

Comparison of the output signal of the output chokes

Output choke	<ul style="list-style-type: none"> Current- (CH1) and Voltage curve (CH2) at the output of the converter or the choke 	<ul style="list-style-type: none"> Voltage edge(CH1) at the motor Reversal current (CH2) at the beginning of the shielded cable to the motor 	Effect on voltage edge and recharging current to the motor
Without Output choke			<ul style="list-style-type: none"> $dv/dt > 6kV/\mu s$ $U_{max} = 1200V$ THDI : 76,16%
dv/dt - choke Type: CNW 806			<ul style="list-style-type: none"> $dv/dt < 500V/\mu s$ $U_{max} = 950V$ THDI : 50,03%
Motor choke Type: CNW 854			<ul style="list-style-type: none"> $dv/dt < 200V/\mu s$ $U_{max} = 950V$ THDI : 24,31%
Sine filter Type: CNW 933			<ul style="list-style-type: none"> Similar to mains operation optimal result THDI: 4,28%

Recommendations for use of our output chokes

Output choke type	Cable length to the motor	Cable length to the motor	Cable length to the motor
	< 50m	50m – 150m	> 150m
Switching frequency of the inverter < 2,5 kHz	CNW 811 / I[A] CNW 806 / I[A] CNW 854 / I[A]	CNW 854 / I[A]	CNW 933 / I[A]
Switching frequency of the inverter 2,5 kHz – 8kHz	CNW 811 / I[A] CNW 806 / I[A] CNW 854 / I[A]	CNW 854 / I[A]	CNW 933 / I[A]
Switching frequency of the inverter 8 kHz – 16kHz	CNW 854 / I[A] CNW 933 / I[A]	CNW 933 / I[A]	CNW 933 / I[A]

For additional information please refer to the corresponding data sheets!