

输入/输出交流电抗器

Input AC/Output AC Reactor

■ 产品简述 (Product Profile)

输入电抗器：是限流设备，用于驱动器的输入侧，保护交流驱动器不受瞬态超压的影响。有降低浪涌和峰值电流，提高真实功率因数，抑制电网谐波，改善输入电流波形的作用。

Input AC Reactor is applied at the AC drive input side to suppress inrush voltage, designed to reduce inrush & peak current, improve the real power factor, restrain the grid harmonics and improve the input current waveform.



输出电抗器：用于平滑滤波，降低瞬变电压 dv/dt ，延长电机寿命。可以降低电机噪音，减低涡流损耗。降低输出高次谐波造成的漏电流。保护变频器内部的功率开关器件。

Output AC Reactor is applied to smoothing the circuit and filter harmonics in order to reduce the transient voltage dt/dv and extend the service life of the electric motors, which reduces the motor noise, eddy loss and leakage current resulting from the output of high harmonics and protects the power switch within the inverters.

■ 产品特点 (Product Features)

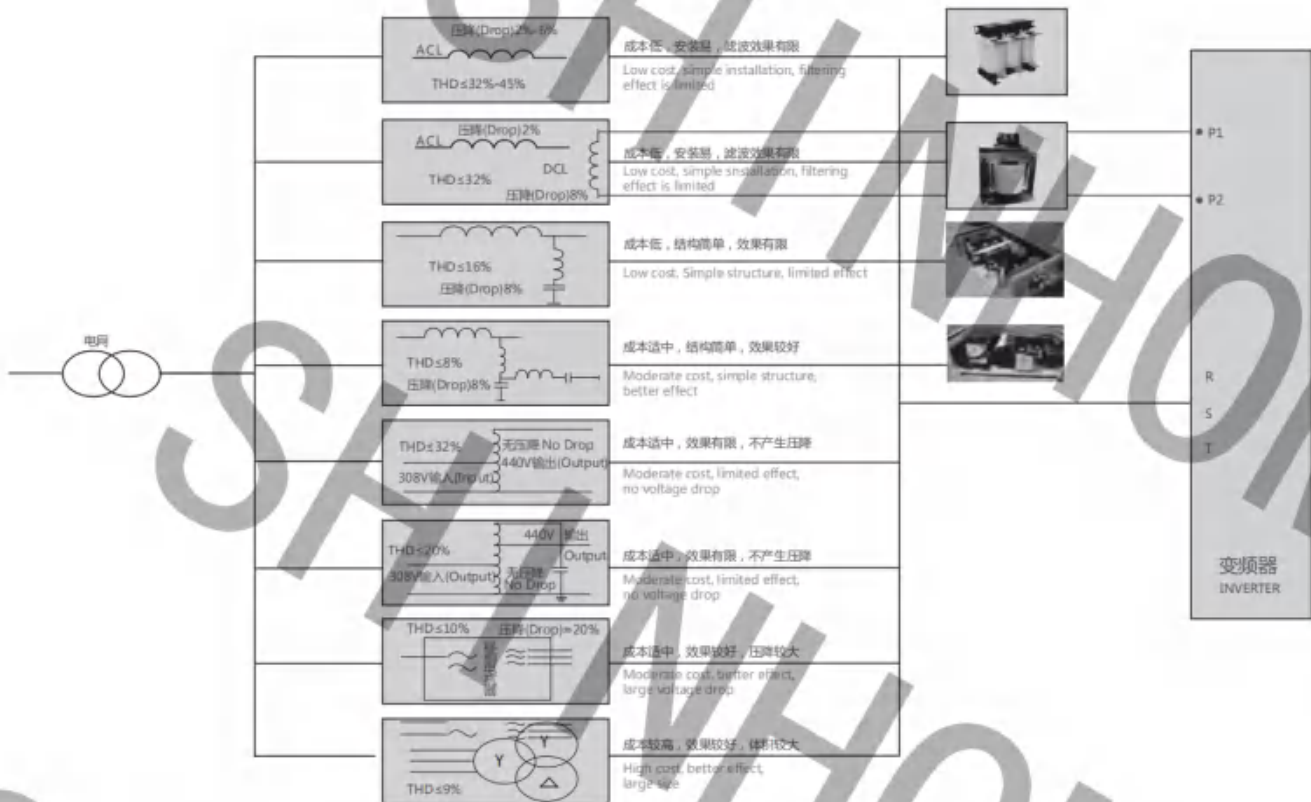
交流输入电抗器：采用了高性能的箔式绕组结构，具有直流电阻小，抗短路能力强，短时间过载能力强；采用高性能的F级以上的复合绝缘材料，使产品在严酷的工作条件下依然可以保持可靠的性能；电抗器设计磁通密度低，线性度好，过载能力强，配合真空压力浸渍工艺电抗器噪音小；铁芯采用优质低损耗冷轧取向硅钢片，电抗器损耗小，效率高，温升低。

Due to the excellent foil winding structure, Input AC Reactor is characterized by small DC resistance, strong ability to withstand short circuit and strong short-time overload capability. F Class insulation materials equip the products with reliable performance even in harsh operating conditions; designed with low magnetic flux density, the reactor is of high linearity and powerful overload capacity. Moreover, combined with VPI process, the reactor noise is low; With the core made of grain-oriented cold rolled silicon steel sheets, the reactor boasts high efficiency, low core loss and low temperature rise.

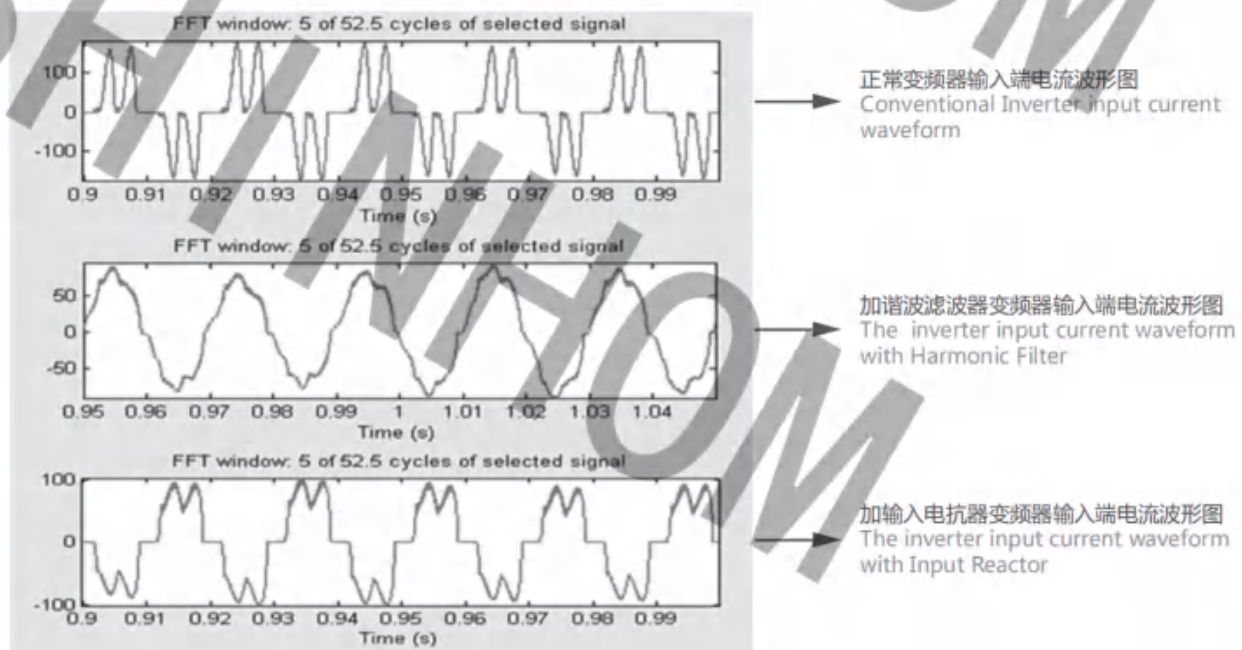
交流输出电抗器：可以根据客户使用频率的高低合理选取磁性材料（硅钢片，铁氧体，非晶铁心，磁粉芯）；采用了高性能的箔式绕组结构，具有直流电阻小，抗电磁力能力强，短时间过载能力强；采用高性能的F级以上的复合绝缘材料，使产品在严酷的工作条件下依然可以保持可靠的性能；电抗器设计磁通密度低，线性度好，过载能力强，配合真空压力浸渍工艺电抗器噪音小。

Different choices of magnetic materials (Silicon steel sheets, ferrite material or amorphous core) are available to match the frequencies of different application. Due to the excellent foil winding structure, Output AC Reactor is characterized by small DC resistance, strong resistance to electromagnetic interference and strong short-time overload capability. F Class insulation materials equip the products with reliable performance even in harsh operating conditions; Designed with low magnetic flux density, the reactor is of high linearity and powerful overload capacity. Moreover, combined with VPI process, the reactor noise is low.

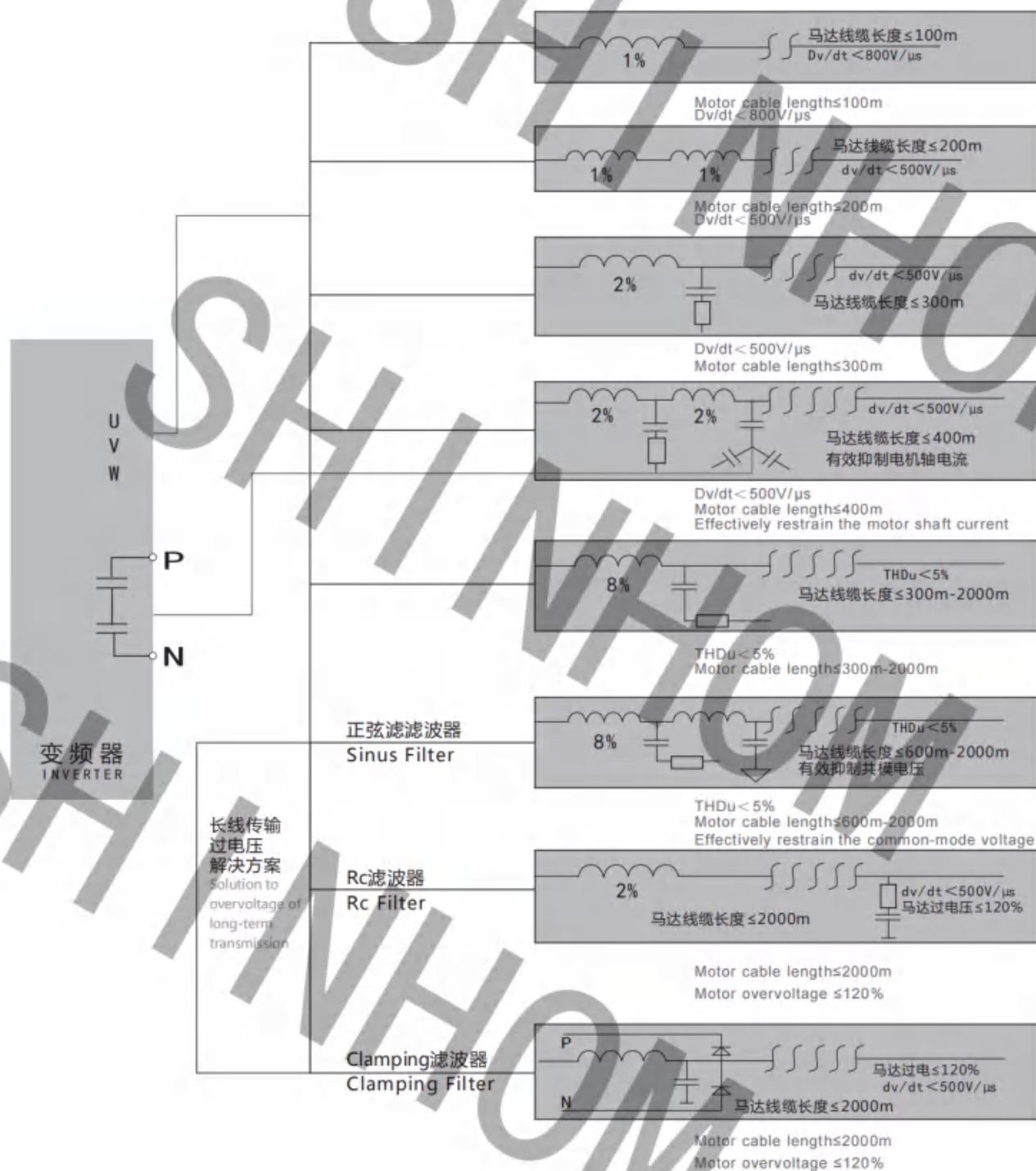
■ 变频输入端解决方案 (Solutions to the inverter input side)



■ 变频器输入端电流波形图 (Inverter input current waveform)



■ 变频输出端解决方案 (Solution to the inverter output side)



输入/输出交流电抗器 Input AC/Output AC Reactor

380V交流输入电抗器选型表 (380V Input AC Reactor Selection Table)

(2%压降 2% Voltage Drop)

序号 No.	功率 Power (KVA)	额定 电流 Rated current (A)	电感 Inductance value (mH)	压降 Voltage drop	绝缘 等级 Insulation class	电抗型号 Reactor type	图号 Picture No.	产品规格 Product specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	安装孔 直径 φ(mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 Qty	包装代码 Packaging code
1	1.5	5	2.8	2%	F	ACL-0005-EISC-E2M8C	A	110*130*84	91*65	6*11	/	/	Cu	2.4	2	A1
2	2.2	7	2	2%	F	ACL-0007-EISC-E2M0C		110*130*84	91*65	6*11	/	/	Cu	2.5	2	A1
3	3.7	10	1.4	2%	F	ACL-0010-EISC-E1M4C		110*130*84	91*65	6*11	/	/	Cu	2.6	2	A1
4	5.5	15	0.93	2%	F	ACL-0015-EISC-EM93C		125*135*84	40*64	6*9	/	/	Cu	3.3	2	B1
5	7.5	20	0.7	2%	F	ACL-0020-EISC-EM70C		130*135*84	40*64	6*9	/	/	Cu	3.3	2	B1
6	11	30	0.47	2%	F	ACL-0030-EISCL-EM47C	B	200*125*116	120*72	8.5*20	/	/	Cu	4.9	2	D4
7	15	40	0.35	2%	F	ACL-0040-EISCL-EM35C		200*125*116	120*72	8.5*20	/	/	Cu	4.9	2	D4
8	18.5	50	0.28	2%	F	ACL-0050-EISCL-EM28C		200*160*120	120*72	8.5*20	/	/	Cu	5.9	2	D4
9	22	60	0.24	2%	F	ACL-0060-EISCL-EM24C		200*150*120	120*72	8.5*20	/	/	Cu	5.9	2	D4
10	37	90	0.16	2%	F	ACL-0090-EISCL-EM16C		200*160*120	120*72	8.5*20	/	/	Cu	6.9	2	D4
11	45	120	0.12	2%	F	ACL-0120-EISCL-EM12C		200*140*155	120*72	8.5*20	/	/	Cu	10	2	D4
12	55	150	0.095	2%	F	ACL-0150-EISH-E95UC		195*210*160	120*92	8.5*20	11	25*5	AL	14	1	D8
13	75	200	0.07	2%	F	ACL-0200-EISH-E70UC		195*220*170	120*102	8.5*20	11	25*5	AL	16	1	D8
14	110	250	0.056	2%	F	ACL-0250-EISH-E56UC		250*230*170	182*96	11*18	11	25*5	AL	18	1	E3
15	132	290	0.048	2%	F	ACL-0290-EISH-E48UC		250*230*180	182*96	11*18	12	30*5	AL	21	1	E3
16	160	330	0.042	2%	F	ACL-0330-EISH-E42UC	C	250*235*190	182*106	11*18	12	30*5	AL	22	1	E3
17	185	390	0.036	2%	F	ACL-0390-EISH-E36UC		290*250*185	214*100	11*18	12	30*5	AL	25	1	G3
18	220	490	0.028	2%	F	ACL-0490-EISH-E28UC		300*280*205	214*110	11*18	13	40*8	AL	33	1	G4
19	240	530	0.026	2%	F	ACL-0530-EISH-E26UC		300*280*205	214*110	11*18	13	40*8	AL	42	1	G4
20	280	600	0.023	2%	F	ACL-0600-EISH-E23UC		300*280*230	214*130	11*18	13	40*8	AL	42	1	G4
21	300	660	0.021	2%	F	ACL-0660-EISH-E21UC		300*280*230	214*130	11*18	13	40*8	AL	45	1	G4
22	380	800	0.017	2%	F	ACL-0800-EISH-E17UC		330*350*235	243*132	12*20	2-φ12	60*8	AL	55	1	I3
23	450	1000	0.014	2%	F	ACL-1000-EISH-E14UC		330*385*250	243*132	12*20	2-φ12	60*10	AL	56	1	I4
24	550	1250	0.011	2%	F	ACL-1250-EISH-E11UC		330*425*275	243*157	12*20	2-φ12	60*10	AL	76	1	I5

(4%压降 4% Voltage Drop)

1	15	15	1.7	4%	F	ACL-0015-EISA-E1M7	A	155*150*120	95*82	6*15	/	/	AL	5.5	2	C2
2	22	25	1.05	4%	F	ACL-0025-EISA-E1M0	B	195*165*140	120*72	8.5*20	/	/	AL	7	2	D6
3	37	35	0.73	4%	F	ACL-0035-EISA-EM73		195*165*160	120*92	8.5*20	/	/	AL	9	2	D6
4	45	55	0.465	4%	F	ACL-0055-EISA-EM46		195*165*160	120*92	8.5*20	/	/	AL	10.5	2	D6
5	55	70	0.365	4%	F	ACL-0070-EISA-EM36		195*185*195	120*127	8.5*20	φ9	20*4	AL	16.5	1	D8
6	75	90	0.285	4%	F	ACL-0090-EISA-EM28		250*230*185	182*88	11*18	φ11	25*5	AL	21	1	E3
7	90	125	0.2	4%	F	ACL-0125-EISA-EM20	D	250*230*200	182*101	11*18	φ11	25*5	AL	23.5	1	E3
8	110/132	160	0.16	4%	F	ACL-0160-EISA-EM16		250*230*210	182*111	11*18	φ11	25*5	AL	27	1	E3
9	160	200	0.125	4%	F	ACL-0200-EISA-EM12		290*250*205	214*100	11*18	φ11	30*5	AL	30	1	G3
10	220	250	0.105	4%	F	ACL-0250-EISA-EM10		290*250*220	214*125	11*18	φ11	30*5	AL	35	1	G3
11	250	300	0.085	4%	F	ACL-0300-EISA-E85U		320*280*220	243*119	12*20	φ14	40*6	AL	41	1	H3
12	315/355	400	0.065	4%	F	ACL-0400-EISA-E65U	E	320*280*235	243*134	12*20	φ14	40*6	AL	47	1	H3
13	450	500	0.05	4%	F	ACL-0500-EISA-E50U		320*280*245	243*144	12*20	φ14	40*8	AL	53	1	H3
14	500/560	650	0.04	4%	F	ACL-0650-EISA-E40U		395*310*295	225*175	15*25	φ14	40*8	AL	60	1	J2
15	630/750	800	0.032	4%	F	ACL-0800-EISA-E32U		395*355*295	225*175	15*25	φ14	40*10	AL	80	1	J3
16	800	950	0.027	4%	F	ACL-0950-EISA-E27U		395*395*320	225*175	15*25	φ14	60*10	AL	89	1	J4
17	900/1000	1200	0.021	4%	F	ACL-1200-EISA-E21U	F	395*395*340	225*200	15*25	φ14	60*10	AL	100	1	J4

输入/输出交流电抗器

Input AC/Output AC Reactor

380V交流输出电抗器选型表 (380V Output AC Reactor Selection Table)

(1%压降 1% Voltage Drop)

序号 No.	功率 Power (KVA)	额定 电流 Rated current (A)	电感 电抗值 (mH)	压降 Voltage drop	绝缘 等级 Insulation class	电抗型号 Reactor type	图号 Fig.	产品规格 Product specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	安装孔 直径 (mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code
1	1.5	5	1.4	1%	F	OCL-0005-EISC-E1M4C	A	110*130*84	91*65	6*11	/	/	Cu	2.4	2	A1
2	2.2	7	1	1%	F	OCL-0007-EISC-E1M0C		110*130*84	91*65	6*11	/	/	Cu	2.4	2	A1
3	3.7	10	0.7	1%	F	OCL-0010-EISC-EM70C		110*130*84	91*65	6*11	/	/	Cu	2.4	2	A1
4	5.5	15	0.47	1%	F	OCL-0015-EISC-EM47C		155*140*84	95*61	6*15	/	/	Cu	3	2	C2
5	7.5	20	0.35	1%	F	OCL-0020-EISC-EM35C		155*140*84	95*61	6*15	/	/	Cu	3.8	2	C2
6	11	30	0.23	1%	F	OCL-0030-EISC-EM23C		200*130*116	120*72	8.5*20	/	/	Cu	4.6	2	D5
7	15	40	0.18	1%	F	OCL-0040-EISC-EM18C	B	200*130*116	120*72	8.5*20	/	/	Cu	4.8	2	D5
8	18.5	50	0.14	1%	F	OCL-0050-EISC-EM14C		200*130*116	120*72	8.5*20	/	/	Cu	5	2	D5
9	22	60	0.12	1%	F	OCL-0060-EISC-EM12C		200*130*116	120*72	8.5*20	/	/	Cu	5.1	2	D5
10	30	80	0.087	1%	F	OCL-0080-EISC-E87UC		195*165*130	120*72	8.5*20	/	/	Cu	6	2	D7
11	37	90	0.078	1%	F	OCL-0090-EISC-E78UC		195*165*130	120*72	8.5*20	/	/	Cu	6	2	D7
12	45	120	0.058	1%	F	OCL-0120-EISC-E58UC		195*165*165	150*88	8*15	/	/	Cu	9	2	D7
13	55	150	0.047	1%	F	OCL-0150-EISC-E47UC	C	195*210*155	120*92	8.5*20	11	20*5	AL	10	1	D7
14	75	200	0.035	1%	F	OCL-0200-EISC-E35UC		195*210*165	120*102	8.5*20	11	20*5	AL	12	1	D7
15	110	250	0.028	1%	F	OCL-0250-EISC-E28UC		195*210*165	120*102	8.5*20	11	20*5	AL	12	1	D7
16	132	290	0.024	1%	F	OCL-0290-EISC-E24UC		255*240*175	182*91	11*18	12	30*5	AL	20	1	F2
17	160	330	0.021	1%	F	OCL-0330-EISC-E21UC		255*240*175	182*91	11*18	12	30*5	AL	20	1	F2
18	185	390	0.018	1%	F	OCL-0390-EISC-E18UC		255*245*175	182*91	11*18	12	30*5	AL	20	1	F2
19	220	490	0.014	1%	F	OCL-0490-EISC-E14UC		300*295*190	214*95	11*18	14	40*8	AL	28	1	G1
20	250	530	0.013	1%	F	OCL-0530-EISC-E13UC		300*295*190	214*95	11*18	14	40*8	AL	29	1	G1
21	280	600	0.012	1%	F	OCL-0600-EISC-E12UC		300*295*210	214*110	11*18	14	40*8	AL	33	1	G2
22	300	660	0.011	1%	F	OCL-0660-EISC-E11UC		300*315*210	214*110	11*18	14	40*8	AL	38	1	G2
23	380	800	0.0087	1%	F	OCL-0800-EISC-E87UC		325*350*215	243*112	12*20	2-φ13	60*8	AL	40	1	I1
24	450	1000	0.007	1%	F	OCL-1000-EISC-E70UC		325*350*215	243*112	12*20	2-φ13	60*8	AL	40	1	I1
25	550	1200	0.0058	1%	F	OCL-1200-EISC-E58UC		325*395*235	243*132	12*20	2-φ13	60*8	AL	56	1	I2

(2%压降 2% Voltage Drop)

1	15	15	0.85	2%	F	OCL-0015-EISA-EM85	A	195*165*140	120*72	8.5*20	/	/	AL	6.5	2	D5
2	22	25	0.51	2%	F	OCL-0025-EISA-EM51		195*165*140	120*72	8.5*20	/	/	AL	7	2	D5
3	37	35	0.36	2%	F	OCL-0035-EISA-EM36		195*150*155	120*85	8.5*20	/	/	AL	9.5	2	D6
4	45	55	0.23	2%	F	OCL-0055-EISA-EM23		195*185*175	120*107	8.5*20	/	/	AL	14	2	D7
5	55	70	0.182	2%	F	OCL-0070-EISA-EM18		250*200*175	182*79	11*18	11	25*5	AL	15	1	E2
6	75	90	0.14	2%	F	OCL-0090-EISA-EM14		250*230*180	182*89	11*18	11	25*5	AL	18	1	E3
7	90	125	0.1	2%	F	OCL-0125-EISA-EM10	D	250*230*200	182*106	11*18	11	25*5	AL	23	1	E3
8	110/132	160	0.08	2%	F	OCL-0160-EISA-E80U		290*250*190	214*100	11*18	11	25*5	AL	25	1	G3
9	160	200	0.064	2%	F	OCL-0200-EISA-E64U		290*250*195	214*105	11*18	11	30*5	AL	28	1	G3
10	220	250	0.05	2%	F	OCL-0250-EISA-E50U		290*250*215	214*125	11*18	11	30*5	AL	35	1	G3
11	250	300	0.042	2%	F	OCL-0300-EISA-E42U		320*280*215	243*129	12*20	14	40*6	AL	37	1	H3
12	315/355	400	0.032	2%	F	OCL-0400-EISA-E32U		320*280*235	243*144	12*20	14	40*6	AL	45	1	H3
13	450	500	0.025	2%	F	OCL-0500-EISA-E25U	E	320*280*250	243*149	12*20	14	40*8	AL	46	1	H3
14	500/560	650	0.02	2%	F	OCL-0650-EISA-E20U		395*355*270	225*150	15*25	14	50*10	AL	60	1	J3
15	630/750	800	0.016	2%	F	OCL-0800-EISA-E16U		395*355*295	225*175	15*25	14	50*10	AL	70	1	J3
16	800	950	0.013	2%	F	OCL-0950-EISA-E13U		395*360*315	225*175	15*25	14	60*10	AL	75	1	J3
17	900/1000	1200	0.01	2%	F	OCL-1200-EISA-E10U	F	395*360*340	225*200	15*25	14	60*10	AL	85	1	J3

输入/输出交流电抗器 Input AC/Output AC Reactor

690V交流输入电抗器选型表 (380V Input AC Reactor Selection Table)

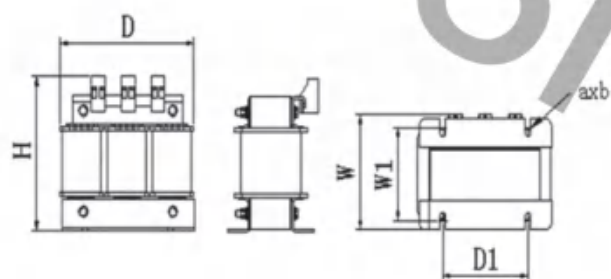
序号 No.	功率 Power (KVA)	额定 电流 Rated current (A)	电感 inductance value (mH)	压降 Voltage drop	绝缘 等级 Insulation class	电抗型号 Reactor type	图号 Picture No.	产品规格 Product specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	安装孔 直径 φ(mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Packaging code
1	15	15	1.7	2%	F	ACL-0015-EISA-E1M7	A	155*150*120	95*82	6*15	/	/	AL	5.5	2	D7
2	22	25	1.05	2%	F	ACL-0025-EISA-E1M0	B	195*165*140	120*72	8.5*20	/	/	AL	7	2	D7
3	37	35	0.73	2%	F	ACL-0035-EISA-EM73		195*165*160	120*92	8.5*20	/	/	AL	9	2	D7
4	45	55	0.465	2%	F	ACL-0055-EISA-EM46		195*165*160	120*92	8.5*20	/	/	AL	10.5	2	D7
5	55	70	0.365	2%	F	ACL-0070-EISA-EM36		195*185*195	120*127	8.5*20	Φ 9	20*4	AL	16.5	1	D8
6	75	90	0.285	2%	F	ACL-0090-EISA-EM28	D	250*230*185	182*88	11*18	Φ 11	25*5	AL	21	1	E3
7	90	125	0.2	2%	F	ACL-0125-EISA-EM20		250*230*200	182*101	11*18	Φ 11	25*5	AL	23.5	1	E3
8	110/132	160	0.16	2%	F	ACL-0160-EISA-EM16		250*230*210	182*111	11*18	Φ 11	25*5	AL	27	1	E3
9	160	200	0.125	2%	F	ACL-0200-EISA-EM12		290*250*205	214*100	11*18	Φ 11	30*5	AL	30	1	G3
10	220	250	0.105	2%	F	ACL-0250-EISA-EM10		290*250*220	214*125	11*18	Φ 11	30*5	AL	35	1	G3
11	250	300	0.085	2%	F	ACL-0300-EISA-E85U		320*280*220	243*119	12*20	Φ 14	40*6	AL	41	1	H3
12	315/355	400	0.065	2%	F	ACL-0400-EISA-E65U		320*280*235	243*134	12*20	Φ 14	40*6	AL	47	1	H3
13	450	500	0.05	2%	F	ACL-0500-EISA-E50U		320*280*245	243*144	12*20	Φ 14	40*8	AL	53	1	H3
14	500/560	650	0.04	2%	F	ACL-0650-EISA-E40U	E	395*310*295	225*175	15*25	Φ 14	40*8	AL	60	1	J2
15	630/750	800	0.032	2%	F	ACL-0800-EISA-E32U		395*355*295	225*175	15*25	Φ 14	40*10	AL	80	1	J3
16	800	950	0.027	2%	F	ACL-0950-EISA-E27U	F	395*395*320	225*175	15*25	Φ 14	60*10	AL	89	1	J4
17	900/1000	1200	0.021	2%	F	ACL-1200-EISA-E21U		395*395*340	225*200	15*25	Φ 14	60*10	AL	100	1	J4

690V交流输出电抗器选型表 (690V Output AC Reactor Selection Table)

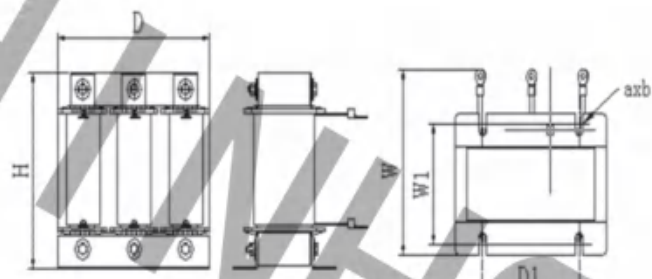
序号 No.	功率 Power (kVA)	额定 电流 Rated current (A)	电感 Inductance value (mH)	压降 Voltage drop	绝缘 等级 Insulation Class	电抗型号 Reactor type	图号 Picture No.	产品规格 Product specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	安装孔 直径 (mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code
1	15	15	0.85	1%	F	OCL-0015-EISA-EM85	A	195*165*140	120*72	8.5*20	/	/	AL	6.5	2	D5
2	22	25	0.51	1%	F	OCL-0025-EISA-EM51		195*165*140	120*72	8.5*20	/	/	AL	7	2	D5
3	37	35	0.36	1%	F	OCL-0035-EISA-EM36		195*150*155	120*85	8.5*20	/	/	AL	9.5	2	D7
4	45	55	0.23	1%	F	OCL-0055-EISA-EM23		195*185*175	120*107	8.5*20	/	/	AL	14	2	D8
5	55	70	0.182	1%	F	OCL-0070-EISA-EM18	D	250*200*175	182*79	11*18	11	25*5	AL	15	1	E2
6	75	90	0.14	1%	F	OCL-0090-EISA-EM14		250*230*180	182*89	11*18	11	25*5	AL	18	1	E3
7	90	125	0.1	1%	F	OCL-0125-EISA-EM10		250*230*200	182*106	11*18	11	25*5	AL	23	1	E3
8	110/132	160	0.08	1%	F	OCL-0160-EISA-E80U		290*250*190	214*100	11*18	11	25*5	AL	25	1	G3
9	160	200	0.064	1%	F	OCL-0200-EISA-E64U		290*250*195	214*105	11*18	11	30*5	AL	28	1	G3
10	220	250	0.05	1%	F	OCL-0250-EISA-E50U		290*250*215	214*125	11*18	11	30*5	AL	35	1	G3
11	250	300	0.042	1%	F	OCL-0300-EISA-E42U		320*280*215	243*129	12*20	14	40*6	AL	37	1	H3
12	315/355	400	0.032	1%	F	OCL-0400-EISA-E32U		320*280*235	243*144	12*20	14	40*6	AL	45	1	H3
13	450	500	0.025	1%	F	OCL-0500-EISA-E25U	E	320*280*250	243*149	12*20	14	40*8	AL	46	1	H3
14	500/560	650	0.02	1%	F	OCL-0650-EISA-E20U		395*355*270	225*150	15*25	14	50*10	AL	60	1	J3
15	630/750	800	0.016	1%	F	OCL-0800-EISA-E16U		395*355*295	225*175	15*25	14	50*10	AL	70	1	J3
16	800	950	0.013	1%	F	OCL-0950-EISA-E13U		395*360*315	225*175	15*25	14	60*10	AL	75	1	J3
17	900/1000	1200	0.01	1%	F	OCL-1200-EISA-E10U	F	395*360*340	225*200	15*25	14	60*10	AL	85	1	J3

输入/输出交流电抗器 Input AC/Output AC Reactor

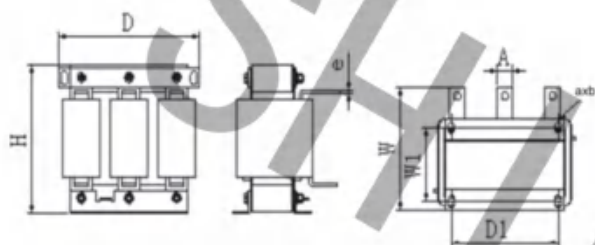
■ 产品尺寸图 (Product Size)



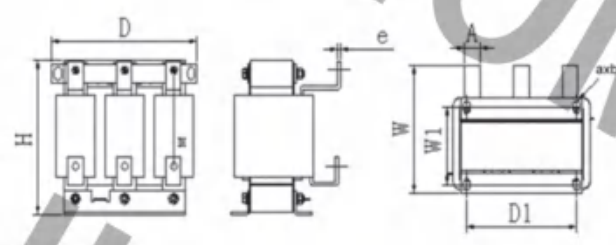
Picutre A



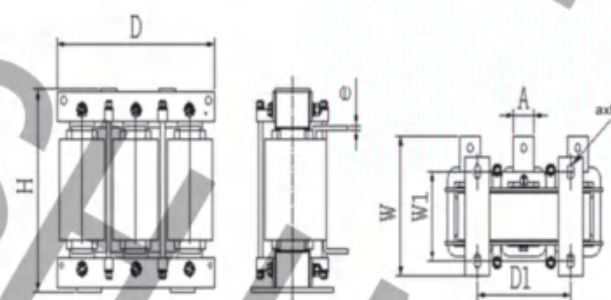
Picutre B



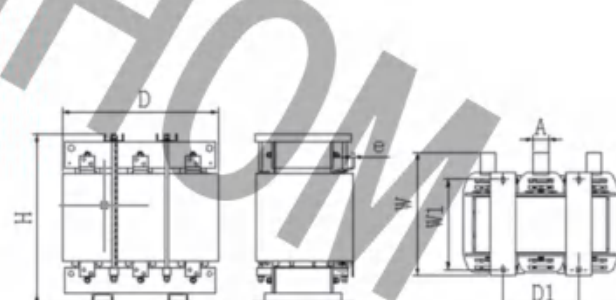
Picutre C



Picutre D

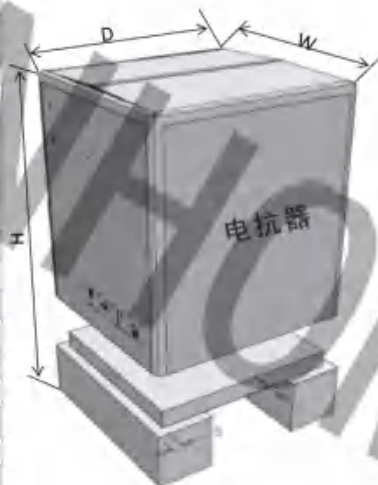
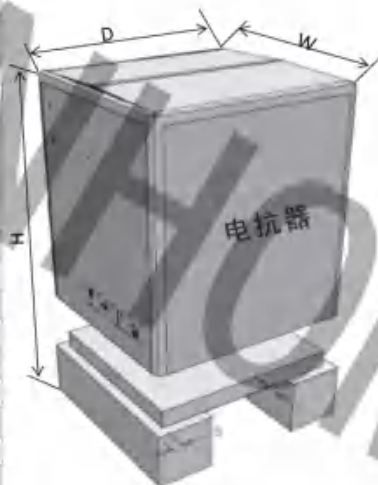
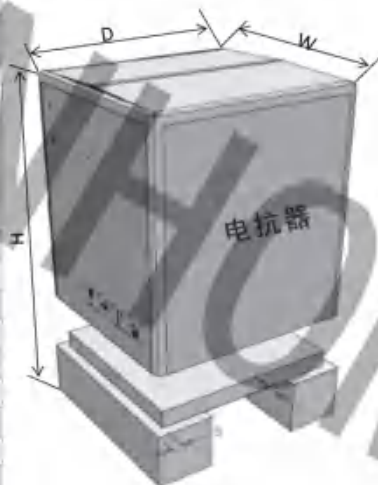
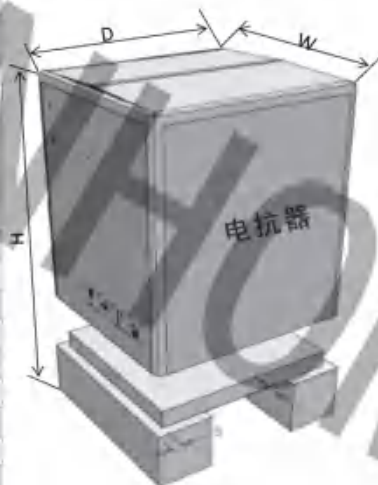
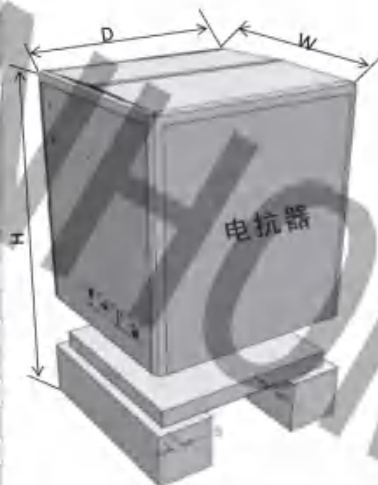
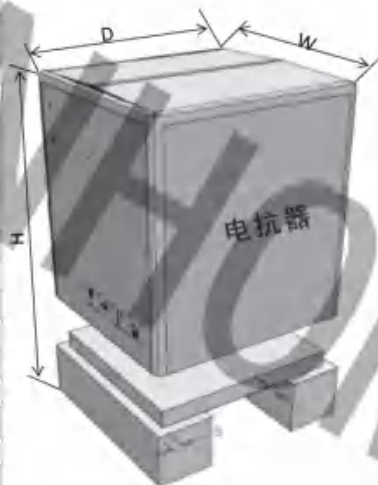
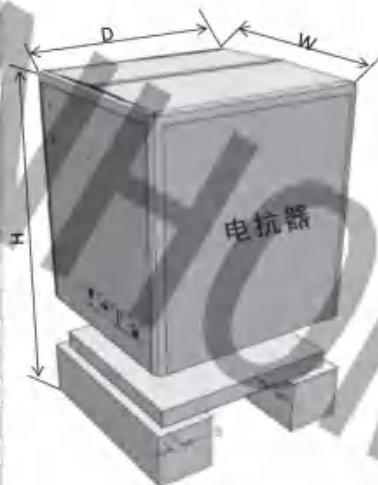
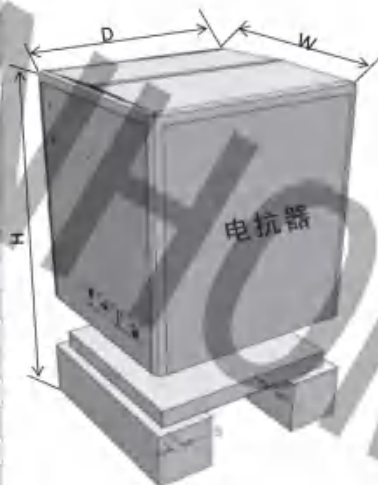
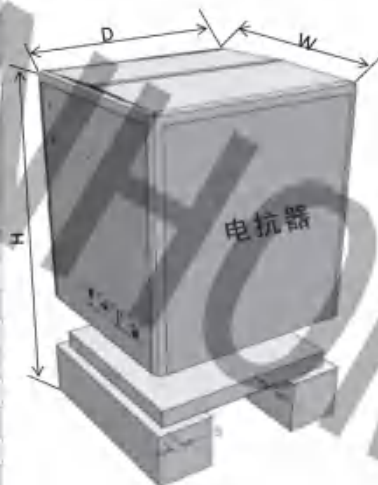
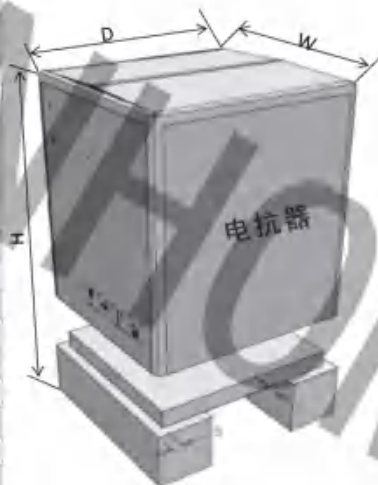


Picutre E



Picutre F

■ 包装代码对应一览表 (Package Code Table)

序号 No.	代号 Code	D	W	H	D _{max}	D _{min}	D _{max} -D _{min}	W _{max}	W _{min}	W _{max} -W _{min}	H _{max}	H _{min}	H _{max} -H _{min}	包装图 Package Outline
1	A1	220	330	300	110	80	30	200	168	32	168	168	20	
2	A2	220	360	300	110	110	0	240	240	0	240	240	0	
3	B1	220	330	300	130	125	5	168	168	0	168	168	0	
4	B2	220	430	335	138	120	18	300	270	30	270	270	25	
5	C2	220	360	315	155	155	0	240	168	72	168	168	10	
6	C3	255	430	380	165	155	10	320	130	190	130	130	20	
7	D3	300	290	420	210	185	25	200	150	50	150	150	40	
8	D4	290	420	325	200	200	0	310	232	78	232	232	35	
9	D5	310	390	445	220	195	25	280	150	130	150	150	150	
10	D6	285	430	330	195	195	0	320	280	40	280	280	15	
11	D7	285	460	375	195	155	40	350	155	195	155	155	60	
12	D8	285	510	420	195	195	0	400	195	205	195	195	95	
13	E2	340	265	365	250	250	0	175	175	0	175	175	0	
14	E3	340	325	395	250	250	0	235	180	55	180	180	60	
15	E4	325	310	435	235	215	20	220	160	60	160	160	20	
16	F2	345	310	410	255	250	5	220	175	45	175	175	25	
17	F3	340	340	465	250	250	0	250	240	10	240	240	50	
18	G1	390	280	460	300	300	0	190	190	0	190	190	0	
19	G2	390	300	480	300	300	0	210	210	0	210	210	20	
20	G3	390	370	430	300	290	10	280	190	90	190	190	80	
21	G4	390	370	395	300	300	0	280	280	0	280	280	25	
22	G5	380	340	455	290	250	40	250	200	50	200	200	20	
23	G6	340	310	445	250	250	0	220	220	0	220	220	0	
24	H3	410	445	485	320	320	0	355	215	140	215	215	40	
25	H4	410	430	530	320	315	5	340	245	95	245	245	75	
26	H5	410	430	585	320	320	0	340	340	0	340	340	0	
27	I1	415	305	515	325	325	0	215	215	0	215	215	0	
28	I2	450	545	560	360	325	35	455	235	220	235	235	135	
29	I3	450	440	515	360	320	40	350	270	80	270	270	115	
30	I4	450	475	565	360	330	30	385	340	45	340	340	150	
31	I5	420	515	615	330	320	10	425	340	85	340	340	175	
32	J2	485	385	475	395	395	0	295	295	0	295	295	0	
33	J3	485	480	525	395	370	25	390	270	120	270	270	20	
34	J4	485	465	560	395	365	30	375	320	55	320	320	20	
35	K1	510	440	465	420	420	0	350	350	0	350	350	0	
36	K2	515	560	520	425	400	25	470	365	105	365	365	15	
37	K3	510	430	555	420	420	0	340	340	0	340	340	0	
38	K4	490	430	605	400	400	0	340	340	0	340	340	40	
39	K5	520	560	645	430	405	25	470	350	120	350	350	10	
40	L1	570	440	553	480	480	0	350	350	0	350	350	0	
41	L2	570	430	643	480	480	0	340	340	0	340	340	0	
42	L3	610	460	638	520	520	0	370	370	0	370	370	0	
43	L4	575	525	703	485	485	0	435	435	0	435	435	0	
44	L5	545	570	673	455	455	0	480	480	0	480	480	0	
45	L6	590	600	738	500	340	160	510	340	170	340	340	115	
46	M2	640	470	703	550	550	0	380	340	40	340	340	0	
47	M3	635	555	713	545	545	0	465	465	0	465	465	0	
48	N2	680	605	773	590	550	40	515	420	95	420	420	45	
49	N3	640	620	823	550	550	0	530	530	0	530	530	25	
50	N4	690	620	883	600	600	0	530	530	0	530	530	0	

■ 产品简述(Product Profile)

直流电路中能减少电流脉动，当电感量达到一定量时能保证电流连续不断流。改善电容滤波造成的输入电流波形畸变，减少和防止因冲击电流造成整流桥损坏和电容过热，提高功率因素，降低直流母线交流脉冲，限制电网电压的瞬变。

DC Reactors are designed to: reduce the current ripple in DC circuit, ensuring continuous current; when inductance value reach to a certain degree; reduce and prevent the rectifier bridge from the damage and overheating caused by pulse current; mprove power factor; reduce the AC pulse to the DC busbar; limit grid voltage transience.



■ 产品特点(Product Features)

电抗器高性能，高耐温的符合绝缘材料配合无骨架工艺，电抗器耐热等级高，F级和H级可选。电抗器采用氩弧焊接工艺，噪音低，漏磁小，电感稳定。线圈采用箔绕工艺，耐电磁力强，工艺整洁，外观漂亮。铁心采用优质低损耗冷轧硅钢片，使电抗器可靠性高，体积小，重量轻，价格便宜。

Due to the composite insulation material of high performance & high temperature resistance and frameless process, the reactors' temperature heat-resisting ability is strong and the class F&H are optional. The process of the argon arc welding adopted by our company makes the reactors characterized by low noise, small magnetic flux leakage and stable inductance. Coiled with foil winding process, the reactors have strong resistance to electric magnetic force, and neat appearance. With the core made of grain-oriented cold-rolled silicon steel sheets, our reactors boast the advantages of high reliability, small size, light weight and low cost.

■ 产品参数(Product Parameters)

1. 额定工作电压：DC500V-DC1000V
2. 抗电强度：铁芯-绕组3000VAC/50Hz/5mA，10S无飞弧击穿
3. 绝缘电阻：铁芯-绕组1000VDC，绝缘阻值 $\geq 100M\Omega$ ，
4. 电抗器噪音：小于65dB(与电抗器水平距离点1米测试)；
5. 产品执行标准：GB19212.1-2008
GB19212.21-2007
GB1094.6-2011

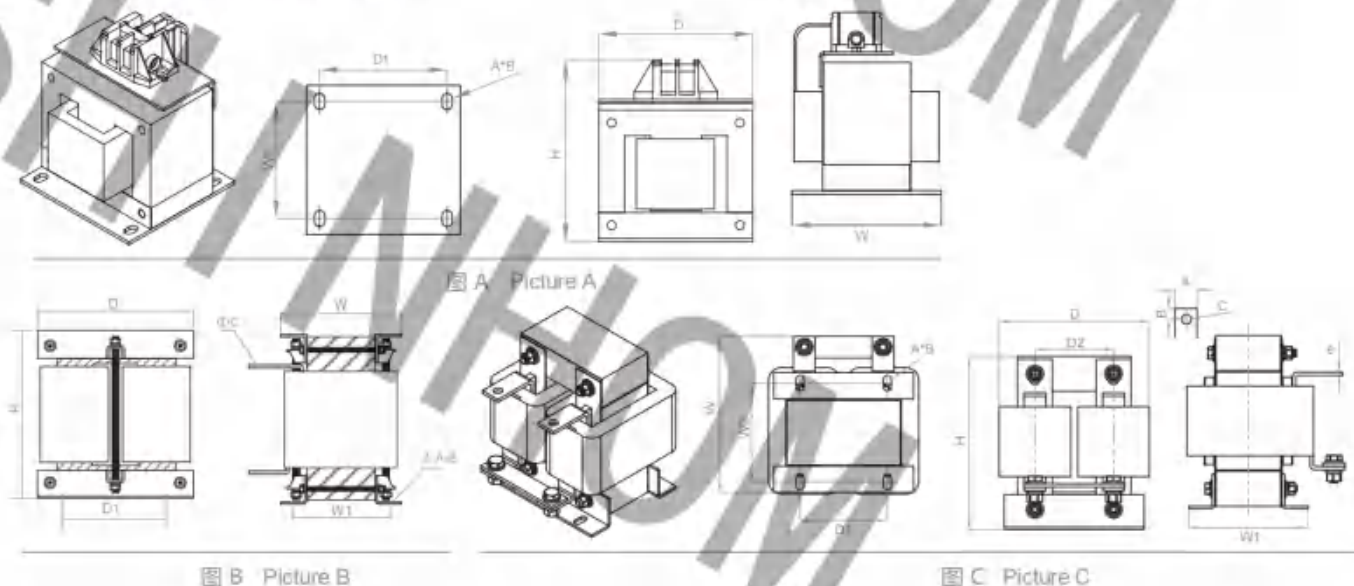
1. Rated operating power: DC500V-DC1000V
2. Reactive strength: cored-winding 3000VAC/50Hz/5mA/10S free of arcing breakage
3. Insulation resistance: cored-winding 1000VDC, insulation resistance value $\geq 100M\Omega$
4. Reactor's noise is less than 65dB (to be measured at the point 1 meter away from the reactor horizontally)
5. Standards of the product conform to:
GB19212.1-2008/GB19212.21-2007/GB1094.6-2011

直流电抗器 DC Reactor

直流电抗器选型表 (DC Reactor Selection)

序号 No.	功率 Power (KVA)	电压 Voltage (V)	额定 电流 Rated current (A)	电感 值 Inductance value (mH)	绝缘 等级 Insulation class	电抗型号 Reactor type	图号 Picture No.	产品规格 Product specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	φc (mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code
1	1.5/2.2	400	6	11	F	DCL-0006-EIDC-E11M	A	80*110*85	63*60	5.4*9	/	/	Cu	2.3	2	A1
2	3.7/4.0	400	12	6.3	F	DCL-0012-EIDC-E6M3		100*125*100	80*70	6*11	/	/	Cu	3.2	2	A1
3	5.5/7.5	400	23	3.6	F	DCL-0023-EIDH-E3M6		110*135*120	87*70	6*11	/	/	AL	3.8	2	A2
4	11.0/15.0	400	33	2	F	DCL-0033-EIDH-E2M0		110*135*120	87*70	6*11	/	/	AL	4.3	2	A2
5	18.5	400	40	1.3	F	DCL-0040-EIDH-E1M3		110*135*120	87*70	6*11	/	/	AL	4.3	2	A2
6	22	400	50	1.08	F	DCL-0050-EIDH-E1M1		120*145*135	95*85	8.4*13	/	/	AL	5.5	2	B2
7	30	400	65	0.8	F	DCL-0065-EIDH-EM80		138*170*150	111*85	8.4*13	/	/	AL	7.2	2	B2
8	37	400	78	0.7	F	DCL-0078-EIDH-EM70		138*170*150	111*85	8.4*13	/	/	AL	7.5	2	B2
9	45	400	95	0.54	F	DCL-0095-EIDH-EM54		138*170*150	111*85	8.4*13	/	/	AL	7.8	2	B2
10	55	400	115	0.45	F	DCL-0115-EIDH-EM45		155*195*160	125*90	9*18	/	/	AL	9.2	2	C3
11	75	400	160	0.36	F	DCL-0160-UIDH-EM36	B	165*215*130	100*98	9*18	/	20*5	AL	10	1	C3
12	90	400	180	0.33	F	DCL-0180-UIDH-EM33		165*215*130	100*98	9*18	/	20*5	AL	20	1	C3
13	110/132	400	250	0.26	F	DCL-0250-UIDH-EM26		210*255*150	176*115	11*18	12	30*5	AL	23	1	D3
14	160	400	340	0.17	F	DCL-0340-UIDH-EM17		210*255*150	176*115	11*18	12	30*5	AL	23	1	D3
15	185/220	400	460	0.09	F	DCL-0460-UIDH-EM09		220*280*150	191*115	11*18	14	35*6	AL	28	1	D5
16	300	400	650	0.072	F	DCL-0650-UIDH-E72U	C	235*280*160	206*125	11*18	14	45*6	AL	33	1	E4
17	55	690	95	1	F	DCL-0095-UIDA-E1M0		185*215*185	100*127	9*18	11	25*5	AL	15	1	D3
18	75	690	120	0.85	F	DCL-0120-UIDA-EM85		190*215*200	100*142	9*18	11	25*5	AL	18	1	D3
19	90	690	165	0.65	F	DCL-0165-UIDA-EM65		215*260*190	176*126	11*18	11	25*5	AL	18.5	1	E4
20	132	690	210	0.47	F	DCL-0210-UIDA-EM47		215*260*200	176*131	11*18	11	25*5	AL	20	1	E4
21	160	690	264	0.38	F	DCL-0264-UIDA-EM38		220*260*220	176*151	11*18	11	30*5	AL	26	1	E4

产品尺寸图 (Product Size)



■ 包装代码对应一览表 (Package Code Table)

序号 No.	代号 Code	D	W	H	D _{max}	D _{min}	D _{max} -D _{min}	W _{max}	W _{min}	W _{max} -W _{min}	H _{max}	H _{min}	H _{max} -H _{min}	包装图 Package Outline
1	A1	220	330	300	110	80	30	200	168	32	168	168	20	
2	A2	220	360	300	110	110	0	240	240	0	240	240	0	
3	B1	220	330	300	130	125	5	168	168	0	168	168	0	
4	B2	220	430	335	138	120	18	300	270	30	270	270	25	
5	C2	220	360	315	155	155	0	240	168	72	168	168	10	
6	C3	255	430	380	165	155	10	320	130	190	130	130	20	
7	D3	300	290	420	210	185	25	200	150	50	150	150	40	
8	D4	290	420	325	200	200	0	310	232	78	232	232	35	
9	D5	310	390	445	220	195	25	280	150	130	150	150	150	
10	D6	285	430	330	195	195	0	320	280	40	280	280	15	
11	D7	285	460	375	195	155	40	350	155	195	155	155	60	
12	D8	285	510	420	195	195	0	400	195	205	195	195	95	
13	E2	340	265	365	250	250	0	175	175	0	175	175	0	
14	E3	340	325	395	250	250	0	235	180	55	180	180	60	
15	E4	325	310	435	235	215	20	220	160	60	160	160	20	
16	F2	345	310	410	255	250	5	220	175	45	175	175	25	
17	F3	340	340	465	250	250	0	250	240	10	240	240	50	
18	G1	390	280	460	300	300	0	190	190	0	190	190	0	
19	G2	390	300	480	300	300	0	210	210	0	210	210	20	
20	G3	390	370	430	300	290	10	280	190	90	190	190	80	
21	G4	390	370	395	300	300	0	280	280	0	280	280	25	
22	G5	380	340	455	290	250	40	250	200	50	200	200	20	
23	G6	340	310	445	250	250	0	220	220	0	220	220	0	
24	H3	410	445	485	320	320	0	355	215	140	215	215	40	
25	H4	410	430	530	320	315	5	340	245	95	245	245	75	
26	H5	410	430	585	320	320	0	340	340	0	340	340	0	
27	I1	415	305	515	325	325	0	215	215	0	215	215	0	
28	I2	450	545	560	360	325	35	455	235	220	235	235	135	
29	I3	450	440	515	360	320	40	350	270	80	270	270	115	
30	I4	450	475	565	360	330	30	385	340	45	340	340	150	
31	I5	420	515	615	330	320	10	425	340	85	340	340	175	
32	J2	485	385	475	395	395	0	295	295	0	295	295	0	
33	J3	485	480	525	395	370	25	390	270	120	270	270	20	
34	J4	485	465	560	395	365	30	375	320	55	320	320	20	
35	K1	510	440	465	420	420	0	350	350	0	350	350	0	
36	K2	515	560	520	425	400	25	470	365	105	365	365	15	
37	K3	510	430	555	420	420	0	340	340	0	340	340	0	
38	K4	490	430	605	400	400	0	340	340	0	340	340	40	
39	K5	520	560	645	430	405	25	470	350	120	350	350	10	
40	L1	570	440	553	480	480	0	350	350	0	350	350	0	
41	L2	570	430	643	480	480	0	340	340	0	340	340	0	
42	L3	610	460	638	520	520	0	370	370	0	370	370	0	
43	L4	575	525	703	485	485	0	435	435	0	435	435	0	
44	L5	545	570	673	455	455	0	480	480	0	480	480	0	
45	L6	590	600	738	500	340	160	510	340	170	340	340	115	
46	M2	640	470	703	550	550	0	380	340	40	340	340	0	
47	M3	635	555	713	545	545	0	465	465	0	465	465	0	
48	N2	680	605	773	590	550	40	515	420	95	420	420	45	
49	N3	640	620	823	550	550	0	530	530	0	530	530	25	
50	N4	690	620	883	600	600	0	530	530	0	530	530	0	

■ 产品简述 (Product Profile)

解谐电抗器也叫串联电抗器，用于无功功率补偿。一般和电容串联使用，其在工频下呈容性，从而防止并联谐振及无放大谐波电流之虞。具有抑制高次谐波，限制合闸涌流；提高系统功率因数；防止谐波电容器造成危害，避免电容器装置的接入对电网谐波的过度放大和谐振发生。

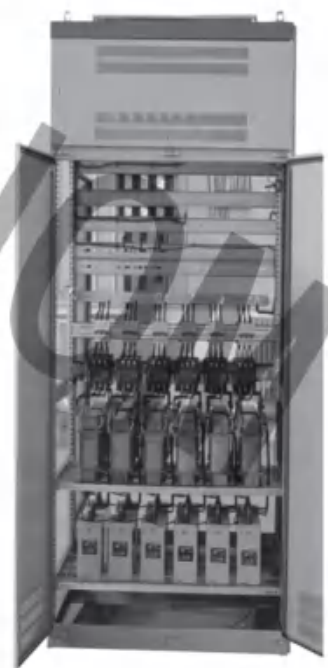
Detuned reactor is also called series reactor for reactive power compensation application. Normally, capacitance series is used so as to prevent the parallel resonance, and thus no amplification harmonic currents occur. Its functions are to restrain high harmonics, limit operating impulse, improve the system power factor, prevent harmonic capacitor causing harmful results, and avoid the excessive amplification and resonance of harmonic wave to the power grid when capacitor equipment accesses in.



■ 产品特点 (Product Features)

耐温等级高，绝缘强度高，安全可靠；电抗器采用优质冷轧硅钢片，损耗低，高频特性好；电抗器线性度好，过载能力强；电抗器浸渍工艺采用真空压力浸渍，浸油充分，油膜厚，电抗器噪音低，耐腐蚀性好。

It is safe and reliable due to high heat resistance level and insulation strength. With the core made of grain-oriented cold rolled silicon steel sheets, the reactor boasts the advantages of excellent high frequency performance and low core loss. Designed with low magnetic flux density, the reactor is of high linearity, powerful overload capacity. VPI process makes the reactor fully immersed and the oil film thicker, which contributes to the low noise and good corrosion resistance of the products.

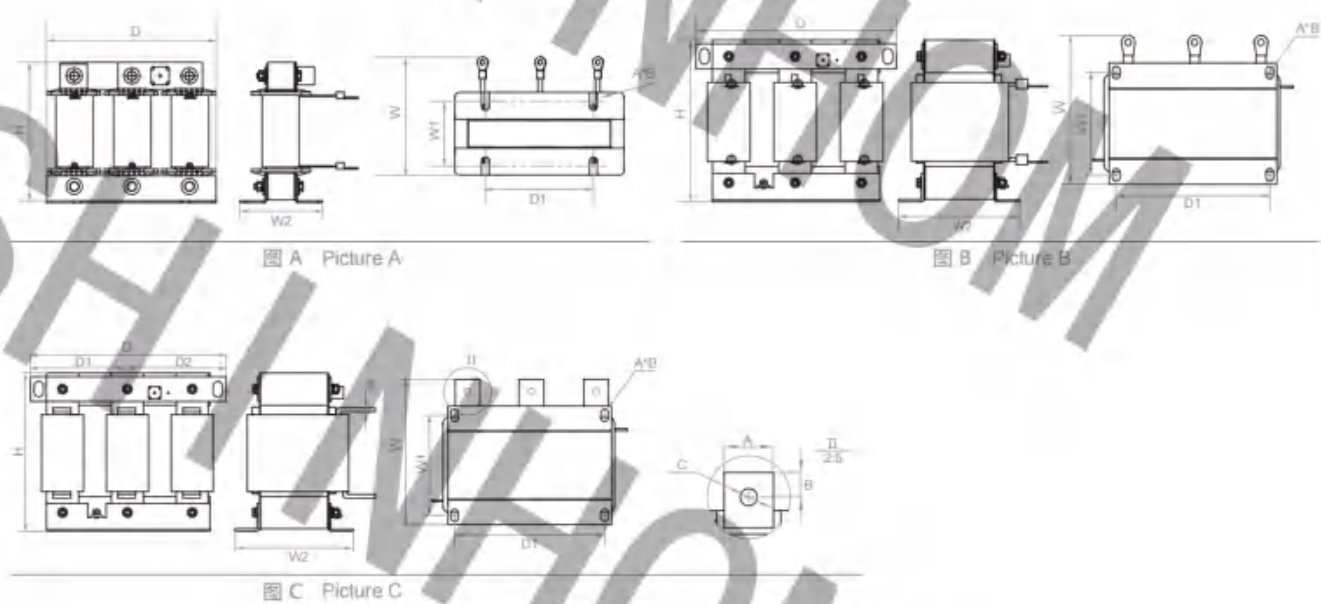


解谐电抗器
Detuned Reactor

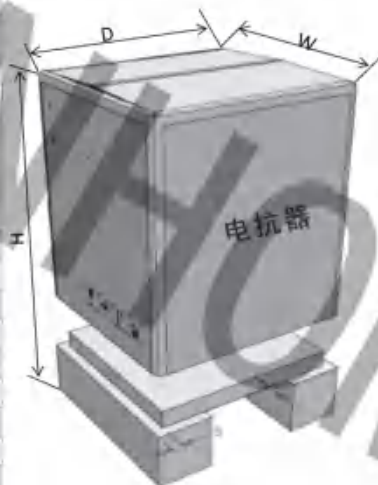
480V解谐电抗器选型表 (480V Detuned Reactor Selection Table)

序号 No	额定 电流 Rated current (A)	电感 Inductance value (mH)	电容 容量 Capacitance (kvar)	压降 Voltage drop	绝缘 等级 Insulation class	电抗型号 Product type	图号 Picture No	产品规格 Product Specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	φc c(mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code
1	13.5	6.43	7.5	7%	F	DHL-0014-EISA-E6M4	A	195*220*170	150*92	6*11	4.3	/	AL	10.5	2	D8
2	18	4.83	10	7%	F	DHL-0018-EISA-E4M8		195*220*200	150*112	6*11	5.3	/	AL	13.5	2	D8
3	22.4	3.86	12.5	7%	F	DHL-0022-EISA-E3M8		195*255*200	150*112	6*11	5.3	/	AL	15	2	D8
4	26.8	3.2	15	7%	F	DHL-0027-EISA-E3M2		250*220*195	182*98	11*18	6.4	/	AL	17	1	F2
5	35.8	2.4	20	7%	F	DHL-0036-EISA-E2M4		250*220*210	182*108	11*18	6.4	/	AL	20	1	F2
6	45	1.93	25	7%	F	DHL-0045-EISA-E1M9		250*220*220	182*118	11*18	6.4	/	AL	22	1	F2
7	54	1.61	30	7%	F	DHL-0054-EISA-E1M6		250*235*210	182*108	11*18	6.4	/	AL	22	1	F2
8	71	1.21	40	7%	F	DHL-0071-EISA-E1M2	B	290*265*220	214*117	11*18	8.4	/	AL	28	1	G3
9	90	0.97	50	7%	F	DHL-0090-EISA-EM97		290*265*240	214*132	11*18	8.4	/	AL	34	1	G3
10	107	0.82	60	7%	F	DHL-0110-EISA-EM82	C	320*295*245	243*136	12*20	11	25*5	AL	45	1	H4
11	125	0.69	70	7%	F	DHL-0125-EISA-EM69		320*295*250	243*149	12*20	11	25*5	AL	49	1	H4
12	143	0.6	80	7%	F	DHL-0140-EISA-EM60		320*330*255	243*144	12*20	11	25*5	AL	54	1	H4
13	161	0.55	90	7%	F	DHL-0160-EISA-EM55		320*350*255	243*148	12*20	11	25*5	AL	59	1	H4
14	179	0.49	100	7%	F	DHL-0180-EISA-EM49		320*365*250	243*144	12*20	11	25*5	AL	62	1	H4

产品尺寸图 (Product Size)



■ 包装代码对应一览表 (Package Code Table)

序号 No.	代号 Code	D	W	H	D _{max}	D _{min}	D _{max} -D _{min}	W _{max}	W _{min}	W _{max} -W _{min}	H _{max}	H _{min}	H _{max} -H _{min}	包装图 Package Outline
1	A1	220	330	300	110	80	30	200	168	32	168	168	20	
2	A2	220	360	300	110	110	0	240	240	0	240	240	0	
3	B1	220	330	300	130	125	5	168	168	0	168	168	0	
4	B2	220	430	335	138	120	18	300	270	30	270	270	25	
5	C2	220	360	315	155	155	0	240	168	72	168	168	10	
6	C3	255	430	380	165	155	10	320	130	190	130	130	20	
7	D3	300	290	420	210	185	25	200	150	50	150	150	40	
8	D4	290	420	325	200	200	0	310	232	78	232	232	35	
9	D5	310	390	445	220	195	25	280	150	130	150	150	150	
10	D6	285	430	330	195	195	0	320	280	40	280	280	15	
11	D7	285	460	375	195	155	40	350	155	195	155	155	60	
12	D8	285	510	420	195	195	0	400	195	205	195	195	95	
13	E2	340	265	365	250	250	0	175	175	0	175	175	0	
14	E3	340	325	395	250	250	0	235	180	55	180	180	60	
15	E4	325	310	435	235	215	20	220	160	60	160	160	20	
16	F2	345	310	410	255	250	5	220	175	45	175	175	25	
17	F3	340	340	465	250	250	0	250	240	10	240	240	50	
18	G1	390	280	460	300	300	0	190	190	0	190	190	0	
19	G2	390	300	480	300	300	0	210	210	0	210	210	20	
20	G3	390	370	430	300	290	10	280	190	90	190	190	80	
21	G4	390	370	395	300	300	0	280	280	0	280	280	25	
22	G5	380	340	455	290	250	40	250	200	50	200	200	20	
23	G6	340	310	445	250	250	0	220	220	0	220	220	0	
24	H3	410	445	485	320	320	0	355	215	140	215	215	40	
25	H4	410	430	530	320	315	5	340	245	95	245	245	75	
26	H5	410	430	585	320	320	0	340	340	0	340	340	0	
27	I1	415	305	515	325	325	0	215	215	0	215	215	0	
28	I2	450	545	560	360	325	35	455	235	220	235	235	135	
29	I3	450	440	515	360	320	40	350	270	80	270	270	115	
30	I4	450	475	565	360	330	30	385	340	45	340	340	150	
31	I5	420	515	615	330	320	10	425	340	85	340	340	175	
32	J2	485	385	475	395	395	0	295	295	0	295	295	0	
33	J3	485	480	525	395	370	25	390	270	120	270	270	20	
34	J4	485	465	560	395	365	30	375	320	55	320	320	20	
35	K1	510	440	465	420	420	0	350	350	0	350	350	0	
36	K2	515	560	520	425	400	25	470	365	105	365	365	15	
37	K3	510	430	555	420	420	0	340	340	0	340	340	0	
38	K4	490	430	605	400	400	0	340	340	0	340	340	40	
39	K5	520	560	645	430	405	25	470	350	120	350	350	10	
40	L1	570	440	553	480	480	0	350	350	0	350	350	0	
41	L2	570	430	643	480	480	0	340	340	0	340	340	0	
42	L3	610	460	638	520	520	0	370	370	0	370	370	0	
43	L4	575	525	703	485	485	0	435	435	0	435	435	0	
44	L5	545	570	673	455	455	0	480	480	0	480	480	0	
45	L6	590	600	738	500	340	160	510	340	170	340	340	115	
46	M2	640	470	703	550	550	0	380	340	40	340	340	0	
47	M3	635	555	713	545	545	0	465	465	0	465	465	0	
48	N2	680	605	773	590	550	40	515	420	95	420	420	45	
49	N3	640	620	823	550	550	0	530	530	0	530	530	25	
50	N4	690	620	883	600	600	0	530	530	0	530	530	0	

产品简述 (Product Profile)

使用在矿山设备中。由于使用环境恶劣，设备要求可靠性高，安全等级高。电抗器在设计时充分考虑矿山设备特殊要求，保证电抗器结构强度高，绝缘好，温升低，漏电流小，充分保证其安全等级。可改善输入电流波形和平衡度；抑制高次谐波，限制合闸涌流；提高系统功率因数。

Reactor for Mining Inverter is applied to mining equipment. Due to the harsh working condition, high reliability and safety is very necessary. With the special mining circumstances taken into full consideration, the reactor should be strong in structural strength and high in insulation, with low temperature rise and little leakage current; it is designed to improve the input current waveform and balance degree, restrain high harmonic, limit operating impulse and improve system power factor.

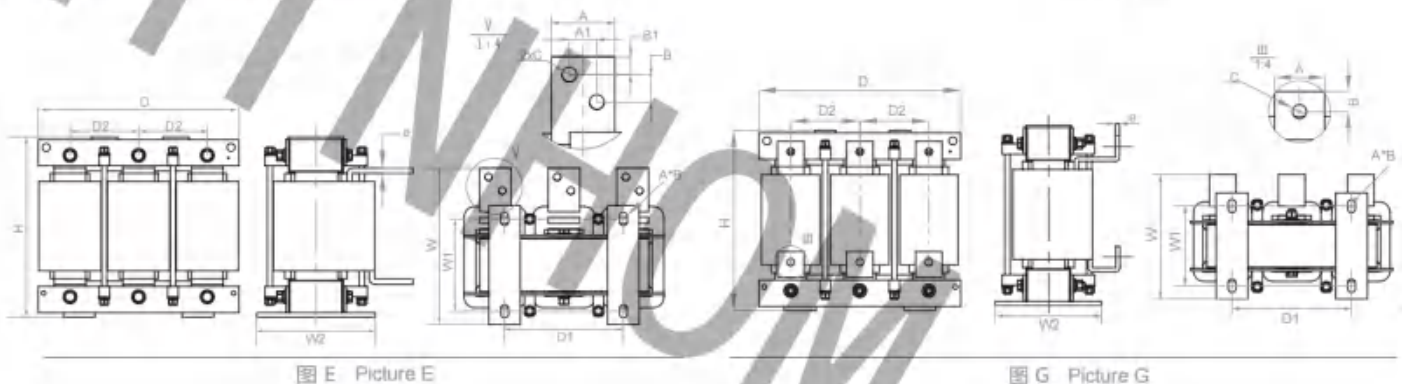


产品特点 (Product Features)

电抗器采用优质冷轧取向硅钢片，损耗低，高频特性好；设计磁通密度低，线性度好，过载能力强。绕组电密取值低，降低了绕组的损耗，从而使温升降低。电抗器浸渍工艺采用真空压力浸渍，浸油充分，油膜厚，电抗器噪音低，耐腐蚀性高，防潮性能强。线圈采用H级绝缘，大大提高了长期运行的可靠性。体积小，安装方便，性能稳定，抗短路能力强。设计温升小于70K，噪音小于75dB。绝缘性能好，泄露电流小。设计参考标准GB/T 14093.7-2009。

With the core made of grain-oriented cold rolled silicon steel sheets, the reactor boasts excellent high frequency performance and low core loss. Designed with low magnetic flux density, the reactor is of high linearity and powerful overload capacity. Low current density brings low loss and temperature rise. VPI process makes the reactor fully immersed and the oil film thicker, which contributes to the low noise, good corrosion resistance and good moisture performance of the products. The coil insulation class is H, greatly improving the reliability of the long-term operation; more advantages are compact structure, easy installation, stable performance and strong anti-short circuit ability, temperature rise less than 70K, noise less than 75dB, good insulation performance, small leakage currents, etc.

产品尺寸图 (Product Size)



防爆电抗器 Reactor for Mining Inverter

■ 防爆输入电抗器选型表 Mining Inverter Input Reactor Selection Table

序号 No.	功率 Power (kVA)	电压 Voltage (V)	额定 电流 Rated current (A)	电感 Inductance value (mH)	绝缘 等级 Insulation class	电抗型号 Product model	图号 Picture No.	产品规格 Product Specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	φc (mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code
1	110	660	110	0.46	H	FBLA-0110-EISC-6423	G	300*250*280	200*250	12*20	11	20*5	Cu	40	1	G3
2	132	660	147	0.25	H	FBLA-0147-EISC-6423		250*250*240	200*190	12*20	11	20*5	Cu	45	1	F3
3	200	660	200	0.25	H	FBLA-0200-EISC-6423		E	420*300*350	250*300	15*25	11	20*5	Cu	100	1
4	250	660	280	0.13	H	FBLA-0280-EISC-6423	G	250*300*250	200*210	12*20	11	20*5	Cu	65	1	F3
5	400	660	380	0.13	H	FBLA-0380-EISC-6423	E	330*400*340	250*300	15*25	11	40*5	Cu	130	1	I4
6	400	660	400	0.09	H	FBLA-0400-EISC-6423	G	370*340*350	250*300	15*25	2-φ11	50*5	Cu	120	1	J3
7	500	660	500	0.10	H	FBLA-0500-EISC-6423	E	320*420*340	250*300	15*25	13	40*6	Cu	125	1	H5
8	500	660	560	0.07	H	FBLA-0560-EISC-6423	G	370*350*350	250*300	15*25	2-φ11	50*5	Cu	125	1	J3
9	630	660	630	0.09	H	FBLA-0630-EISC-6423	E	405*480*350	250*300	15*25	2-φ12	50*6	Cu	200	1	K5
10	200	1140	118	1.07	H	FBLA-0118-EISC-6423		420*300*350	250*300	15*25	11	20*5	Cu	125	1	K1
11	250	1140	162	0.39	H	FBLA-0162-EISC-6423		350*290*340	250*300	15*25	11	20*5	Cu	50	1	I4
12	400	1140	229	0.55	H	FBLA-0229-EISC-6423	G	425*340*365	250*300	15*25	11	30*5	Cu	185	1	K2
13	400	1140	260	0.24	H	FBLA-0260-EISC-6423A	E	360*350*340	250*300	15*25	11	20*5	Cu	110	1	I3
14	500	1140	290	0.44	H	FBLA-0290-EISC-6423		365*395*375	250*300	15*25	13	30*5	Cu	195	1	I4
15	630	1140	360	0.36	H	FBLA-0360-EISC-6423		500*420*390	250*300	15*25	13	40*5	Cu	280	1	L6
16	630	1140	385	0.20	H	FBLA-0385-EISC-6423	G	370*375*330	250*300	12*20	14	40*5	Cu	137	1	I4
17	630	1140	408	0.15	H	FBLA-0408-EISC-6423A	E	400*400*340	250*300	15*25	2-φ13	50*5	Cu	135		K4

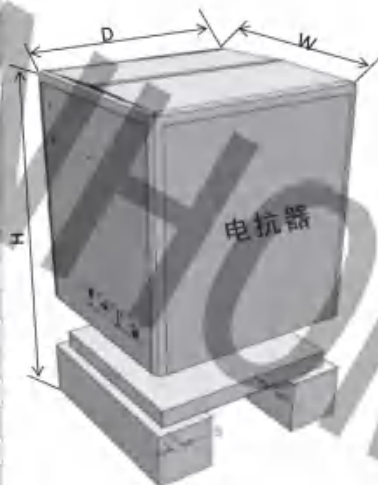
■ 防爆输出电抗器选型表 Mining Inverter Output Reactor Selection Table

序号 No.	功率 Power (kVA)	电压 Voltage (V)	额定 电流 Rated current (A)	电感 Inductance value (mH)	绝缘 等级 Insulation class	电抗型号 Product model	图号 Picture No.	产品规格 Product specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	φc (mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code
1	500	660	448	0.08	H	FBLO-0448-EISC-6423	E	320*450*340	250*300	15*25	14	40*5	Cu	110	1	I5
2	132	1140	86	0.73	H	FBLO-0086-EISC-6423		320*290*340	250*300	15*25	11	20*5	Cu	60	1	H4
3	200	1140	130	0.49	H	FBLO-0130-EISC-6423		320*310*340	250*300	12*20	11	20*5	Cu	80	1	H4
4	250	1140	162	0.39	H	FBLO-0162-EISC-6423A		360*350*340	250*300	15*25	11	20*5	Cu	85	1	I3
5	400	1140	260	0.24	H	FBLO-0260-EISC-6423		360*380*340	250*300	15*25	11	20*5	Cu	120	1	I4
6	400	1140	260	0.24	H	FBLO-0260-EIWC-6423		360*260*455	300*400	12*20	11	20*5	Cu	120	1	I2
7	500	1140	324	0.19	H	FBLO-0324-EISC-6423	G	320*420*365	250*300	15*25	13	30*5	Cu	150	1	I5
8	1000	1140	350	0.20	H	FBLO-0350-EISC-6423C		420*390*340	250*300	15*25	13	40*5	Cu	180	1	K3
9	1000	1140	350	0.04	H	FBLO-0350-EISC-6423		315*320*332	250*300	12*20	14	40*5	Cu	70	1	H4
10	630	1140	408	0.15	H	FBLO-0408-EISC-6423	E	400*440*340	250*300	15*25	2-φ13	50*5	Cu	160	1	K4

■ 防爆能量回馈电抗器选型表 Mining Inverter Energy Regenerated Reactor Selection Table

序号 No.	功率 Power (KVA)	电压 Voltage (V)	额定 电流 Rated current (A)	电感 Inductance value (mH)	绝缘 等级 Insulation class	电抗型号 Product model	图号 Picture No.	产品规格 Product specifications								
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	φc (mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code
1	90	660	90	0.85	H	FBLE-0090-EISC-6423	G	320*280*280	200*250	12*20	11	20*5	Cu	85	1	H3
2	110	660	110	0.69	H	FBLE-0110-EISC-6423		320*320*280	200*250	12*20	11	20*5	Cu	90	1	H3
3	200	660	200	0.38	H	FBLE-0200-EISC-6423		480*350*350	250*300	15*25	11	20*5	Cu	200	1	L1
4	630	660	315	0.25	H	FBLE-0315-EISC-6423	E	520*435*370	250*300	15*25	11	30*5	Cu	245	1	L3
5	400	660	380	0.20	H	FBLE-0380-EISC-6423		350*500*340	250*300	15*25	11	40*5	Cu	200	1	L6
6	500	660	500	0.24	H	FBLE-0500-EISC-6423		485*500*435	250*360	15*25	13	40*6	Cu	370	1	L4
7	200	1140	118	2.13	H	FBLE-0118-EISC-6423	G	480*440*340	250*300	15*25	11	20*5	Cu	260	1	L2
8	630	1140	180	1.40	H	FBLE-0180-EISC-6423		550*580*340	250*300	15*25	11	20*5	Cu	350	1	M2
9	400	1140	229	1.10	H	FBLE-0229-EISC-6423		550*500*380	250*300	15*25	11	25*5	Cu	410	1	M2
10	500	1140	290	0.87	H	FBLE-0290-EISC-6423	G	545*510*465	250*360	15*25	13	30*5	Cu	450	1	M3
11	1000	1140	340	0.91	H	FBLE-0340-EISC-6423	E	590*525*420	250*360	15*25	14	40*5	Cu	539		N2

■ 包装代码对应一览表 (Package Code Table)

序号 No.	代号 Code	D	W	H	D _{max}	D _{min}	D _{max} -D _{min}	W _{max}	W _{min}	W _{max} -W _{min}	H _{max}	H _{min}	H _{max} -H _{min}	包装图 Package Outline
1	A1	220	330	300	110	80	30	200	168	32	168	168	20	
2	A2	220	360	300	110	110	0	240	240	0	240	240	0	
3	B1	220	330	300	130	125	5	168	168	0	168	168	0	
4	B2	220	430	335	138	120	18	300	270	30	270	270	25	
5	C2	220	360	315	155	155	0	240	168	72	168	168	10	
6	C3	255	430	380	165	155	10	320	130	190	130	130	20	
7	D3	300	290	420	210	185	25	200	150	50	150	150	40	
8	D4	290	420	325	200	200	0	310	232	78	232	232	35	
9	D5	310	390	445	220	195	25	280	150	130	150	150	150	
10	D6	285	430	330	195	195	0	320	280	40	280	280	15	
11	D7	285	460	375	195	155	40	350	155	195	155	155	60	
12	D8	285	510	420	195	195	0	400	195	205	195	195	95	
13	E2	340	265	365	250	250	0	175	175	0	175	175	0	
14	E3	340	325	395	250	250	0	235	180	55	180	180	60	
15	E4	325	310	435	235	215	20	220	160	60	160	160	20	
16	F2	345	310	410	255	250	5	220	175	45	175	175	25	
17	F3	340	340	465	250	250	0	250	240	10	240	240	50	
18	G1	390	280	460	300	300	0	190	190	0	190	190	0	
19	G2	390	300	480	300	300	0	210	210	0	210	210	20	
20	G3	390	370	430	300	290	10	280	190	90	190	190	80	
21	G4	390	370	395	300	300	0	280	280	0	280	280	25	
22	G5	380	340	455	290	250	40	250	200	50	200	200	20	
23	G6	340	310	445	250	250	0	220	220	0	220	220	0	
24	H3	410	445	485	320	320	0	355	215	140	215	215	40	
25	H4	410	430	530	320	315	5	340	245	95	245	245	75	
26	H5	410	430	585	320	320	0	340	340	0	340	340	0	
27	I1	415	305	515	325	325	0	215	215	0	215	215	0	
28	I2	450	545	560	360	325	35	455	235	220	235	235	135	
29	I3	450	440	515	360	320	40	350	270	80	270	270	115	
30	I4	450	475	565	360	330	30	385	340	45	340	340	150	
31	I5	420	515	615	330	320	10	425	340	85	340	340	175	
32	J2	485	385	475	395	395	0	295	295	0	295	295	0	
33	J3	485	480	525	395	370	25	390	270	120	270	270	20	
34	J4	485	465	560	395	365	30	375	320	55	320	320	20	
35	K1	510	440	465	420	420	0	350	350	0	350	350	0	
36	K2	515	560	520	425	400	25	470	365	105	365	365	15	
37	K3	510	430	555	420	420	0	340	340	0	340	340	0	
38	K4	490	430	605	400	400	0	340	340	0	340	340	40	
39	K5	520	560	645	430	405	25	470	350	120	350	350	10	
40	L1	570	440	553	480	480	0	350	350	0	350	350	0	
41	L2	570	430	643	480	480	0	340	340	0	340	340	0	
42	L3	610	460	638	520	520	0	370	370	0	370	370	0	
43	L4	575	525	703	485	485	0	435	435	0	435	435	0	
44	L5	545	570	673	455	455	0	480	480	0	480	480	0	
45	L6	590	600	738	500	340	160	510	340	170	340	340	115	
46	M2	640	470	703	550	550	0	380	340	40	340	340	0	
47	M3	635	555	713	545	545	0	465	465	0	465	465	0	
48	N2	680	605	773	590	550	40	515	420	95	420	420	45	
49	N3	640	620	823	550	550	0	530	530	0	530	530	25	
50	N4	690	620	883	600	600	0	530	530	0	530	530	0	

■ 产品简述 (Product Profile)

将电动机的 PWM 输出信号转化为低剩余纹波电压的光滑正弦波,防止对电机的绕组绝缘造成损害。减少了因电缆线长而出现的分布电容和分布电感产生共振的现象;消除高 dv/dt 而造成的电机过电压;消除涡流损耗造成的电动机提前损坏;滤波器降低了电动机的可听噪音。

Sinus Filter is designed to convert the PWM output signal of motor drives into a smooth sine wave with low residual ripple so as to avoid the motor insulation damage, reduce the resonance phenomenon caused by the distributed capacitance and inductance due to the long cable, eliminate the excessive motor voltage caused by high dv/dt , eliminate motor damage caused by eddy loss and reduce the noise of motor by filter application;



■ 产品特点 (Product Features)

采用了高性能的箔式绕组结构,铝排引出,具有直流电阻小,抗电磁力能力强,短时间过载能力强;采用高性能的H级绝缘材料,使产品在严酷的工作条件下依然可以保持可靠的性能;电抗器绝缘强度高,能承受极高的 Dv/dt 的电压冲击。电抗器采用真空压力浸渍工艺,可听噪音小。

Due to the excellent foil winding structure and aluminum leading structure, Sinus Filter is characterized by small DC resistance, strong resistance to electromagnetic interference and strong short-time overload capability. F Class insulation materials equip the products with reliable performance even in harsh operating conditions; high insulation ability can sustain high Dv/dt voltage impulse to the reactor; VPI process makes the humming noise low.

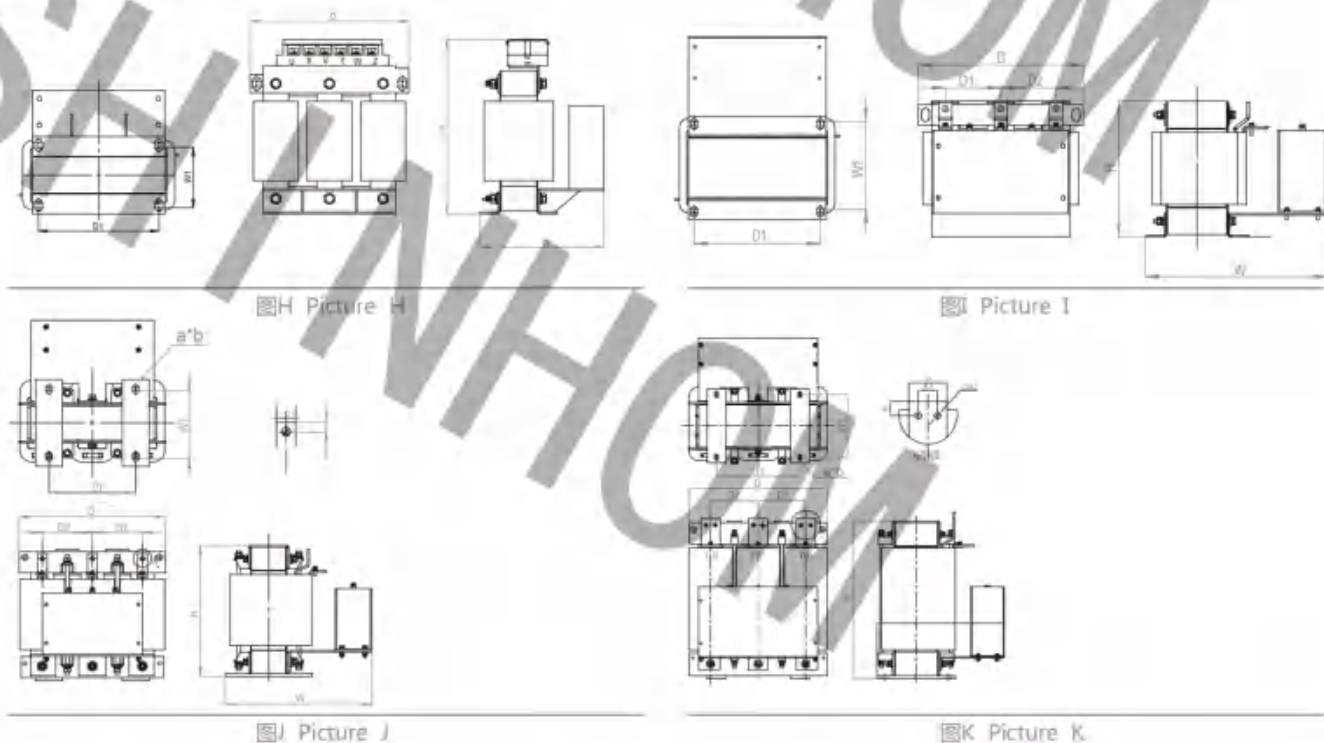
■ 电气原理图 (Electrical Diagram)



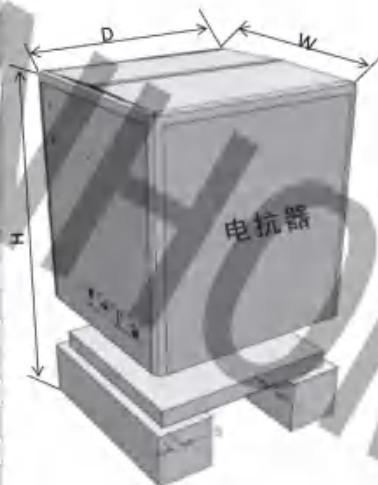
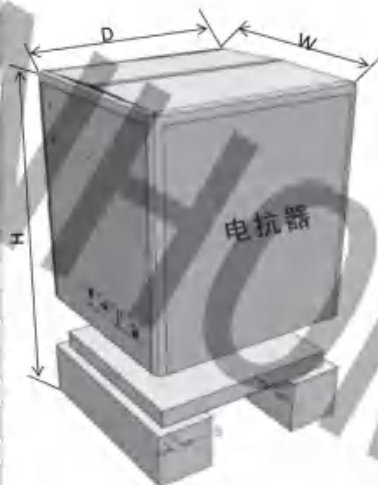
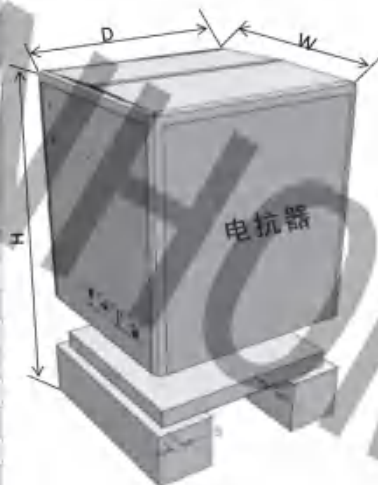
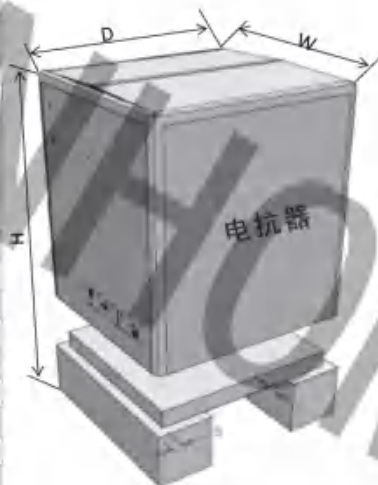
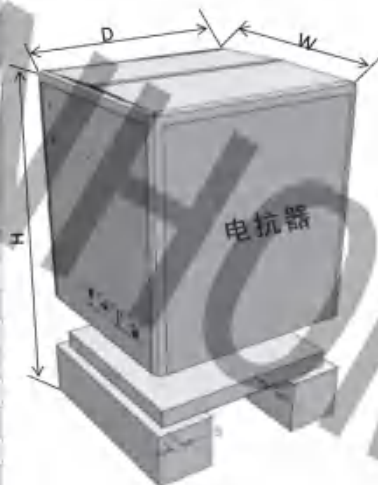
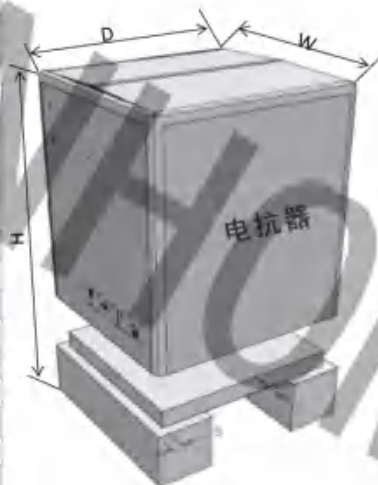
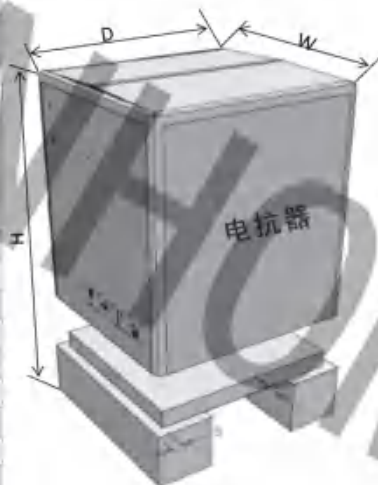
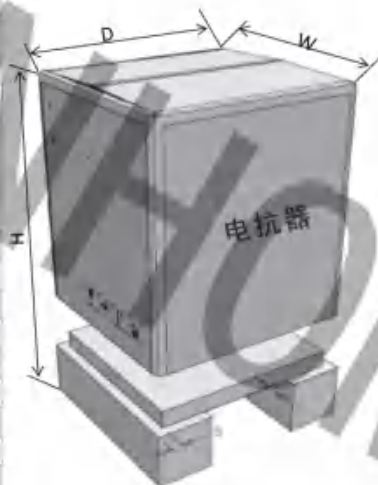
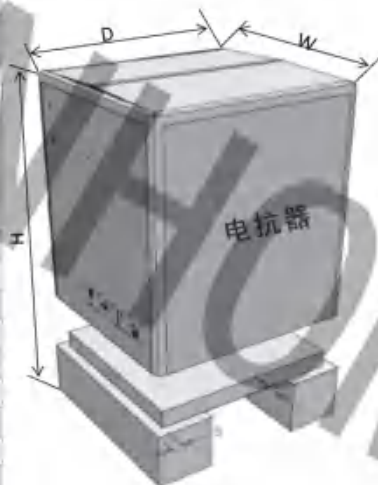
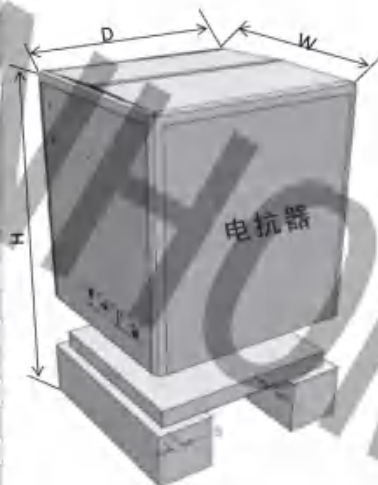
■ 输出380V正弦波滤波器选型表 (Output 380V Sinus Filter Selection)

序号 No	功率 Power (KVA)	额定 电流 Rated current (A)	电感 Inductance value (mH)	电容 容量 Capacitance (kvar)	绝缘 等级 Insulation class	电抗型号 Reactor type	图号 Picture No.	产品规格 Product Specifications									
								D*H*W (mm)	D1*W1 (mm)	a*b (mm)	φc c(mm)	A*e (mm)	材质 Material	重量 Weight (kg)	包装 数量 QTY	包装代码 Package code	
1	5.5	15	4.00	5.5	H	OSF-0015-EISA-E4M0	H	250*270*200	182*91	11*18	6.4	/	AL	18	1	G5	
2	7.5	20	3.00	7.5	H	OSF-0020-EISA-E3M0		250*280*220	182*100	11*18	6.4	/	AL	22	1	G6	
3	11	30	2.00	11	H	OSF-0030-EISA-E2M0		250*280*240	182*106	11*18	6.4	/	AL	22	1	G5	
4	15	40	1.40	15	H	OSF-0040-EISA-E1M4		250*280*240	182*121	11*18	6.4	/	AL	26	1	G5	
5	18.5	50	1.20	18.5	H	OSF-0050-EISA-E1M2		290*290*250	214*110	11*18	6.4	/	AL	26	1	G5	
6	22	60	1.00	22	H	OSF-0060-EISA-E1M0		290*290*250	214*120	11*18	6.4	/	AL	31	1	G5	
7	30	80	0.80	30	H	OSF-0080-EISA-EM80		320*320*270	243*142	12*20	6.4	/	AL	45	1	I3	
8	37	90	0.65	37	H	OSF-0090-EISA-EM65		I	320*280*340	243*159	12*20	11	25*5	AL	60	1	H3
9	45	120	0.52	45	H	OSF-0120-EISA-EM52			320*280*355	243*169	12*20	11	25*5	AL	60	1	H3
10	55	150	0.45	55	H	OSF-0150-EISA-EM45		J	390*360*390	225*175	15*25	11	25*5	AL	90	1	J3
11	75	200	0.35	75	H	OSF-Q200-EISA-EM35	400*355*435		225*200	15*25	11	30*5	AL	95	1	K2	
12	110	250	0.30	110	H	OSF-Q250-EISA-EM30	400*340*470		225*225	15*25	11	30*5	AL	115	1	K2	
13	185	450	0.15	185	H	OSF-0450-EISA-EM15	430*470*470		250*250	15*25	14	40*5	AL	170	1	K5	
14	220	500	0.15	220	H	OSF-0500-EISA-EM15	455*470*480		270*250	15*25	14	50*5	AL	190	1	L5	
15	280	600	0.12	280	H	OSF-0600-EISA-EM12	480*535*480		275*250	15*25	14	50*5	AL	250	1	L6	
16	315	660	0.10	315	H	OSF-0660-EISA-EM10	475*530*510		300*250	15*25	14	50*5	AL	255	1	L6	
17	355	750	0.09	355	H	OSF-0750-EISA-EM09	K		550*570*515	275*250	15*25	14	50*10	AL	290	1	N2
18	400	900	0.08	400	H	OSF-0900-EISA-E75U			550*620*530	275*250	15*25	2-φ13	60*10	AL	330	1	N3
19	450	1000	0.06	450	H	OSF-1000-EISA-E60U			550*595*530	275*250	15*25	2-φ13	60*10	AL	300	1	N3
20	500	1200	0.07	500	H	OSF-1200-EISA-E65U		600*680*530	300*250	15*25	2-φ13	80*8	AL	390	1	N4	

■ 产品外形图 (Product Outline)



■ 包装代码对应一览表 (Package Code Table)

序号 No.	代号 Code	D	W	H	D _{max}	D _{min}	D _{max} -D _{min}	W _{max}	W _{min}	W _{max} -W _{min}	H _{max}	H _{min}	H _{max} -H _{min}	包装图 Package Outline
1	A1	220	330	300	110	80	30	200	168	32	168	168	20	
2	A2	220	360	300	110	110	0	240	240	0	240	240	0	
3	B1	220	330	300	130	125	5	168	168	0	168	168	0	
4	B2	220	430	335	138	120	18	300	270	30	270	270	25	
5	C2	220	360	315	155	155	0	240	168	72	168	168	10	
6	C3	255	430	380	165	155	10	320	130	190	130	130	20	
7	D3	300	290	420	210	185	25	200	150	50	150	150	40	
8	D4	290	420	325	200	200	0	310	232	78	232	232	35	
9	D5	310	390	445	220	195	25	280	150	130	150	150	150	
10	D6	285	430	330	195	195	0	320	280	40	280	280	15	
11	D7	285	460	375	195	155	40	350	155	195	155	155	60	
12	D8	285	510	420	195	195	0	400	195	205	195	195	95	
13	E2	340	265	365	250	250	0	175	175	0	175	175	0	
14	E3	340	325	395	250	250	0	235	180	55	180	180	60	
15	E4	325	310	435	235	215	20	220	160	60	160	160	20	
16	F2	345	310	410	255	250	5	220	175	45	175	175	25	
17	F3	340	340	465	250	250	0	250	240	10	240	240	50	
18	G1	390	280	460	300	300	0	190	190	0	190	190	0	
19	G2	390	300	480	300	300	0	210	210	0	210	210	20	
20	G3	390	370	430	300	290	10	280	190	90	190	190	80	
21	G4	390	370	395	300	300	0	280	280	0	280	280	25	
22	G5	380	340	455	290	250	40	250	200	50	200	200	20	
23	G6	340	310	445	250	250	0	220	220	0	220	220	0	
24	H3	410	445	485	320	320	0	355	215	140	215	215	40	
25	H4	410	430	530	320	315	5	340	245	95	245	245	75	
26	H5	410	430	585	320	320	0	340	340	0	340	340	0	
27	I1	415	305	515	325	325	0	215	215	0	215	215	0	
28	I2	450	545	560	360	325	35	455	235	220	235	235	135	
29	I3	450	440	515	360	320	40	350	270	80	270	270	115	
30	I4	450	475	565	360	330	30	385	340	45	340	340	150	
31	I5	420	515	615	330	320	10	425	340	85	340	340	175	
32	J2	485	385	475	395	395	0	295	295	0	295	295	0	
33	J3	485	480	525	395	370	25	390	270	120	270	270	20	
34	J4	485	465	560	395	365	30	375	320	55	320	320	20	
35	K1	510	440	465	420	420	0	350	350	0	350	350	0	
36	K2	515	560	520	425	400	25	470	365	105	365	365	15	
37	K3	510	430	555	420	420	0	340	340	0	340	340	0	
38	K4	490	430	605	400	400	0	340	340	0	340	340	40	
39	K5	520	560	645	430	405	25	470	350	120	350	350	10	
40	L1	570	440	553	480	480	0	350	350	0	350	350	0	
41	L2	570	430	643	480	480	0	340	340	0	340	340	0	
42	L3	610	460	638	520	520	0	370	370	0	370	370	0	
43	L4	575	525	703	485	485	0	435	435	0	435	435	0	
44	L5	545	570	673	455	455	0	480	480	0	480	480	0	
45	L6	590	600	738	500	340	160	510	340	170	340	340	115	
46	M2	640	470	703	550	550	0	380	340	40	340	340	0	
47	M3	635	555	713	545	545	0	465	465	0	465	465	0	
48	N2	680	605	773	590	550	40	515	420	95	420	420	45	
49	N3	640	620	823	550	550	0	530	530	0	530	530	25	
50	N4	690	620	883	600	600	0	530	530	0	530	530	0	

Dv/dt滤波器

Dv/dt Filters

■ 功能和作用 (100m以上用dv/dt滤波器)

Fuction 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.

■ 一般电缆参数 (不加输出电抗器) General Cable Parameters(without output reactors)

电压等级 (KW) Power rating (KW)	最大电流 (A) Max. current (A)	主电缆 (UL AWG) Main cable (UL AWG)	额定电感 Rated inductance			导体对导体额定电感 Rated capacitance conductor to conductor			导体对导体/防护 罩额定电感 Rated capacitance conductor to conductor&shield		导体额定直流电阻 @200C Rated conductor DC resistance@20°C		推荐最大 电流@30°C (Amps) Max. Recommended current@30°C (Amps)
			(Uh/ft)	(Uh/m)	(H/Km)	(pF/ft)	(pF/m)	F/KM	(pF/m)	(pF/m)	(Ohm/1000ft)	(Ohm/1000m)	
5.5	12.8	AWG14	0.213	0.699	6.988189E-04	23	75.5	7.545932E-08	75.5	137.8	2.52	8.268	25
11	24.8	AWG10	0.184	0.604	6.036745E-04	29	95.1	9.514436E-08	95.1	173.9	0.989	3.245	40

变频器输出dv/dt为3000V/us根据屏蔽电缆分布参数，不会发生行波反射的临界长度一般为15m左右，则不加输出电抗器。工程上因为电缆的分布参数不一致，伺服驱动器输出的dv/dt要比3000V/μs大许多，所以不加电抗器建议电缆长度为10m.超过10m,建议加1%的输出电抗器。

The dt/dv the inverters output is 3000V/μs. According to the distribution parameters of the shielded cable, the critical length of traveling wave reflection is about 15m. If the cable is less than 15m, the output reactor can be spared. Due to the inconformity of the distribution parameters of cables in the engineering, the dt/dv the servo drivers output is much larger than 3000V/μs, so it is advised that reactors with 1% voltage drop should be used if the cable length is more than 10m.

■ 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)