Contatti REO Italia:
+39 030 279 3883 •
info@reoitalia.it

CNW 897

Three-phase harmonic filter (400 V /50/60 Hz)



Unique Selling Point

- Reduction of the THDI valuE
- Low voltage drop
- Increasing network stability
- Reduction of input current up to 30%
- Suitable for installation in control cabinets
- Easy integration into existing systems
- Increased reliability of electrical installations

Description

The filter is designed for the reduction of the THD (Total Har-monic Distortion) when used with B12 rectifiers. The harmonic currents are extremely suppressed so that the THD is reduced to lower than 5 % (for example in UPS-systems)

Typical values of Total Harmonic Distortion with B12 rectifiers and use of transformers are between 12 and 13%. This complies with the EN 61000-3-4 and EN 61000-3-12 standards.

If more severe conditions for the mains are defined, in addition to the transformer it is necessary to use REO-Harmonic-Filter type CNW 897. These filters are available in two different versions:

- THD < 5%
- THD < 10 %

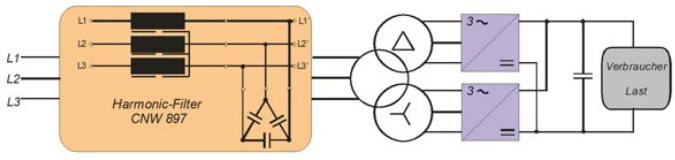
The IP00 version is especially suitable for panel mounting and can be mounted to save space here. The CNW 897 helps to comply with international power quality standards IEEE 519 or EN 61000-3 .

- Nominal voltage : 400 V
- Frequency : 50 Hz
- In accordance with : EN 60289 / EN 61558
- Test voltage : L - L 2500 V , DC 1min ; L - PE 2500 V , DC 1min
- Insulation class : T40 / F
- Protection : IP 00 (also available as IP20 version)
- Climate class : IEC 60068-1 DIN
- Nominal voltage : 400 V / 50/60 Hz
- Standards : IEEE 519 , EN 61000-3-12 , EN 61000-3-2 , IEC 61000-3-4

Technical Data

- Nominal Voltage : 400 V
- Rated current : 25 - 600 A
- Inductance of the choke : 0,2 - 2,9 mH

Circuit example



Typical applications:

- Drive technology for motor drives, e.g:
- Engineering
- Elevators / escalators
- Pipe
- Conveyor Technology
- Ventilation and air conditioning
- Robotics
- Automation Technology
- Power Supplies
- Failsafe processes
- Applications with a 6- pulse rectifier

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Technical data

Typ	Rated voltage/ Rated frequency [V]	Rated current 3x[A]	Inductance 3x[mH]	Capacity capacitor[µF]	Rated power [kVA]	Power loss [W]	Cu / Al [kg]	Weight choke [kg]	Weight capacitor [kg]
CNW 897/25/400/5%	3 x 400 50/60 Hz	25	2,9	3 x 68	17,3	70	9 / 0	20	5,98
CNW 897/40/400/5%		40	2,48	3 x 80	27,7	90	11 / 0	26	6,58
CNW 897/70/400/5%		70	1,1	3 x 180	48,5	130	18 / 0	32	10,18
CNW 897/90/400/5%		90	0,9	3 x 220	62,4	200	0.8 / 3.4	49	12,58
CNW 897/120/400/5%		120	0,75	3 x 220 + 3 x 40	83,1	250	0.8 / 5.1	59	17,66
CNW 897/150/400/5%		150	0,6	3 x 330	103,9	350	1 / 8.4	59	16,78
CNW 897/180/400/5%		180	0,5	3 x 220 + 3 x 180	124,7	330	1.1 / 8.4	65	21,86
CNW 897/250/400/5%		250	0,36	3 x 330 + 3 x 220	173,2	440	1.7 / 12.8	82	29,33
CNW 897/310/400/5%		310	0,3	6 x 330	214,8	570	1.9 / 14	95	33,53
CNW 897/400/400/5%		400	0,225	6 x 330 + 3 x 220	277,1	910	3 / 10.1	108	45,2
CNW 897/600/400/5%		600	0,2	9 x 330	415,7	1040	6.4 / 22.8	193	49,4

THD < 10% on request

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Dimensions drawings

Bild 1

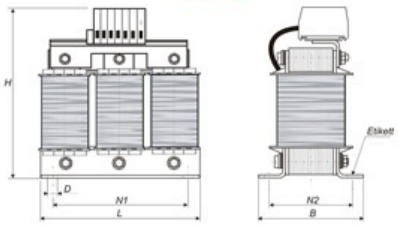
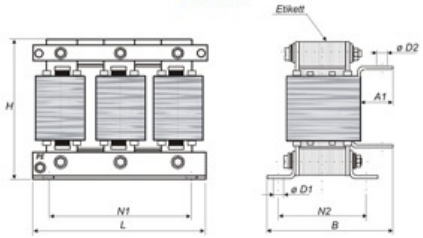


Bild 2



Dimensions

Type	L [mm]	B [mm]	H [mm]	N1 [mm]	N2 [mm]	ØD1 [mm]	A1 [mm]	ØD2 [mm]	Connection terminal/ Flat copper
CNW 897/25/400/5%	240	106	275	185	84	10 x 18	-	-	connection terminal 10 mm²
CNW 897/40/400/5%	240	126	285	185	104	10 x 18	-	-	connection terminal 16 mm²
CNW 897/70/400/5%	300	123	345	224	95	10 x 18	-	-	connection terminal35 mm²
CNW 897/90/400/5%	300	211	263	224	165	10 x 18	33	9	flat copper 25x3 mm
CNW 897/120/400/5%	340	209	293	248	165	10 x 18	32	9	flat copper 25x3 mm
CNW 897/150/400/5%	360	217	291	264	167	10 x 18	37	11	flat copper 30x3 mm
CNW 897/180/400/5%	360	213	311	264	167	10 x 18	37	11	flat copper 30x3 mm
CNW 897/250/400/5%	420	215	368	316	164	13 x 20	39	11	flat copper 30x4 mm
CNW 897/310/400/5%	480	217	414	356	158	13 x 20	39	11	flat copper 30x4 mm
CNW 897/400/400/5%	420	266	364	316	204	13 x 20	49	13	flat copper 40x5 mm
CNW 897/600/400/5%	480	317	466	356	238	13 x 20	59	13	flat copper 40x8 mm

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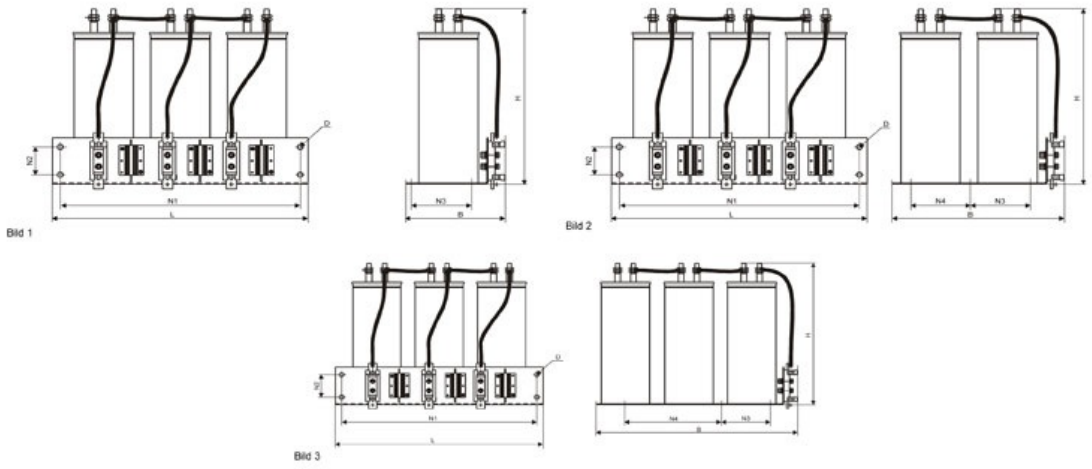
Dimension drawings of the chasis



Dimensions of the chasis

Type	Image	L [mm]	B [mm]	H [mm]	N1 [mm]	N2 [mm]	N3 [mm]	N4 [mm]	ØD [mm]	Connection	Fuse
CNW 897/25/400/5%	1	500	242	219	450	50	100	-	7	M8	NH00 25A
CNW 897/40/400/5%	1	500	242	219	450	50	100	-	7	M8	NH00 35A
CNW 897/70/400/5%	1	500	242	284	450	50	100	-	7	M8	NH00 63A
CNW 897/90/400/5%	1	500	242	359	450	50	100	-	7	M8	NH00 100A
CNW 897/120/400/5%	2	500	392	359	450	50	100	125	7	M8	NH00 100A
CNW 897/150/400/5%	1	500	242	358	450	50	100	-	7	M8	NH00 125A
CNW 897/180/400/5%	2	500	392	359	450	50	100	125	7	M8	NH00 160A
CNW 897/250/400/5%	2	500	415	359	450	50	100	125	7	M10	NH1 200A
CNW 897/310/400/5%	2	500	415	358	450	50	100	125	7	M10	NH1 250A
CNW 897/400/400/5%	3	500	572	359	450	50	100	275	7	M10	NH2 315A
CNW 897/600/400/5%	3	500	572	358	450	50	100	275	7	M10	NH2 355A

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