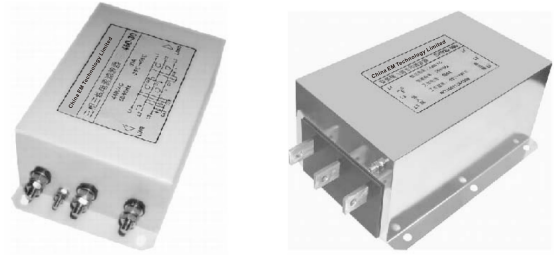


EM-FIT3 Series Input Filter

- Current ratings from 5 to 1200A
- Very high performance filter
- Reduction of electromagnetic interference levels from inverters.
- Input filter



◆ Technical Data

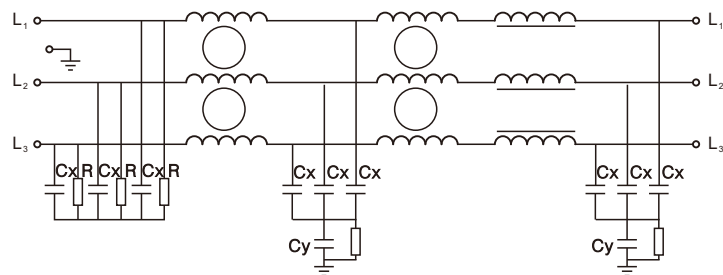
Maximum operating Voltage(VAC)	Operating frequency	Hipot test voltage(1 minute)		Operating temperature	Minimum insulation resistance
		P---P(VDC)	P---E(VDC)		
440V	50/60 Hz	2250	2700	-25 ~ +85℃	Line to Ground at 500VDC: >200MΩ

Filter	Rated Current (@40℃) (A)	Housing	Components Cy(nF)
EM-FIT3-d75/1d5	5	N2	220
EM-FIT3-2d2/004	8	N2	220
EM-FIT3-5d5/7d5	16	N5	220
EM-FIT3-011/015	30	N5	470
EM-FIT3-018/022	45	N10	470
EM-FIT3-037	75	N12	1000
EM-FIT3-045	100	N12	1000
EM-FIT3-055	120	N12	1000
EM-FIT3-075	150	N15	2200
EM-FIT3-090	200	N15	2200
EM-FIT3-132/185	300	N30	2200
EM-FIT3-220	420	N30	2200
EM-FIT3-250	500	N60	2200
EM-FIT3-280/315	630	N60	2200
EM-FIT3-400	800	N60	2200

◆ Insertion Loss(PER CISPR17;A=50/50Ω Sym)

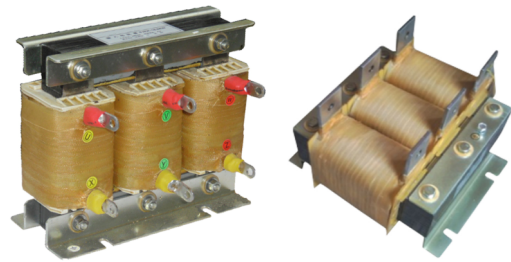
CM								DM							
Rated Current	Frequency (MHz)							Rated Current	Frequency (MHz)						
	0.1	0.15	0.5	1.0	5.0	10	30		0.1	0.15	0.5	1.0	5.0	10	30
5	74	85	94	94	78	77	65	5	62	75	76	78	87	72	55
8	75	80	79	94	83	80	80	8	75	80	90	86	78	70	51
16	75	84	89	89	80	77	70	16	60	66	88	88	82	80	67
30	70	80	90	88	79	76	66	30	70	80	88	87	81	77	69
45	62	75	90	88	80	75	61	45	72	85	87	85	75	69	59
75	60	75	85	81	70	65	52	75	85	92	85	81	72	70	59
100	64	82	80	85	68	63	53	100	93	91	83	84	73	70	58
120	62	80	80	85	69	64	53	120	92	91	84	84	73	70	58
150	58	72	75	78	65	59	49	150	87	86	80	78	70	61	52
200	60	70	75	78	65	59	49	200	85	81	75	75	70	70	52
300	40	50	72	80	65	55	35	300	86	81	73	75	70	69	44
420	40	50	72	80	65	55	35	420	86	81	73	75	70	69	44
500	32	45	80	72	50	39	27	500	78	87	79	56	40	39	38
630	32	45	80	72	50	39	27	630	78	87	79	56	40	39	38
800	35	41	65	72	70	50	38	800	29	70	79	80	80	79	52

◆ Electrical schematic



EM-RAI3 Series Input Choke

- Rated working voltage: AC 3/380V~480V
- Tolerance voltage test: 3.5KV, AC/50Hz/5mA/60s
- Application of frequency: 0~60Hz
- Power: 0.4~600KW
- Working noise: <55dB
- Insulation resistance: 1000VDC: >100MΩ



◆ Main Function

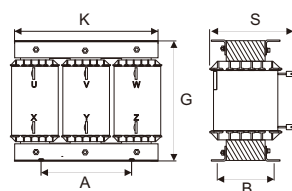
- Reducing working frequency inverter and DC speed regulator interference to other devices, like harmonic interference, waveform distortion.
- Enhance the capability of frequency inverter resistance to voltage unbalance degree. (Unbalance degree > 1.8% of rated voltage).
- Protection frequency inverter rectifier modules and related components damage from pinnacle capacitive current due to low internal power resistance. (When power supply capacity is 5 times larger than frequency inverter capacity).
- Improve the power factor of power supply, lower harmonic current content in the inverter power supply.
- Reduce current and voltage waveform distortion rate, improve the quality of power supply.

◆ Application Environment

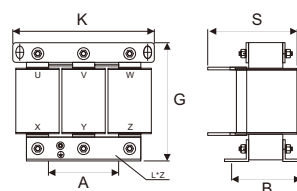
- The altitude does not exceed 1000m.
- Application environment temperature -25°C ~ +40°C, relative humidity is not more than 85%.
- Surrounding environment has good ventilation conditions, such as loading in the cabinet, which should be equipped with ventilation fan.
- No violent shock and severe turbulence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

◆ Production specification

Model	Rated Power (KW)	Rated Current (A)	Dimension(mm)						Insulation class	Housing
			K	S	G	A	B	L*Z		
EM-RAI3-d75	0.75	1.8	120	76	110	70	47	7*12	F	T1
EM-RAI3-1d5	1.5	2.5	120	76	110	70	47	7*12	F	T1
EM-RAI3-2d2	2.2	5	120	92	120	70	62	7*12	F	T1
EM-RAI3-004	4	10	130	80	138	75	60	7*12	F	T1
EM-RAI3-5d5	5.5	15	130	90	138	75	68	7*12	F	T1
EM-RAI3-7d5	7.5	20	160	100	160	90	65	7*15	F	T1
EM-RAI3-011	11	30	160	120	165	90	78	7*15	F	T1
EM-RAI3-015	15	40	205	110	190	110	70	7*15	F	T1
EM-RAI3-018	18.5	50	205	125	160	110	70	7*15	F	T2
EM-RAI3-022	22	50	205	125	160	110	70	7*15	F	T2
EM-RAI3-030	30	60	205	130	146	110	83	7*15	F	T2
EM-RAI3-037	37	75	205	135	163	110	88	7*15	F	T2
EM-RAI3-045	45	90	205	140	164	110	88	7*15	F	T2
EM-RAI3-055	55	120	225	165	192	120	100	7*18	F	T2
EM-RAI3-075	75	150	225	176	203	120	110	7*18	F	T2
EM-RAI3-090	90	190	280	196	214	150	110	10*20	F	T2
EM-RAI3-110	110	250	280	216	212	150	121	10*20	F	T2
EM-RAI3-132	132	290	280	217	235	150	111	10*20	F	T2
EM-RAI3-160	160	330	280	205	234	150	121	10*20	F	T2
EM-RAI3-185	185	400	320	210	270	160	130	10*20	F	T3
EM-RAI3-220	220	440	320	210	270	160	130	10*20	F	T3
EM-RAI3-250	250	490	320	230	270	160	140	10*20	F	T3
EM-RAI3-280	280	540	320	230	290	160	140	13*21	F	T3
EM-RAI3-315	315	600	390	240	335	200	130	13*21	F	T4
EM-RAI3-350	350	700	390	245	350	200	130	13*21	F	T4
EM-RAI3-400	400	800	390	265	330	200	150	13*21	F	T4
EM-RAI3-500	500	1000	435	290	365	240	162	14*24	F	T4
EM-RAI3-560	560	1100	435	290	386	240	162	14*24	F	T4
EM-RAI3-600	600	1250	435	317	363	240	187	14*24	F	T4



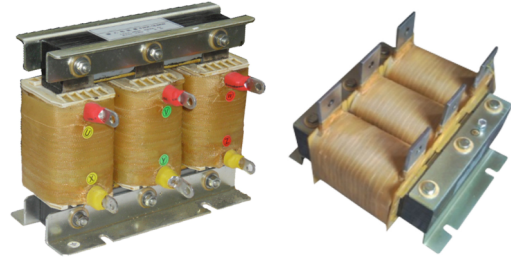
T2



T3

EM-RAO3 Series Output Choke

- Rated working voltage: AC 3/380V~480V
- Tolerance voltage test: 3.5KV, AC/50Hz/5mA/60s
- Application of frequency: 0~60Hz
- Power: 0.4~600KW
- Working noise: <65dB
- Insulation resistance: 1000VDC: >100MΩ



◆ Main Function

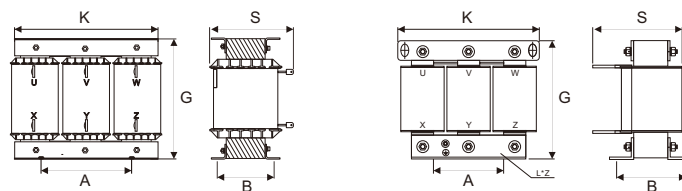
- Reduce motor noise, eddy current losses and reduce motor temperature rise.
- Lower current leakage resulting from higher harmonic wave, reduce RF interference to peripheral equipment.
- Smooth the inverter output voltage and current waveforms, reducing transient voltage DV/DT impact on the motor insulation system, extending motor life span.
- Extend the effective distance between motor and inverter and reduce cable capacitive current, protecting the inverter inside power switch components.

◆ Application Environment

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

◆ Production specification

Model	Rated Power (KW)	Rated Current (A)	Inductance value (mH) @50Hz	Dimension(mm)						Insulation class	Housing
				K	S	G	A	B	L*Z		
EM-RAO3-d75	0.75	1.8	5.82	120	76	110	70	47	7*12	F	T1
EM-RAO3-1d5	1.5	2.5	4.2	120	76	110	70	47	7*12	F	T1
EM-RAO3-2d2	2.2	5	2.1	120	92	120	70	62	7*12	F	T1
EM-RAO3-004	4	10	1.05	130	80	138	75	60	7*12	F	T1
EM-RAO3-5d5	5.5	15	0.7	130	90	138	75	68	7*12	F	T1
EM-RAO3-7d5	7.5	20	0.525	160	100	160	90	65	7*15	F	T1
EM-RAO3-011	11	30	0.35	160	120	165	90	78	7*15	F	T1
EM-RAO3-015	15	40	0.262	205	110	190	110	70	7*15	F	T1
EM-RAO3-018	18.5	50	0.21	205	125	160	110	70	7*15	F	T2
EM-RAO3-022	22	50	0.21	205	125	160	110	70	7*15	F	T2
EM-RAO3-030	30	60	0.175	205	130	146	110	83	7*15	F	T2
EM-RAO3-037	37	75	0.14	205	135	163	110	88	7*15	F	T2
EM-RAO3-045	45	90	0.116	205	140	164	110	88	7*15	F	T2
EM-RAO3-055	55	120	0.087	225	165	192	120	100	7*18	F	T2
EM-RAO3-075	75	150	0.07	225	176	203	120	110	7*18	F	T2
EM-RAO3-090	90	190	0.055	280	196	214	150	110	10*20	F	T2
EM-RAO3-110	110	250	0.042	280	216	212	150	121	10*20	F	T2
EM-RAO3-132	132	290	0.0362	280	217	235	150	111	10*20	F	T2
EM-RAO3-160	160	330	0.0318	280	205	234	150	121	10*20	F	T3
EM-RAO3-185	185	400	0.0262	320	210	270	160	130	10*20	F	T3
EM-RAO3-220	220	440	0.0238	320	210	270	160	130	10*20	F	T3
EM-RAO3-250	250	490	0.0214	320	230	270	160	140	10*20	F	T3
EM-RAO3-280	280	540	0.0194	320	230	290	160	140	13*21	F	T3
EM-RAO3-315	315	600	0.0175	390	240	335	200	130	13*21	F	T4
EM-RAO3-350	350	700	0.015	390	245	350	200	130	13*21	F	T4
EM-RAO3-400	400	800	0.0131	390	265	330	200	150	13*21	F	T4
EM-RAO3-500	500	1000	0.0105	435	290	365	240	162	14*24	F	T4
EM-RAO3-560	560	1100	0.00955	435	290	386	240	162	14*24	F	T4
EM-RAO3-600	600	1250	0.0084	435	317	363	240	187	14*24	F	T4



T2

T3