

中频正弦波滤波器

High frequency SineWave Filter

■ 产品概述 (Product Introduction)

正弦波滤波器是在PWM变频器驱动下，其开关频率范围在2 - 8kHz之间仍提供正弦波输出电压。在变频器驱动应用中，这种滤波器可以消除电机绝缘失效问题并通过消除与变频器输出波形相关的高dV/dT来减少电磁干扰，改善电机的性能和寿命，延长变频器输出距离，最长可达3KM。

A sine wave filter, driven by a PWM frequency converter, provides a sine wave output voltage within a switching frequency range of 2-8kHz. In the application of frequency converter drive, this filter can eliminate the problem of motor insulation failure and reduce electromagnetic interference by eliminating high dV/dT related to the output waveform of the frequency converter, improving the performance and life of the motor, and extending the output distance of the frequency converter, up to 3km.

为保护电线电缆，使用正弦波滤波器可防止长引线驱动电机的过电压问题。在其他能源应用下，比如风力发电机，逆变器将电力通过升压变压器还原到实用的配电系统。这种滤波器可以允许使用标准变压器。满载并在60Hz时给变压器输入的谐波电压畸变最大值是5%的话，那么满载时给电机输入的谐波电压畸变一般就是5%。

To protect wires and cables, using a sine wave filter can prevent overvoltage problems in long lead driven motors. In other energy applications, such as wind turbines, inverters restore electricity to practical distribution systems through step-up transformers, which can allow the use of standard transformers. If the maximum harmonic voltage distortion input to the transformer at full load and 60Hz is 5%, then the harmonic voltage distortion input to the motor at full load is generally 5%.

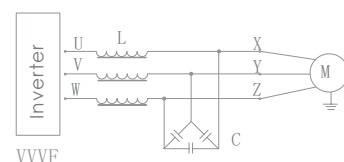
■ 技术规格 (Technical Specifications)

- 1.电压 Voltage:400V(500V MAX)
- 2.运行频率 Operating frequency :0~1000Hz
- 3.开关频率 Switching frequency:8~16kHz
- 4.压降 Pressure drop:8% MAX.
- 5.温升 Temperature rise:<105K
- 6.绝缘等级 Insulation level:CLASSH(180℃)
- 7.耐电压 Voltage endurance:3.0kV AC 50/60HZ 60SEC
- 8.绝缘阻抗 Insulation impedance:>100MOHM @DC1000V
- 9.噪音 Noise:<83dB
- 10.电机电缆长度 Motor cable length:2000m
- 11.谐波电压畸变 Harmonic voltage distortion:<5
- 12.防护等级 Protection level:IP00
- 13.海拔高度 Altitude:<1000M.
- 14.环境温度 Environmental temperature:-25℃~+45℃
- 15.MTBF :>300,000H
- 16.冷却方式 Cooling method:AF

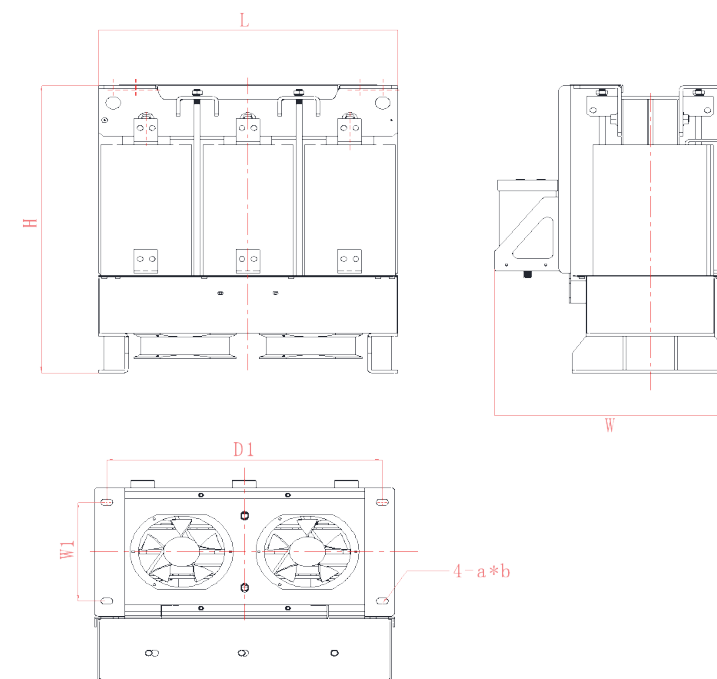


典型电路图

(Typical circuit diagram)



■ 产品尺寸图 (Product Size)



滤波器型号 TYPE	材质 Material	适配功率 Power (kw)	额定输出 电流 Rated out put current	参考电机 频率 Reference mo tor frequency	绝缘等级 Insulation Class	载波频率 carrier fre quency	电感 Inductance	尺寸 Dimension(±5mm)					重量 weight	
								L(max)	H(max)	W(max)	W1±1	D1±2		A*B
IFSFR-0075-0M26-0.4SA		37	75		F、H		0.26	320	430	330	150	300	13*20	40
IFSFR-0092-0M22-0.4SA		45	92		F、H		0.22	320	430	330	150	300	13*20	45
IFSFR-0115-0M17-0.4SA		55	115		F、H		0.17	350	450	350	160	310	13*20	50
IFSFR-0150-0M13-0.4SA		75	150		F、H		0.13	400	500	380	180	345	13*20	62
IFSFR-0180-0M11-0.4SA		90	180		F、H		0.11	400	500	380	180	345	13*20	70
IFSFR-0215-0M11-0.4SA		110	215	400-500	F、H		0.11	400	550	380	200	345	13*20	90
IFSFR-0260-0M11-0.4SA		132	260		F、H		0.11	400	550	380	200	345	13*20	100
IFSFR-0305-0M11-0.4SA		160	305		F、H		0.11	500	610	435	200	460	13*20	125
IFSFR-0340-070U-0.4SA	AL	185	340		F、H	≤6K	0.07	500	590	435	200	460	13*20	120
IFSFR-0380-070U-0.4SA		200	380		F、H		0.07	500	680	435	200	460	13*20	140
IFSFR-0425-045U-0.4SA		220	425		F、H		0.045	500	630	435	200	460	13*20	130
IFSFR-0480-045U-0.4SA		250	480		F、H		0.045	500	685	435	200	460	13*20	140
IFSFR-0530-050U-0.4SA		280	530		F、H		0.05	500	720	465	220	460	13*20	165
IFSFR-0600-045U-0.4SA		315	600	300-500	F、H		0.045	500	780	465	220	460	13*20	190
IFSFR-0650-030U-0.4SA		355	650		F、H		0.03	500	700	500	200	460	13*20	150
IFSFR-0720-025U-0.4SA		400	720		F、H		0.025	500	780	500	200	460	13*20	165
IFSFR-0820-022U-0.4SA		450	820	400-600	F、H		0.022	500	800	500	200	460	13*20	195
IFSFR-0860-022U-0.4SA		500	860		F、H		0.022	500	800	500	200	460	13*20	205

备注：其他规格尺寸，可根据用户要求制造。Remark: Dimension can be customization