

PRODUCT INFORMATION

Sinusoidal filter

Reduced noise and low-loss Sinus Filters

The Sinus Filters are designed in such way that nearly perfect sinusoidal voltages are produced at the output. The modulated output voltage of the converter, which has a high ratio of harmonics, is „smoothed.“

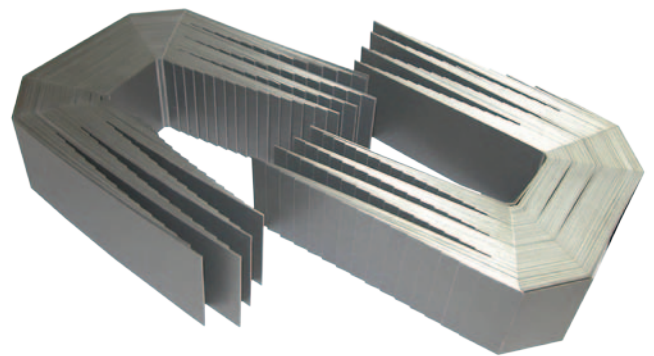
Voltage peaks caused by reflections are also attenuated by the filter.

Our product range includes sinus filters with a nominal voltage of 690V and a nominal current up to 500A. It is recommended to use Sinus Filters for motor cable lengths from 250m up to 800m.

The application of Unicore technology introduces the advantages of reduced noise emission and increased energy efficiency.

Sales spectrum:

Voltage range:	from 400V up to 690V
Current range:	up to 500A
Rated frequencies:	50 Hz / 60 Hz (but also special designs up to 400Hz)
Switching frequency:	from 1.5kHz up to 10kHz
Cooling modes:	AN, AF, and WF (direct and indirect water cooling)
Protection index:	IP00 / IP23 / IP54 with enclosure for wall fastening or ground erection IP65 (cast)
Class of insulation system:	Standard F, H on demand (up to 180 °C)



Technical data:

Article	Power	Current	Switching frequency	Total losses	Protection index	Dimensions			
	500V	500V		up to 400V		w	d	h	Weight
	[kW]	[A]	[kHz]	[W]		[mm]	[mm]	[mm]	[kg]
10 RSF 5 U	4	10	>4,5	60	IP00	210	120	230	7,2
					IP20				
13 RSF 5 U	5,5	13	>4,5	60	IP00	210	130	230	7,2
					IP20				
16 RSF 5 U	7,5	16	>4,5	100	IP00	210	130	230	13,5
					IP20				
24 RSF 5 U	11	24	>4,5	100	IP00	240	140	250	15
					IP20				
32 RSF 5 U	15	32	>4,5	160	IP00	280	200	290	24
					IP20				
37,5 RSF 5 U	18,5	37,5	>4,5	160	IP00	280	200	290	24
					IP20				
44 RSF 5 U	22	44	>4,5	255	IP00	340	220	350	34,5
					IP20				
61 RSF 5 U	30	61	>4,5	320	IP00	340	220	350	44
					IP20				
73 RSF 5 U	37	73	>4,5	320	IP00	340	240	350	44
					IP20				
90 RSF 5 U	45	90	>4,5	450	IP00	340	240	380	50
					IP20				
106 RSF 5 U	55	106	>3,6	570	IP00	400	240	420	69
					IP20				
147 RSF 5 U	75	147	> 3,6	680	IP00	400	250	420	96
					IP20				
177 RSF 5 U	90	177	>3,6	680	IP00	460	300	500	96
					IP20				
212 RSF 5 U	110	212	>3,6	760	IP00	460	300	500	130
					IP23				
260 RSF 5 U	132	260	>3,6	790	IP00	460	330	500	170
					IP20				
315 RSF 5 U	132	315	>3,6	1045	IP00	520	350	570	185
					IP23				
395 RSF 5 U	160	395	>3,6	1190	IP00	520	380	570	195
					IP23				
480 RSF 5 U	200	480	>3,6	1520	IP00	520	380	500	205
					IP21				

dU/dt-Filter

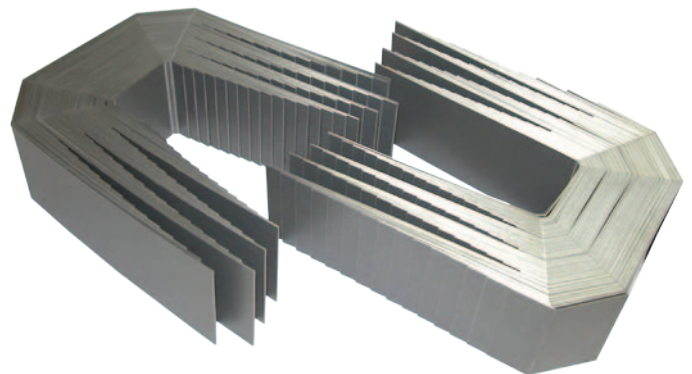
Reduced noise and low loss dU/dt-filters

The dU/dt-filters manufactured by us reduce the voltage slew rate to less than 500V/ μ s. Our product range contains dU/dt-filters for a nominal voltage up to 690V and a nominal current up to 800A. The filters are designed in such a way that the resonance frequency lies far above the modulation frequency. It is recommended to use dU/dt-filters for motor cable lengths up to 250 m.

The application of Unicore technology introduces the advantages of reduced noise emission and increased energy efficiency.

Sales spectrum:

Voltage range:	from 400V up to 690V
Current range:	up to 800 A
Rated frequencies:	50/60 Hz (but also special designs up to 400 Hz)
Switching frequency:	from 1.5 kHz up to 10 kHz
Cooling modes:	AN, AF and WF (direct and indirect water cooling)
Protection index:	IP00 / IP23 / IP54 with enclosure for wall fastening or ground erection IP65 (cast)
Class of insulation system:	Standard F, H on demand (up to 180 °C)



Survey on dU/dt filters:

Article	Power	Current	Switching frequency	Total losses	Protection index	Dimensions			
	500V	500V		up to 400V		w	d	h	Weight
	[kW]	[A]	[kHz]	[W]		[mm]	[mm]	[mm]	[kg]
38 RDT 5 U	18,5	37,5	<8	80	IP00	190	110	230	5,8
					IP20				
44 RDT 5 U	22	44	<8	93	IP00	190	110	230	6,5
					IP20				
61 RDT 5 U	30	61	<8	104	IP00	210	120	250	10
					IP20				
73 RDT 5 U	37	73	<8	110	IP00	210	130	250	11,5
					IP20				
90 RDT 5 U	45	90	<8	114	IP00	210	130	250	13
					IP20				
106 RDT 5 U	55	106	<8	152	IP00	210	130	250	18
					IP20				
147 RDT 5 U	75	147	<8	180	IP00	280	140	310	22
					IP20				
177 RDT 5 U	90	177	<8	210	IP00	280	180	320	26
					IP20				
212 RDT 5 U	110	212	<8	238	IP00	280	180	320	22,5
					IP20				
260 RDT 5 U	132	260	<8	285	IP00	340	200	420	48
					IP20				
315 RDT 5 U	160	315	<8	314	IP00	340	200	420	51
					IP20				
395 RDT 5 U	200	395	<8	437	IP00	400	250	450	62
					IP00				
480 RDT 5 U	250	480	<8	570	IP00	400	250	400	84
					IP20				
600 RDT 5 U	315	600	<8	570	IP00	460	280	400	105
					IP20				
658 RDT 5 U	355	658	<8	589	IP00	520	420	500	138
					IP20				
745 RDT 5 U	400	745	<8	608	IP00	520	450	500	149
					IP20				
800 RDT 5 U	450	800	<8	618	IP00	520	480	500	175
					IP00				