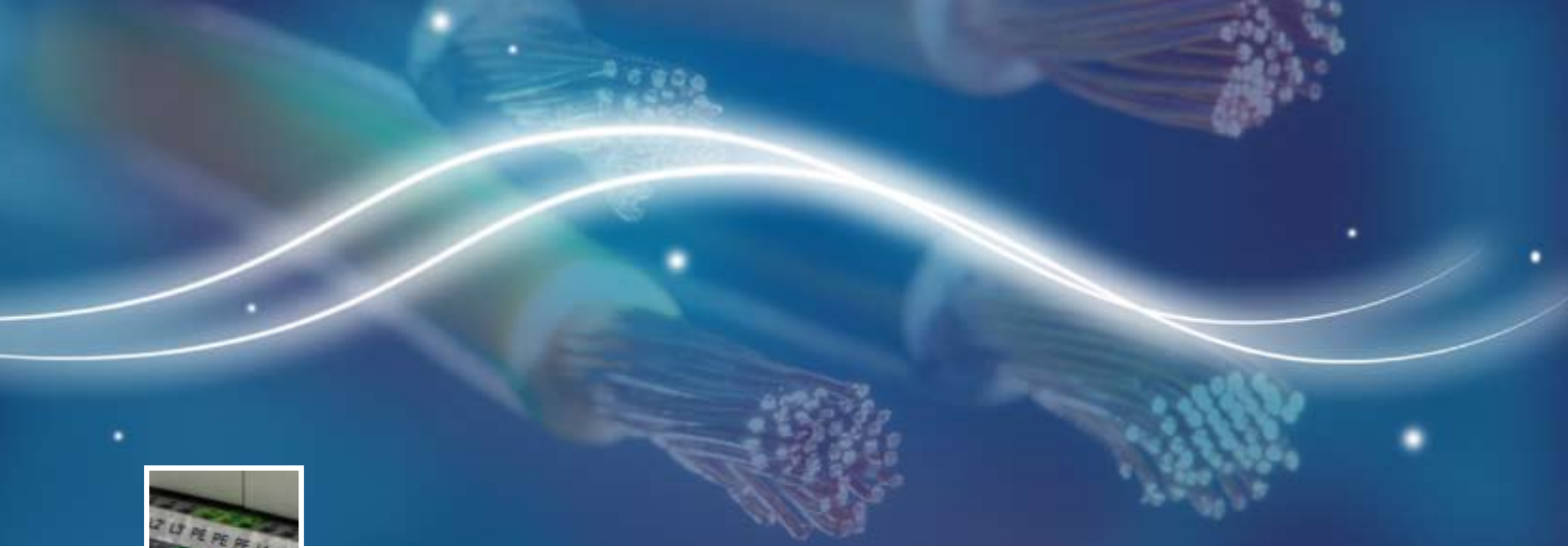


REO

INDUCTIVE COMPONENTS



REONIC[®]
Harmonic Filtration Technology

Harmonic Filters for Drive Engineering

Pure | Power | Perfection

Harmonic Filters for Drive Engineering

Modern electrical equipment, such as that used in drive engineering, is increasingly being optimised in terms of power consumption. Due to the choice of components and operating modes, these types of loads produce a non-sinusoidal current. When they operate they create harmonics which can affect the function and operating life of other equipment connected to the public mains network. Power quality standards are enforced to protect other consumers and to maintain a distortion-free mains supply, and these determine the levels of the harmonics that a consumer may generate.

The REONIC ® Harmonic Filter for drive engineering, depending on the operating conditions, provides compliance with Power Quality standards such as DIN EN 61000-3-12 and IEEE 519-1992. Besides reducing the THD (Total Harmonic Distortion) value to an acceptable level, the simple integration of a REONIC ® filter in an application also addresses the requirements for energy conservation and efficiency.

REONIC ® harmonic filters offer the following advantages:

- compact design
- a choice of terminations (terminals / connectors / cables / bus-bars)
- reduction of mains harmonics
- reduction of current in-rush during starting or switching
- protection against mains surges, current-spikes and short voltage-dips.
- increased frequency inverter/motor life
- compliance with power quality standards

Technical data for REONIC®

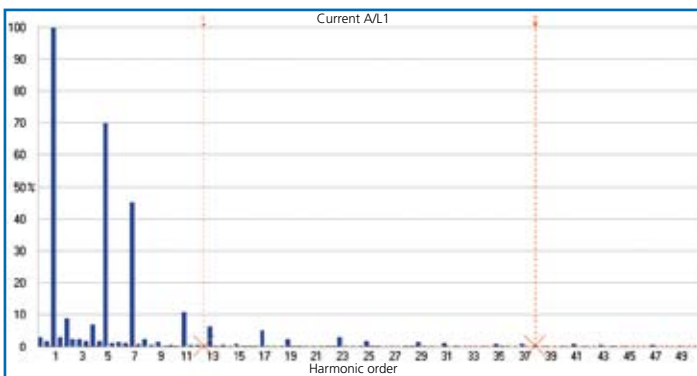
REONIC - Type	Rated voltage [V]	Rated current [A]	Leakage current 400 V / 50 Hz [mA]	Power losses [W]
CNW 898 / 3	3 x 400 (50 Hz)	3	< 15	38
CNW 898 / 6		6		44
CNW 898 / 10		10		74
CNW 898 / 16		16		90
CNW 898 / 25		25		102
CNW 898 / 36		36		130
CNW 898 / 50		50	< 30	152
CNW 898 / 80		80		190
CNW 898 / 120		120		220
CNW 898 / 150		150	< 100	270
CNW 898 / 180		180		300

REONIC® harmonic filters are available in other designs and can be built according to customer's requirements.



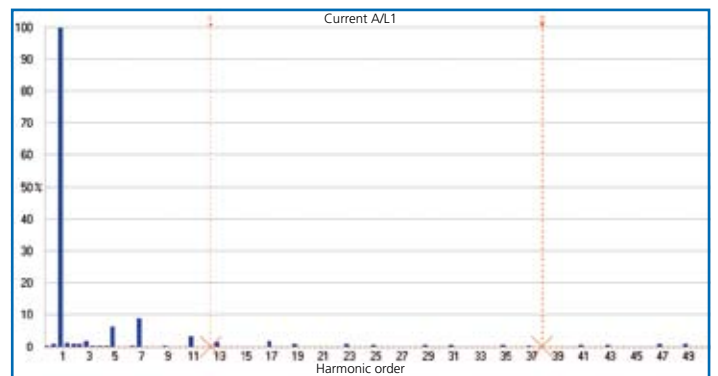
Examples of the frequency spectrum taken with and without the REONIC® harmonic filter connected.

Without REONIC® harmonic filter



Fundamental frequency = 50,0 Hz ·
Total Harmonic Distortion = 64,8 % ·
 KFactor = 16,0

With REONIC® harmonic filter



Fundamental frequency = 49,9 Hz ·
Total Harmonic Distortion = 11,7 % ·
 KFact = 1,9



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