

Sine Wave Filters LC3SWF

The combination of precise three-phase reactors and high performance capacitors guarantees best-in-class motor protection and extended motor life-time. LC3SWF are designed to suit both - line input or load output of drive systems. The modular design and its overall small dimensions make it easy to integrate and install them.

Typical Applications

- Pumps
- HVAC applications
- Conveyors
- Motor drive with long motor cable
- Ventilators
- Retrofit installations with motor drives
- Compressors
- Motor drive with multiple motors in parallel

Feature and Benefits

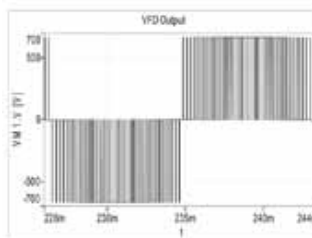
- Provides a sinusoidal output voltage
- Motor protection
- Reduce bearing currents
- Extended motor cable length capability
- Balanced inductance in all three phases
- Possible installation of filters in parallel

Technical Specifications

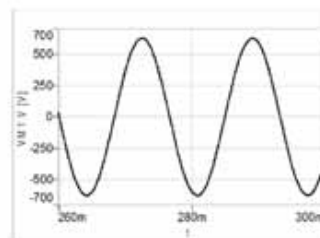
- Rated voltage: 400 Vac (other on request)
- Motor frequency: 70 Hz (up to 200Hz with derating)
- Switching frequency: See filter selection table
- Rated currents: 4,5 A – 1200 A at 40 °C max
- Winding temperature rise class: F
- Insulation class: H
- Working class: F
- Protection category: IP00 (other on request)
- Overload: 1,5 × rated current for 1 minute, once per hour
- High voltage test: 3000 Vac (1 min)
- Altitude Maximum: 1000 m
- Standards: IEC 61558-2-20

Voltage Waveform

Without LC3SWF3

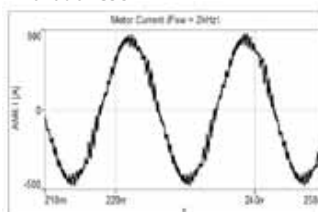


With LCSWF

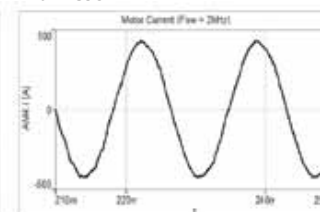


Current Waveform

Without LC3SWF



With LC3SWF



ORDER CODE	Rated Current @45 °C / 50 Hz A	Rated Current @45 °C / 100 Hz A	Typical Motor Driving Rating kW	Nominal Inductance mH	Nominal Capacitance μF	Capacitance Connection	Min. Switching Frequency kHz	Terminals
LC3SWF4,5A400	4,5	4,05	1,1/1,5	13	2,2	Y	4	Terminal Blocks
LC3SWF8A400	8	7,2	2,2/3	6,9	4,7	Y	4	Terminal Blocks
LC3SWF10A400	10	9	4	5,2	6,8	Y	4	Terminal Blocks
LC3SWF17A400	17	15,3	5,5/7,5	3,1	10	Y	4	Terminal Blocks
LC3SWF24A400	24	21,6	11	2,4	10	Y	4	Terminal Blocks
LC3SWF38A400	38	34,2	15/18,5	1,6	10	Y	4	Terminal Blocks
LC3SWF48A400	48	43,2	22	1,1	14,7	Y	4	Terminal Blocks
LC3SWF62A400	62	55,8	30	0,85	30	Y	3	Terminal Blocks
LC3SWF75A400	75	67,5	37	0,75	30	Y	3	Terminal Blocks
LC3SWF115A400	115	103,5	45/55	0,5	20	Δ	3	Terminal Blocks
LC3SWF180A400	180	162	75/90	0,3	33	Δ	3	Bus Bars
LC3SWF260A400	260	234	110/132	0,2	47	Δ	3	Bus Bars
LC3SWF410A400	410	369	160/200	0,13	66	Δ	3	Bus Bars
LC3SWF480A400	480	432	250	0,11	94	Δ	3	Bus Bars
LC3SWF660A400	660	594	315/355	0,14	141	Δ	2	Bus Bars
LC3SWF750A400	750	675	400	0,12	165	Δ	2	Bus Bars
LC3SWF880A400	880	792	400/500	0,11	188	Δ	2	Bus Bars
LC3SWF1200A400	1200	1080	560/630	0,075	282	Δ	2	Bus Bars