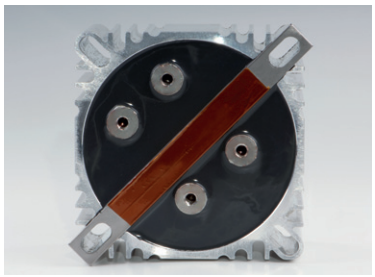


Common Mode Choke with aluminum casing for 300 A nominal current.

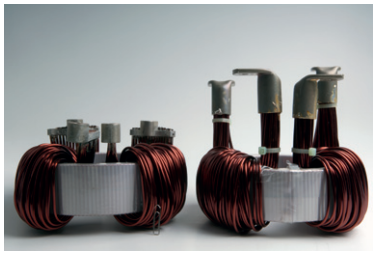
CUSTOMER SPECIFIC IS OUR STANDARD

Common Mode Chokes (CMC) are used in filter circuits in order to reduce grid-bound noise. While a lot of filter applications can rely on standard products, high-current applications typically need a specific approach.

Our modular system allows to adjust the CMC to our customers' demands but uses series components and approved part combinations.

Properties and advantages:

- Modular system for up to 1000 A
- Nanocrystalline cores for high inductance, temperature stability and broadband damping behavior
- Compact design, low height and reliable contacting
- Mounting holes integrated
- Robust design, suitable for higher mechanical requirements
- Adaptable to customers' demands



Common Mode Choke with SEKELS cable shoe (left) and with a conventional cable shoe (right).

Casing:

Mechanical stability, robustness under harsh thermal and climatic conditions and intelligent mounting options are the challenges for the supplier of power electronic components. Our CMC's are offered fully encapsulated, either with a plastic or an aluminum casing. Aluminum improves heat dissipation and mechanical stability.

Connections:

Wire connections are often the unrecognized weak points of power electronic devices. Thermally stressed by high currents and often exposed to mechanical vibrations the contact between copper wire and cable shoe can age very fast, the formation of „hot-spots" and later choke failure are the consequences. Our patented cable shoes reduce the height of our CMC significantly and offer a higher reliability.

NANOCRYSTALLINE TAPE-WOUND CORES

Remarkably low losses, high saturation magnetization and an unreached permeability make nanocrystalline tape-wound cores the first choice for filter applications. They allow size and efficiency optimized solutions with a broadband and almost temperature independent damping behavior. High quality nanocrystalline VITROPERM®- tape-wound cores made by VACUUMSCHMELZE GmbH & Co. KG are the first choice for our CMC.

CMC - Modular Types (L_N = 2 x 1000 µH)

Type	Nominal Current	Test Voltage	Copper Resistivity	Diameter (Plastic)	L x W (Aluminum)	Height	Weight
	I_N [A]	$U_{P,eff}$ [V]	R_{Cu} [µΩ]	Ø [mm]	a [mm]	h [mm]	m [kg]
B001	125 A (DC)	1.000 V (50 Hz)	< 240	108	114	52	2,2
B002	200 A (DC)	2.200 V (50 Hz)	< 140	138	145	70	3,5
B003	300 A (DC)	2.200 V (50 Hz)	< 90	180	185	85	6,5
B004	400 A (DC)	2.200 V (50 Hz)	< 80	220	230*	90	8,7
B005	500 A (DC)	2.200 V (50 Hz)	< 60	220	230*	120	11,3

Ambient Temperature -40 °C to +85 °C

* on request

SEKELS GMBH

SEKELS GmbH develops, produces and deals technical products in the field of magnetism. With approx. 25 employees (more than half of them physicists and engineers), SEKELS currently supplies over 600 customers worldwide.

Our products and services include:

- Customer-specific inductive components (CMC, transformer etc.)
- Expert distributor for products of Vacuumschmelze GmbH & Co. KG
- Amorphous and nanocrystalline (VITROPERM®, VITROVAC®) tape-wound cores and cut cores
- Laminations, core packages, tape-wound cores and cut cores made of other softmagnetic alloys
- Softmagnetic alloys and semifinished products (MUMETALL®, PERMENORM®, VACOFLUX®, SiFe, Pure Iron)
- Magnetic shielding, magnetic systems and devices
- Measurement services and development in the field of magnetic materials and magnetism

COMMON MODE CHOKES
FOR HIGH CURRENTS

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