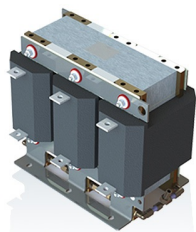


CNW MD 953

Water-cooled three-phase mains choke 8% Uk



Unique Selling Point

- Suitable for regenerative converters
- Up to 80% power dissipation at water cooling
- Reducing of the surface temperature to below 80 ° C
- Compact design
- Extended life-time of electrical consumers
- Attenuation of current spikes of up to 60%
- Reduction of the input current
- Production possible according to UL insulation system E251513
- Protection against dust and moisture
- Protection up to IP 65
- Excellent heat distribution

Description

Power Noise Reduction - save energy costs. The water-cooled power / filter choke CNW MD 953 series has been specially developed for smoothing flows in regenerative converters. By efficiently cooling the power losses is dissipated up to 80% by cooling and reduces heating of switching cabinets. The CNW MD 953 is also suitable for use as a filter choke in LCL filters.

By using a mains choke the inverter electronics and DC-capacitors will be protected.

Starting currents and current peaks are reduced up to 60%. Mains chokes helps to comply with international power quality standards IEEE 519 or EN 61000-3-2.

- Rated voltage: $U \leq 3 \times 500 \text{ V}$
- Short circuit: Uk 8% (400VAC/50Hz, INenn)
- Frequency: 50/60 Hz
- According to: EN 60289 / EN 61558
- Test voltage: L-L 2500 V, 50Hz 60s; L-PE 2500 V, 50Hz 60s
- Insulation class: T50/F
- Protection rating: IP00
- Climatic categorie: DIN IEC 60068-1
- Overload: 1,5 x INenn 1 min / h
- Cooling: Water/Glykol (70/30 %)
- Max. increased coolant inlet temperature: 50° C
- Flow rate: min. 3,6 l/min.
- Pressure drop: <0,5 bar

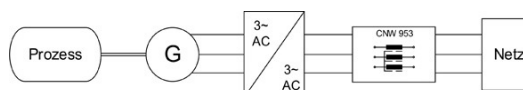
Typical applications

- Drive systems for motor drives:
 - Mechanical engineering
 - Conveyor technology
 - Automation technology
- Wind turbines
- Solar systems

Technical Data

- Nominal Voltage : 400 V
- Rated current : 200 - 1200 A
- Inductance : 0,012 - 0,074 mH

Circuit example



CNW MD 953

Water-cooled three-phase mains choke 8% Uk

Technical data

Type	Rated voltage [V]	Rated current [A]	U _k	Linear up to	Inductance [μH]	R ₂₀ [mΩ]	Winding weight [kg]
CNW MD 953/200	3 x 400 (optional 3x690)	200	8%	300	294	2,1	7
CNW MD 953/400		400		600	147	0,96	11
CNW MD 953/600		600		900	98	0,49	15
CNW MD 953/800		800		1200	74	0,4	19
CNW MD 953/1000		1000		1500	59	0,3	18
CNW MD 953/1200		1200		1800	49	0,18	32

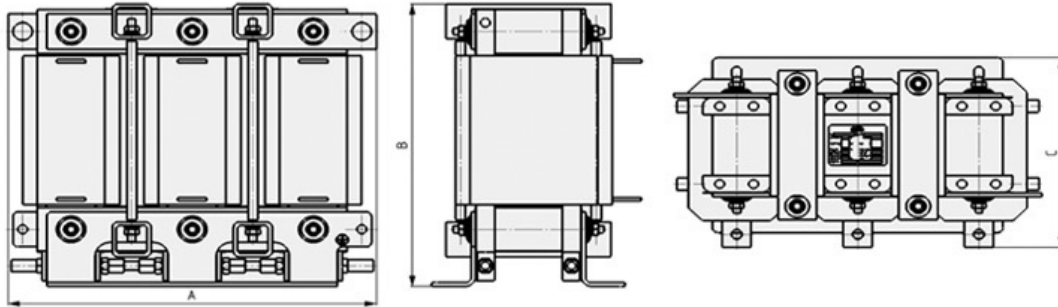
Higher power ratings on request

For Europe	For USA
Frequency: 50 Hz	Frequency: 60 Hz
Short circuit voltage U _k : 4% (by 400V)	Short circuit voltage U _k : 9,6% (by 200V)
Voltage drop: 9,23 V/branch	Voltage drop: 11,05 V/branch

CNW MD 953

Water-cooled three-phase mains choke 8% Uk

Dimension drawings



Dimensions

Type	A [mm]	B [mm]	C [mm]	Weight [kg]
Braced				
CNW MD 953/200	380	320	250	70
CNW MD 953/400	390	380	260	95
CNW MD 953/600	420	505	325	140
CNW MD 953/800	530	550	295	175
CNW MD 953/1000	510	590	335	225
CNW MD 953/1200	530	675	335	260
Unbraced				
CNW MD 953/200	380	312	250	68
CNW MD 953/400	390	372	260	93
CNW MD 953/600	420	478	325	133
CNW MD 953/800	530	523	295	168
CNW MD 953/1000	510	563	335	218
CNW MD 953/1200	530	646	335	253