

- Sine wave voltage output
 - Protect motor cable and can connect with multiple motors
- Use to purify and output sine wave of frequency inverter and UPS AC/DC equipments
- No limit for output cable length

◆ Specification:

1. Motor frequency inverter is a kind of special inverter, generally uses SPWM modulation mode, used to drive special frequency asynchronous motor, commonly used relatively close distance (motor cable less than 100 meters).
2. When motor cable is too longer (more than 100 meters), the motor will produce high du/dt, which will damage motor insulation, cause coil breakdown aging, core loss increase, still can cause bearing heating serious, reduce motor life or damage, even can burned motor in heavily situation. So user must choose sine wave filter to solve this problem.

◆ Constructure Feature:

My company produces the EM-SWF series sine wave filter adopting trait reactor, having professional filter capacitor and power resistor, reasonable structure, waveform distortion is small, small loss and low noise characteristics, can match with all brands frequency inverter and match many sets of machines, such as wind power, oil field, water and electricity, metallurgy, etc.

◆ Electrical Feature:

1. To cover SPWM voltage current waveform of frequency inverter to approximate sine wave waveform (For the line load feature, the COS is greater than 0.3 and T H D is less than 5%);
2. Protect motor insulation system, reduce bearing current, prolong service life, reduce motor noise;
3. With general asynchronous motor can replace frequency induction motor use;
4. Effectively restrain the high frequency loss and RF radiation interference, in certain occasions without to use a shielded cable, lowering the field Cable requirements;
5. Cable between motor and frequency inverter can extend to 500 meters, the longest can reach 3000 meters above;
6. We have 220 V \ 380 V \ 440V \ 690V \ 1140V three phase variable frequency drive system;
7. Suitable motor and inverter power range: 0.4KW - 1600 KW ;
8. Suitable frequency inverter output carrier frequency range: 1.5-16 KHz ;
9. Basic frequency range: 0 to 400 Hz (above 50Hz order must tell us when order);
10. Driving load forms: asynchronous motor (After special design can use for EPS \ UPS and the surrounding power supply system);
11. Heat resistant level: F grade (for reactor part);
12. Protection level :IP 20.

◆ Technical condition:

Rated voltage	380/440VAC		Working frequency	4KHz-16KHz
Testing voltage (60s)	Line to line	1500VDC	Insulation resistance	>3000MΩ@100VDC
	Line to ground	2500VDC	Ambient temperature	-25℃ - +85℃
Motor frequency	0-200HZ		Longest cable	300m(Shielded cable)
				200m(Normal cable)

◆ Application Environment:

1. The altitude does not exceed 1000 meters;
2. Application environment temperature - 25 ° to + 40 °, relative humidity is not more than 85%;
3. Surrounding environment has good ventilation conditions, such as loading in the cabinet, which should be equipped with ventilation fan;
4. No violent shock and severe turbulence place, has rainproof equipment place;
5. Environment without enough to corrosion metal box failure insulation gas and electric dust, etc.

◆ Caution:

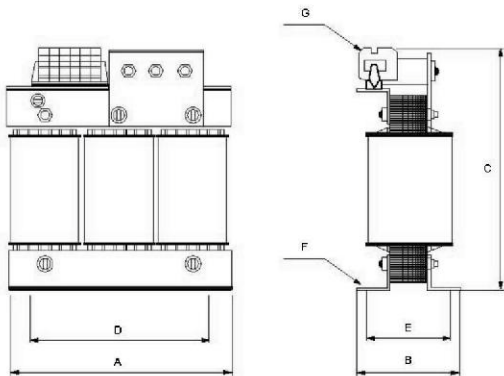
1. Sine wave filter has a percentage of voltage attenuation, attenuation value related to load current, fundamental wave, carrier frequency. General given carrier frequency 50Hz base frequency with rated load current, the voltage drop is about 7% to 10% (can adjust higher frequency inverter output voltage values to compensation);
2. Can't change the filter factory set or both parties agreed to use carrier frequency, otherwise, it will influence the filter use effect, serious will burn filter and frequency inverter.

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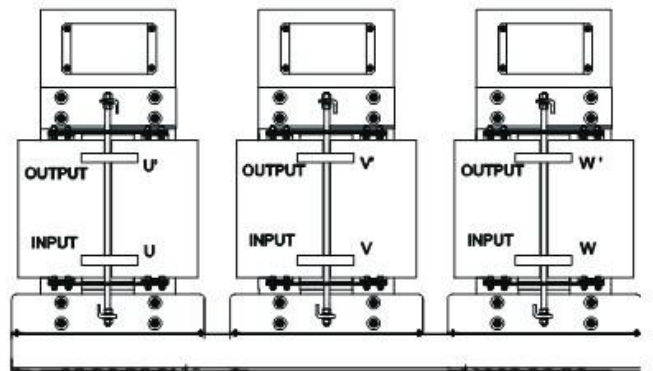
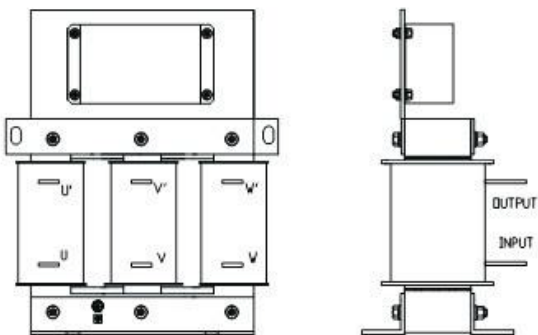
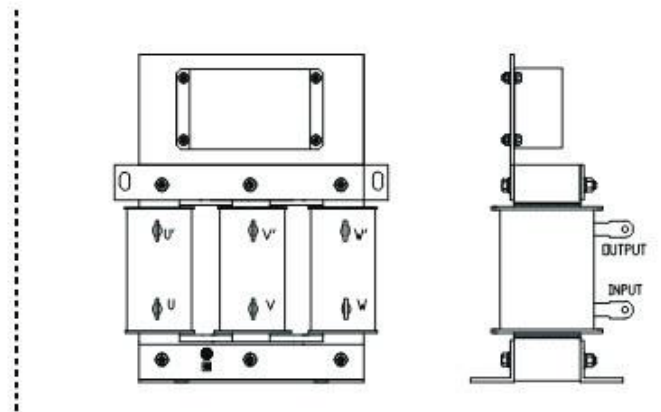
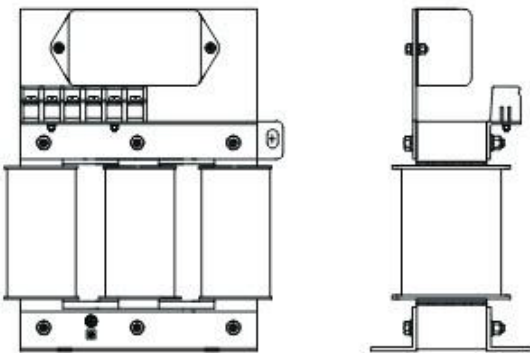
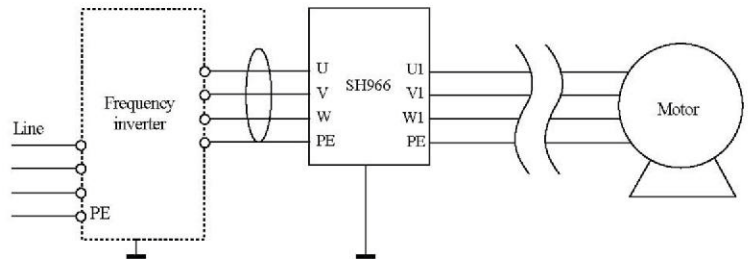
EM-SWF3 Series

Sinusoidal output filter for frequency inverters

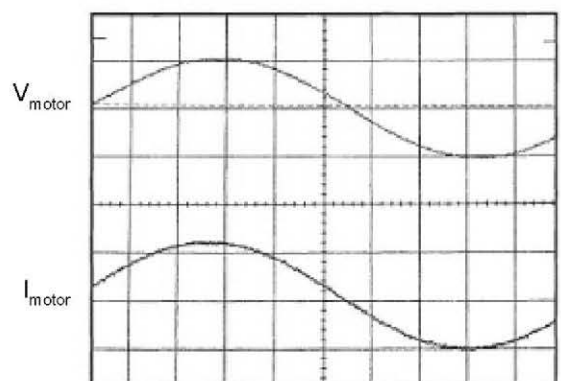
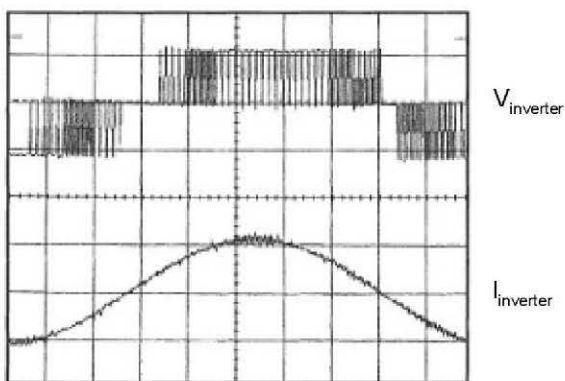
◆ Size(mm)



◆ Connection diagram



◆ Effect diagram



EMHEATER[®] Sinusoidal output filter for frequency inverters

EM-SWF3 Series

◆ Technical parameter

Model	Voltage (V)	Power (KW)	Current (A)	Size
EM-SWF3-d75	380	0.75	2.5	Q1
EM-SWF3-1d5	380	1.5	3.5	Q1
EM-SWF3-2d2	380	2.2	5	Q1
EM-SWF3-004	380	4.0	8.5	Q2
EM-SWF3-5d5	380	5.5	11	Q2
EM-SWF3-7d5	380	7.5	17	Q3
EM-SWF3-011	380	11	25	Q3
EM-SWF3-015	380	15	33	Q3
EM-SWF3-018	380	18.5	39	Q3
EM-SWF3-022	380	22	45	Q4
EM-SWF3-030	380	30	60	Q4
EM-SWF3-037	380	37	75	Q5
EM-SWF3-045	380	45	90	Q5
EM-SWF3-055	380	55	110	Q6
EM-SWF3-075	380	75	150	Q6
EM-SWF3-093	380	93	190	Q7
EM-SWF3-110	380	110	220	Q7
EM-SWF3-132	380	132	260	Q8
EM-SWF3-160	380	160	320	Q8
EM-SWF3-185	380	185	370	Q8
EM-SWF3-200	380	200	400	Q8
EM-SWF3-220	380	220	450	Q8
EM-SWF3-250	380	250	500	Q9
EM-SWF3-280	380	280	560	Q9
EM-SWF3-315	380	315	630	Q9
EM-SWF3-350	380	350	700	Q9
EM-SWF3-400	380	400	800	Q9
EM-SWF3-500	380	500	1000	Q9
EM-SWF3-630	380	630	1300	Q9

Model	A	B	B1	C	D	E	F	G
Q1	125	65	110	180	100	45	5*8	2.5
Q2	155	95	118	205	130	70	8*12	4
Q3	210	130	135	260	170	85	8*12	10
Q4	240	220	<B	290	190	135	8*12	15
Q5	300	210	<B	345	240	139	11*15	35
Q6	370	237	<B	375	270	162	11*15	50
Q7	420	260	<B	470	370	182	11*15	11
Q8	480	310	<B	580	430	234	13*18	11
Q9	500	370	<B	670	430	238	13*18	11

The above parameters is for reference only and subject to change without notice. Other technical parameters and size can be customized according to the customer request.

Ordering instruction

1. The matched inverter or motor power (KW)
2. The voltage of inverter input (V)
3. The inverter rated output current(A)
4. The inverter output rated carrier frequency (KHz)
5. Be driven asynchronous motor highest operation basic frequency(Hz)
6. Be driven asynchronous motor highest continuous running current (A)
7. IP protection: IP20
8. The distance between inverter and motor (Meter)
9. Delivery time (Day)