

功能和作用 (100m以上用dv/dt滤波器) Function and Application(dv/dt filters are applied to cable over 100m)

- 1.有效降低变频伺服电动机端的dv/dt电压；
- 2.防止传输电缆和伺服电机线圈的过早老化和击穿；
- 3.延长伺服电机的使用寿命，提高伺服的可靠性和正常运行时间；
- 4.降低对邻近设备或线路的干扰传播；
- 5.减小电机接地泄露电流
- 6.减小打开滤波器与电机之间的接触器所引起的干扰
- 7.有效降低伺服电机端脉冲尖峰电压
- 8.输出满足IEC 60034-17, 60034-25要求

- Dv/dt filters can support our customers with:
- 1.effectively reducing the dt/dv voltage of the inverter servo motor ends;
 - 2.preventing the transmission cable and the servo motor coil from early aging and breakdown;
 - 3.extending the service life of the servo motors and operation period and improving the servo's reliability;
 - 4.reducing the interference to the nearby equipment and circuits;
 - 5.reducing the motor grounding leaking current;
 - 6.reducing the interference when the contactor between filters and the motors is switched on;
 - 7.effectively reducing the peak pulse voltage of the servo motor ends.
 - 8.meeting the output requirements of IEC 60034-17, 60034-25.

差模测试数据 Differential Mode Test Data

开关频率 Switch frequency	测试点 Test point	50m非屏蔽电缆 50m unshielded cable			150m非屏蔽电缆 150m unshielded cable			500m非屏蔽电缆 500m unshielded cable		
		母线电压 Ubus	峰值电压 Upeak	dv/dt	母线电压 Ubus	峰值电压 Upeak	dv/dt	母线电压 Ubus	峰值电压 Upeak	dv/dt
4KHz	驱动输出 Drive output	525	603	2275	525	588	2218	525	603	2394
	滤波器输出 Filter output	537	594	63	528	609	98	528	744	69
	电机侧 Motor side	501	564	70	501	570	109	438	696	79
8KHz	驱动输出 Drive output	528	603	2353	528	594	2215	525	603	2275
	滤波器输出 Filter output	525	573	68	528	615	91	525	744	69
	电机侧 Motor side	501	537	81	498	582	101	414	672	82

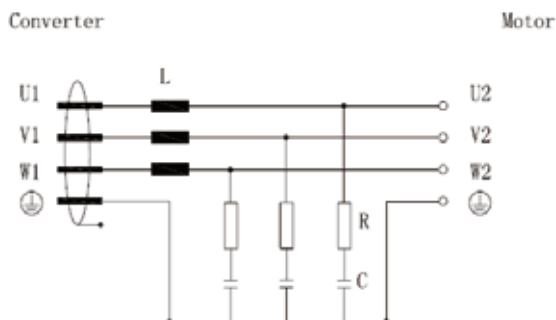
如果不加dv/dt滤波器，100m以上的电缆电机端的尖峰电压可达1000V以上。
Without dt/dv filters, the peak voltage of the motor ends can reach over 1000V. (Wire length: 100m)

共模测试数据 Common Mode Test Data

工作电流(A) Operating current(A)	加载情况 Load	共模电压(V) CM voltage(V)	共模电流(A) CM current(A)
76	80%	538	13
		275.5	1.9

导线长度100米，95Adv/dt滤波器共模测试数据。
CM Test Date of 95A dv/dt filter (Wire length: 100m)

电气原理图 (Electrical Diagram)

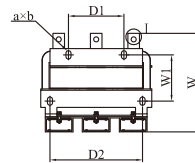
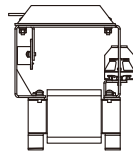
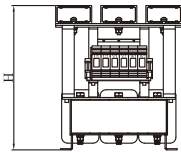
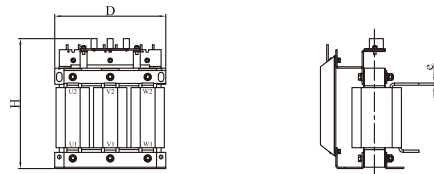
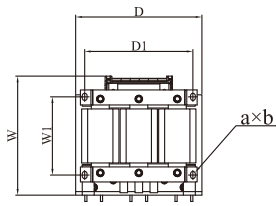


Dv/dt滤波器

Dv/dt Filters

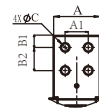
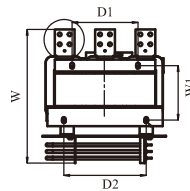
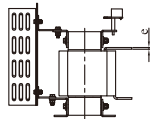
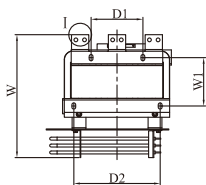
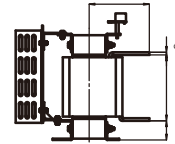
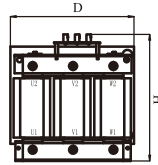
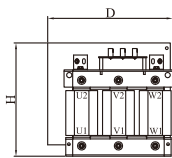
380V Dv/dt滤波器选型表 (380V Dv/dt Filters Selection Table)

序号 No	变频器 功率 (kw)	额定电流 Rated current(A)	产品型号 Product Mode	图号 Picture No.	产品规格 Product Specifications							重量 Weight(kg)
					D*H*W (mm)	D1*W1 (mm)±2	D2 (mm) ±2	a*b (mm)	Φc (mm)	A*e (mm)	A1*B1*B2 (mm)	
1	0.75-2.2	6	SFL-0006-EISH-A004	A	160*175*180	140*90	/	6*9	/	/	/	5
2	3-5.5	15	SFL-0015-EISH-A004		160*190*165	140*90	/	6*9	/	/	/	7
3	7.5-11	25	SFL-0025-EISH-A004		160*185*180	140*90	/	6*9	/	/	/	8
4	15-22	50	SFL-0050-EISH-A004		160*240*250	140*150	/	6*9	/	/	/	10
5	30-45	95	SFL-0095-EISH-A004		210*245*215	180*130	/	8*12	/	/	/	11
6	55-90	180	SFL-0180-EISH-A004	B	240*290*220	120*100	200	11*18	Φ11	25*5	/	18
7	110-160	305	SFL-0305-EISH-A004		330*320*260	150*115	250	11*18	Φ11	30*5	/	28
8	200-250	450	SFL-0450-EISH-A004		320*350*290	150*125	250	11*18	Φ14	40*5	/	40
9	315	600	SFL-0600-EISH-A004	C	400*360*400	150*140	250	11*18	Φ11	50*5	/	46
10	355-400	700	SFL-0700-EISH-A004		400*390*420	150*170	250	11*18	Φ11	50*8	/	58
11	450-500	850	SFL-0850-EISH-A004		D	390*410*420	200*165	250	11*18	Φ11	60*8	30*15*30



Picutre A

Picutre B



Picutre C

Picutre D