

CNW 905

Three-phase mains choke 2% Uk



Unique Selling Point

- Compact design
- Extended life-time of electrical consumers
- Low temperature rise
- Attenuation of current spikes up to 30%
- Reduction of input current up to 15%
- Low noise
- Production according to UL insulation system E251513 possible

Description

Power Noise Reduction - save up to 15% 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 30%. 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 2% (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

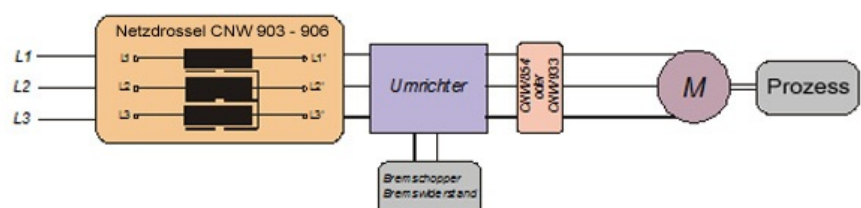
Typical applications

- 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 : 500 V
- Rated current : 3 - 1200 A
- Inductance : 0,012 - 4,8 mH

Circuit example



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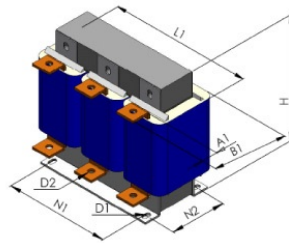
| Type | Rated voltage / Rated frequency [V] | Rated current [A] | Rated inductance per line [mH] | Copper [kg] | Alu [kg] | Weight [kg] |
|--------------|---|----------------------|-----------------------------------|----------------|-------------|----------------|
| CNW 905/3 | Bis 3 x 500V 50/60 Hz | 3 | 4,8 | 0,4 | - | 0,95 |
| CNW 905/6 | | 6 | 2,4 | 0,4 | - | 0,95 |
| CNW 905/8 | | 8 | 1,8 | 0,4 | - | 0,95 |
| CNW 905/10 | | 10 | 1,4 | 0,7 | - | 1,4 |
| CNW 905/12 | | 12 | 1,2 | 1,1 | - | 1,9 |
| CNW 905/16 | | 16 | 0,91 | 1,1 | - | 1,9 |
| CNW 905/25 | | 25 | 0,58 | 1,3 | - | 2,1 |
| CNW 905/36 | | 36 | 0,40 | 2,0 | - | 4,2 |
| CNW 905/50 | | 50 | 0,29 | 2,5 | - | 4,5 |
| CNW 905/70 | | 70 | 0,20 | 3,8 | - | 9,0 |
| CNW 905/90 | | 90 | 0,16 | 4,1 | - | 11,0 |
| CNW 905/110 | | 110 | 0,13 | 6,5 | - | 12,0 |
| CNW 905/125 | | 125 | 0,12 | 6,5 | - | 12,0 |
| CNW 905/160 | | 160 | 0,09 | 11,0 | - | 25,0 |
| CNW 905/200 | | 200 | 0,073 | 1,4 | - | 35 |
| CNW 905/250 | | 250 | 0,058 | 1,4 | - | 35 |
| CNW 905/300 | | 300 | 0,049 | 1,4 | 5,1 | 48 |
| CNW 905/350 | | 350 | 0,042 | 2,4 | 5,5 | 49 |
| CNW 905/400 | | 400 | 0,036 | 2,8 | 6,0 | 56 |
| CNW 905/500 | | 500 | 0,029 | 2,8 | 7,5 | 75 |
| CNW 905/600 | 600 | 0,024 | 3,1 | 8,0 | 75 | |
| CNW 905/700 | 700 | 0,021 | 4,1 | 9,0 | 85 | |
| CNW 905/800 | 800 | 0,018 | 4,1 | 17,0 | 84 | |
| CNW 905/900 | 900 | 0,016 | 10,1 | 20,0 | 140 | |
| CNW 905/1000 | 1000 | 0,014 | 10,1 | 21,0 | 140 | |
| CNW 905/1200 | 1200 | 0,012 | 10,1 | 23,0 | 144 | |

Higher power ratings on request

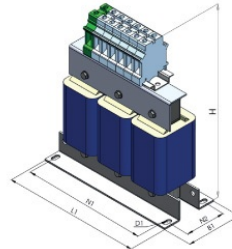
| For Europe | For USA |
|--|--|
| Frequency: 50 Hz | Frequency: 60 Hz |
| Short circuit voltage Uk: 4% (by 400V) | Short circuit voltage Uk: 9,6% (by 200V) |
| Voltage drop: 9,23 V/branch | Voltage drop: 11,05 V/branch |

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Version mit Kupferschienen ab 80 A



Version mit Klemmen

| Type | Version | L [mm] | B [mm] | Hmax [mm] | N1 [mm] | N2 [mm] | ØD [mm] | A1 [mm] | Connection |
|--------------|------------|-----------|-----------|--------------|------------|------------|------------|------------|--------------------|
| CNW 905/3 | Terminals | 95 | 47 | 105 | 56 | 34 | 4,8x9 | | 1,5mm ² |
| CNW 905/6 | Terminals | 95 | 56 | 107 | 56 | 43 | 4,8x9 | | 1,5mm ² |
| CNW 905/8 | Terminals | 125 | 61 | 127 | 100 | 45 | 5x8 | | 2,5mm ² |
| CNW 905/10 | Terminals | 125 | 71 | 127 | 100 | 55 | 5x8 | | 2,5mm ² |
| CNW 905/12 | Terminals | 125 | 71 | 127 | 100 | 55 | 5x8 | | 4,0mm ² |
| CNW 905/16 | Terminals | 155 | 77 | 153 | 130 | 57 | 8x12 | | 4,0mm ² |
| CNW 905/25 | Terminals | 155 | 92 | 185 | 130 | 72 | 8x12 | | 10mm ² |
| CNW 905/36 | Terminals | 190 | 82 | 205 | 170 | 58 | 8x12 | | 10mm ² |
| CNW 905/50 | Terminals | 190 | 102 | 220 | 170 | 78 | 8x12 | | 16mm ² |
| CNW 905/70 | Terminals | 230 | 90 | 270 | 176 | 71 | 9x13 | | 35mm ² |
| CNW 905/90 | Terminals | 240 | 107 | 280 | 185 | 85 | 10x18 | | 35mm ² |
| CNW 905/110 | Terminals | 240 | 117 | 295 | 185 | 95 | 10x18 | | 50mm ² |
| CNW 905/125 | Terminals | 240 | 122 | 295 | 185 | 99 | 10x18 | | 50mm ² |
| CNW 905/160 | Terminals | 300 | 122 | 360 | 224 | 94 | 10x18 | | 95mm ² |
| CNW 905/200 | Cable lugs | 310 | 180 | 260 | 224 | 117 | 10x18 | 40 | 9 |
| CNW 905/250 | Cable lugs | 310 | 180 | 260 | 224 | 137 | 10x18 | 40 | 9 |
| CNW 905/300 | Cu-Bar | 400 | 200 | 310 | 248 | 139 | 10x18 | 40 | 9 |
| CNW 905/350 | Cu-Bar | 400 | 210 | 310 | 248 | 139 | 10x18 | 40 | 11 |
| CNW 905/400 | Cu-Bar | 400 | 230 | 310 | 248 | 164 | 10x18 | 40 | 11 |
| CNW 905/500 | Cu-Bar | 400 | 250 | 310 | 248 | 199 | 10x18 | 40 | 11 |
| CNW 905/600 | Cu-Bar | 400 | 250 | 310 | 248 | 199 | 10x18 | 40 | 11 |
| CNW 905/700 | Cu-Bar | 460 | 260 | 370 | 316 | 180 | 13x20 | 50 | 13 |
| CNW 905/800 | Cu-Bar | 460 | 260 | 370 | 316 | 190 | 13x20 | 50 | 13 |
| CNW 905/900 | Cu-Bar | 490 | 260 | 420 | 356 | 194 | 13x20 | 60 | 13 |
| CNW 905/1000 | Cu-Bar | 490 | 260 | 420 | 356 | 194 | 13x20 | 60 | 2x13 |
| CNW 905/1200 | Cu-Bar | 490 | 280 | 420 | 356 | 199 | 13x20 | 60 | 2x13 |