

# CNW 903

Three-phase mains choke 4% Uk



## Unique Selling Point

- Compact design
- Extended life-time of electrical consumers
- Low temperature rise
- Attenuation of current spikes up to 60%
- Reduction of input current up to 20%
- Low noise
- Production according to UL insulation system E251513 possible

## Description

Power Noise Reduction - save up to 20% energy costs. A mains choker relieved the supply network by compensating the harmonics reactive power. The harmonics and commutation notches are reduced strongly. 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 4% (400VAC/50Hz, INenn)
- Frequency: 50/60 Hz
- According to: EN 60289 / EN 61558
- Test voltage: L-L 2500 V, DC 1min; L-PE 2500 V, DC 1min
- Insulation class: T40/F
- Protection rating: IP00
- Climatic categorie: DIN IEC 60068-1
- Overload: 1,5 x INenn 1 min / h
- Design: mounted on footprint

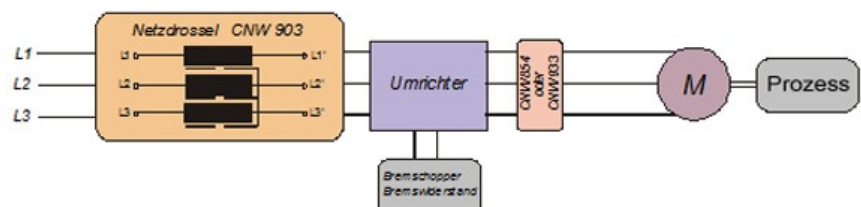
## Typical applications

- Drive systems for motor drives:
  - Mechanical engineering
  - Elevators / escalators
  - Pipes
  - Conveyor technology
  - Ventilation and air conditioning
  - Robotics
  - Automation technology
- Power supplies
- Wind turbines

## Technical Data

- Nominal Voltage : 3 x 500 V
- Rated current : 3-1200 A
- Inductance : 9,800-0,024 mH

## Circuit example



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## Technical data

Type	Rated voltage UN [V]	Rated current IN [A]	Inductance L [mH]	Losses P [W]	Weight [kg]
CNW 903/3	3 x 400 50/60 Hz	3	9,800	14	1,5
CNW 903/6		6	4,880	22	2,4
CNW 903/8		8	3,680	25	2,8
CNW 903/10		10	2,930	30	3,1
CNW 903/12		12	2,450	32	3,9
CNW 903/16		16	1,830	42	4,4
CNW 903/25		25	1,170	48	6,4
CNW 903/36		36	0,810	59	9,2
CNW 903/50		50	0,590	76	11
CNW 903/70		70	0,420	96	15
CNW 903/90		90	0,320	130	19
CNW 903/110		110	0,270	150	23
CNW 903/125		125	0,235	180	24
CNW 903/160		160	0,180	210	29
CNW 903/200		200	0,147	290	34
CNW 903/250		250	0,118	350	40
CNW 903/300		300	0,098	360	44
CNW 903/350		350	0,084	430	52
CNW 903/400		400	0,074	590	58
CNW 903/500		500	0,059	660	66
CNW 903/600	600	0,049	790	81	
CNW 903/700	700	0,042	820	89	
CNW 903/800	800	0,037	1000	101	
CNW 903/900	900	0,033	1000	130	
CNW 903/1000	1000	0,029	1170	130	
CNW 903/1200	1200	0,024	1180	147	

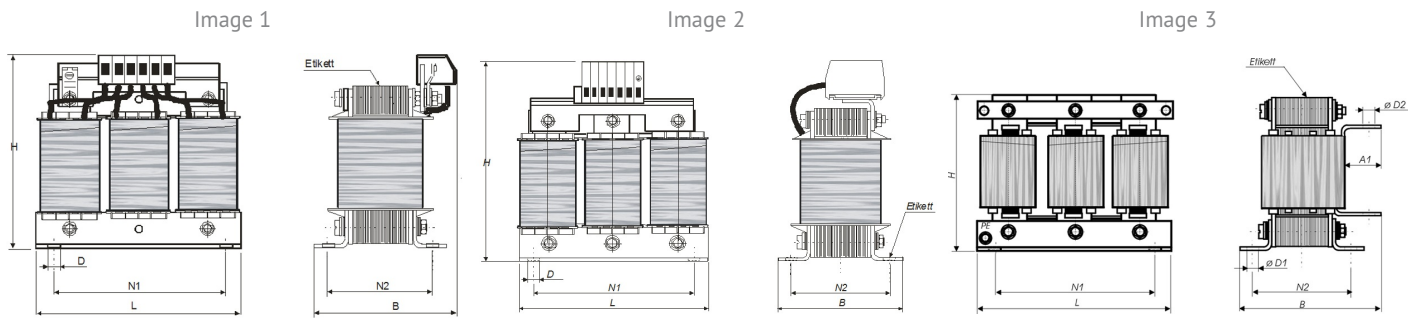
Higher power ratings on request

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

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## Dimension drawings



## Dimensions

Type	Length L [mm]	Width B [mm]	Height H [mm]	Holder		A1	D / D1	D2	Conenction	Image
				N1 [mm]	N2 [mm]					
CNW 903/3	95	71	105	30	43	-	4.8 x 9	-	1,5 mm <sup>2</sup>	1
CNW 903/6	125	76	123	100	45	-	5 x 8	-	2,5 mm <sup>2</sup>	1
CNW 903/8	125	85	123	100	55	-	5 x 8	-	2,5 mm <sup>2</sup>	1
CNW 903/10	125	85	123	100	55	-	5 x 8	-	2,5 mm <sup>2</sup>	1
CNW 903/12	155	95	137	130	56	-	8 x 12	-	5 mm <sup>2</sup>	2
CNW 903/16	155	77	153	130	57	-	8 x 12	-	5 mm <sup>2</sup>	2
CNW 903/25	155	92	185	130	72	-	8 x 12	-	10 mm <sup>2</sup>	2
CNW 903/36	190	92	228	170	68	-	8 x 12	-	16 mm <sup>2</sup>	2
CNW 903/50	190	102	230	170	78	-	8 x 12	-	16 mm <sup>2</sup>	2
CNW 903/70	230	90	270	176	71	-	9 x 13	-	35 mm <sup>2</sup>	2
CNW 903/90	240	107	280	185	85	-	10 x 18	-	50 mm <sup>2</sup>	2
CNW 903/110	240	138	211	185	94	32	10 x 18	9	25 x 3	3
CNW 903/125	300	139	263	224	94	32	10 x 18	9	25 x 3	3
CNW 903/160	300	157	263	224	107	37	10 x 18	11	30 x 3	3
CNW 903/200	300	175	264	224	120	39	10 x 18	11	30 x 4	3
CNW 903/250	300	190	264	224	135	39	10 x 18	11	30 x 4	3
CNW 903/300	360	176	311	264	127	39	10 x 18	11	30 x 4	3
CNW 903/350	360	198	311	264	142	49	10 x 18	13	40 x 5	3
CNW 903/400	360	215	311	264	157	49	10 x 18	13	40 x 5	3
CNW 903/500	420	206	369	316	144	49	13 x 20	13	40 x 5	3
CNW 903/600	420	235	369	316	164	59	13 x 20	13	40 x 8	3
CNW 903/700	420	246	368	316	174	58	13 x 20	13	40 x 8	3
CNW 903/800	420	255	440	316	174	69	13 x 20	2x 13	60 x 5	3
CNW 903/900	480	275	458	356	178	79	13 x 20	2x 13	60 x 10	3
CNW 903/1000	480	275	460	356	178	79	13 x 20	2x 13	60 x 10	3
CNW 903/1200	540	287	483	450	144	79	13 x 20	2x 13	60 x 10	3