Product news
From:	Herbert Blum	Product group:	Single Phase Block Filters
Date:	December 2022	Pages:	3



FMAB NEO PE-Choke

Single Phase Block Filter

- Filter with ground choke
- Excellent symmetrical attenuation
- Fully closed steel housing
- Optional wire leads

Product

SCHURTER is expanding the successful FMAB NEO single-phase filter family with new variants. The filter is now available with an additional ground line choke to suppress high-frequency interference on the earth conductor. The new filter series is available in standard and medical versions for a rated current range of 1 A to 20 A with quick connect terminals.

Standard filters only filter the pole and neutral conductors, the earth line stays untouched. This can be a problem with the occurrence of high-frequency earth conductor currents, because in this case even the best filter can't do any improvements. The new filter versions with integrated earth conductor chokes offer a simple solution.

Ground choke

New variants of the FMAB NEO single-phase filters are equipped with a ground line choke. In addition to the current-compensated choke on the pole and neutral conductor, the mains filters have a second choke on the earth line. The ground line choke is located between the filter input and output. The filters therefore have two earth connections at the input and output, whereby the earth connection at the mains input is insulated from the housing. This ensures that possible high-frequency interference currents on the earth conductor cannot bypass the filter via the housing. Especially medical filters (without Y-capacitors) benefit from an improved asymmetrical attenuation in the higher frequency range due to the earth conductor choke.

Applications

Filters with earth line chokes are used in most applications with critical high-frequency earth line currents. High-frequency earth conductor currents are generated by any type of fast energy conversion such as switching power supplies, frequency converters or motor drives. Earth loops can occur in devices that are connected to other devices with shielded cables. The high-frequency interference current occurring on this earth loop is effectively attenuated with a ground choke. Typical applications are medical and laboratory equipment, audio and video as well as industrial systems.

Approvals

The single-stage FMAB NEO filter family has a particularly compact design combined with high performance. It is suitable for applications in the temperature range from -40 °C to +100 °C and has ENEC and cURus approvals.

Availability and Samples

All articles in the variant table are available in small quantities from stock. Larger quantities on request. More information about available stock of a specific variant may be retrieved by using the Distributor Stock Check in the table of variants on the [Data Sheet \[1\]](#).

Additional Information

This document together with the PR texts, -adverts and -pictures and pricing information are available in [Partner Service \[2\]](#). The [Data Sheet \[1\]](#) contains detailed information about the technical specifications, order numbers as well as CAD-Data.

Please do not hesitate to contact us in case of any questions.

Best Regards,

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Links to Sales Information

[1] Technical Data https://www.schurter.com/en/datasheet/FMAB_NEO

[2] Partner Service <https://ch.schurter.com/en/Home/Services/Partner-Service?SearchText=M1517>

New Part Numbers

Part no.	Description	Configuration code
3-137-000	FMAB NEO 1PH 1ST 1A 250VAC LL PE	FMAB-34UI-0140.PE
3-137-001	FMAB NEO 1PH 1ST 3A 250VAC LL PE	FMAB-34UI-0340.PE
3-137-002	FMAB NEO 1PH 1ST 4A 250VAC LL PE	FMAB-34UI-0440.PE
3-137-003	FMAB NEO 1PH 1ST 6A 250VAC LL PE	FMAB-34UI-0640.PE
3-137-004	FMAB NEO 1PH 1ST 8A 250VAC LL PE	FMAB-34UG-0840.PE
3-137-005	FMAB NEO 1PH 1ST 10A 250VAC LL PE	FMAB-34UG-1040.PE
3-137-006	FMAB NEO 1PH 1ST 12A 250VAC LL PE	FMAB-34UG-1240.PE
3-137-007	FMAB NEO 1PH 1ST 16A 250VAC LL PE	FMAB-34UG-1640.PE
3-137-008	FMAB NEO 1PH 1ST 20A 250VAC LL PE	FMAB-34UG-2040.PE
3-137-009	FMAB NEO 1PH 1ST 1A 250VAC M5 PE	FMAB-36UI-0140.PE
3-137-010	FMAB NEO 1PH 1ST 3A 250VAC M5 PE	FMAB-36UI-0340.PE
3-137-011	FMAB NEO 1PH 1ST 4A 250VAC M5 PE	FMAB-36UI-0440.PE
3-137-012	FMAB NEO 1PH 1ST 6A 250VAC M5 PE	FMAB-36UI-0640.PE
3-137-013	FMAB NEO 1PH 1ST 8A 250VAC M5 PE	FMAB-36UG-0840.PE
3-137-014	FMAB NEO 1PH 1ST 10A 250VAC M5 PE	FMAB-36UG-1040.PE
3-137-015	FMAB NEO 1PH 1ST 12A 250VAC M5 PE	FMAB-36UG-1240.PE
3-137-016	FMAB NEO 1PH 1ST 16A 250VAC M5 PE	FMAB-36UG-1640.PE
3-137-017	FMAB NEO 1PH 1ST 20A 250VAC M5 PE	FMAB-36UG-2040.PE
3-137-018	FMAB NEO 1PH 1ST 1A 250VAC M80 PE	FMAB-37UI-0140.PE
3-137-019	FMAB NEO 1PH 1ST 3A 250VAC M80 PE	FMAB-37UI-0340.PE
3-137-020	FMAB NEO 1PH 1ST 4A 250VAC M80 PE	FMAB-37UI-0440.PE
3-137-021	FMAB NEO 1PH 1ST 6A 250VAC M80 PE	FMAB-37UI-0640.PE
3-137-022	FMAB NEO 1PH 1ST 8A 250VAC M80 PE	FMAB-37UG-0840.PE
3-137-023	FMAB NEO 1PH 1ST 10A 250VAC M80 PE	FMAB-37UG-1040.PE
3-137-024	FMAB NEO 1PH 1ST 12A 250VAC M80 PE	FMAB-37UG-1240.PE
3-137-025	FMAB NEO 1PH 1ST 16A 250VAC M80 PE	FMAB-37UG-1640.PE
3-137-026	FMAB NEO 1PH 1ST 20A 250VAC M80 PE	FMAB-37UG-2040.PE