

- UL-listed
- compact construction

- also suitable for longer motor cables
- Manufacture concerning to UL insulation E251513

## Motor choke

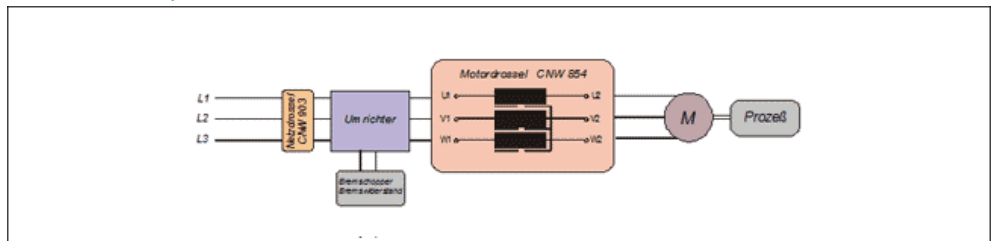
### CNW 854 UL-listed

#### Description

Longer lifetime of motors, reduction of edge steepness  $dV/dT$  to earth and between the phases, reduction of motor noise, current smoothing.

- > Conforming to: EN 60289 / EN 61558
- > Test voltage: L-L 2500 V, DC 1s; L-PE 2500 V, DC 1s
- > Rated voltage:  $U = 3 \times 500$  V
- > Insulation material class: T40/F
- > Protection: IP 00
- > Climatic category: DIN IEC 60068-1
- > Overload: 1,5 x  $I_{Nenn}$  1 min / h
- > Construction: standing mounting profile

#### Circuit example



#### Technical Data

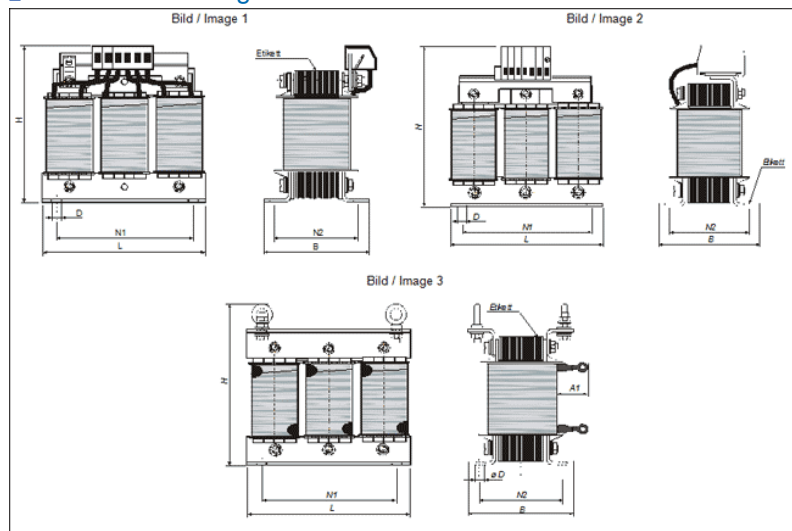
Rated voltage	500 V
Rated inductance	2,0 mH
Rated current	8 A

Type	Rated voltage [V]	Rated current [A]	Inductance per branch [mH]	Chopper ca. [kg]	Weight ca. [kg]
CNW 854 / 4	3 x 500 50/60 Hz	4	3,6	0,5	1,1
CNW 854 / 8		8	2,0	0,6	1,5
CNW 854 / 10		10	1,7	0,9	2,2
CNW 854 / 12		12	1,2	1,1	2,7
CNW 854 / 16		16	0,9	1,1	2,9
CNW 854 / 24		24	0,7	1,9	4,4
CNW 854 / 30		30	0,5	1,9	4,4
CNW 854 / 37		37	0,42	2,6	6,3
CNW 854 / 48		48	0,38	3,7	8,0
CNW 854 / 60		60	0,28	4,0	8,5
CNW 854 / 75		75	0,22	4,2	10,0
CNW 854 / 90		90	0,19	4,5	11,6
CNW 854 / 115		115	0,17	9,6	20,5
CNW 854 / 150		150	0,12	9,6	21,2
Clock frequency inverter		up to 16 kHz	up to 8 kHz	up to 4 kHz	
max. line length		50 m	150 m	200 m	

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#### Dimension drawings

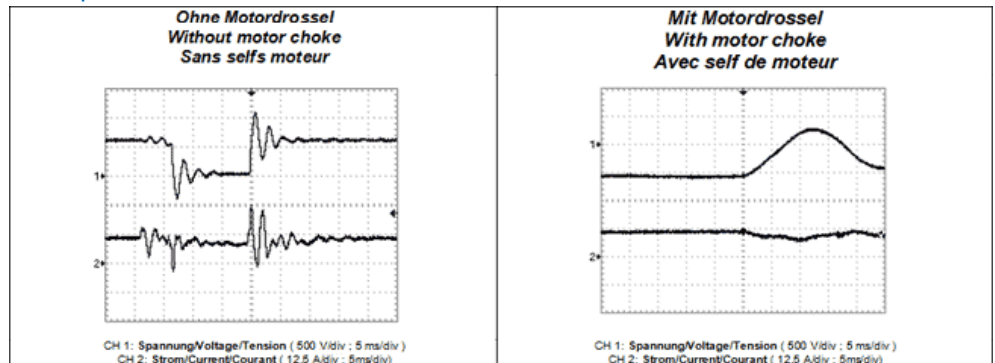


Type	Dimensions								
	Image	L [mm]	B [mm]	Hmax [mm]	N1 [mm]	N2 [mm]	ÆD [mm]	A1 [mm]	Connection [mm <sup>2</sup> ]
CNW 854/4	1	73	47	105	56	34	4,8 x 9	-	1,5
CNW 854/8	1	73	56	105	56	43	4,8 x 9	-	2,5
CNW 854/10	2	125	61	160	100	45	5 x 8	-	2,5
CNW 854/12	2	125	71	160	100	55	5 x 8	-	4,0
CNW 854/16	2	125	71	160	100	55	5 x 8	-	6,0
CNW 854/24	2	155	78	185	130	57	8 x 12	-	10
CNW 854/30	2	155	92	185	130	72	8 x 12	-	10
CNW 854/37	2	155	92	185	130	72	8 x 12	-	10
CNW 854/48	2	190	82	230	170	58	8 x 12	-	16
CNW 854/60	2	190	82	230	170	58	8 x 12	-	35
CNW 854/75	2	190	92	230	170	68	8 x 12	-	35
CNW 854/90	2	190	102	230	170	78	8 x 12	-	35
CNW 854/115	3	240	107	260	185	85	10 x 18	70	M12 95
CNW 854/150	3	240	107	260	185	85	10 x 18	70	M12 95

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#### Comparison with and without motor chokes



The conventional output choke has a very good storing behaviour. The choke has the effect of a typical series inductance and smoothes the symmetrical actual current and the asymmetrical parasitic current. The voltage rise is limited to less than 500 V/ $\mu$ s. The voltage peaks of the voltage between lines on the motor terminal board are lower than 1000 V. This solution attenuates the cable-conducted disturbance very well even in the lower frequency range. The electromagnetic radiation of the lead is considerably attenuated. Losses and typical motor noise, caused by harmonics are reduced. The diagrams show the bounce by the pulse-width modulation. The voltage maximum and the voltage rise are considerably lower when using a motor choke. Thus, the motor isolation will be treated with care.