



Product Profile 2021

Dc-Link CAPACITOR

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DC-Link Capacitors Profile

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Foreword

In the modern power electronics industry, rectifier and power supply systems have been greatly developed. In this power supply system, the function of the DC-Link capacitor is to prevent the DC bus voltage from greatly changing due to the sudden change of load and the induced electromotive force caused by the parasitic inductance of the capacitor itself. With the rapid development of power electronics technology, the current and voltage levels of semiconductor devices are constantly improved. At present, the capacity of a single power component has reached MW level, and the application of DC-Link capacitors is becoming more and more extensive.

General, applications and features

YHA

General

YHA series represents a new generation of DC-Link capacitors. YHA series capacitors are cylindrical aluminum shell structure, stud electrode, fixed by bolt at the bottom, internal epoxy pouring dry structure. It has good electrical performance and environmental adaptability. The expected service life of YHA is up to 100 000 hours, the inrush current capacity is increased to $300I_N$, and the can size is reduced, which makes YHA an ideal capacitor for industrial applications requiring high reliability.



Applications

- Wind power, solar power.
- High voltage frequency converters, SVG, SVC, etc.
- Welders, Elevators, Motor Driver systems.

Features


Structural features

- Metallized polypropylene with high performance and lower weight.
- Cylindrical extruded aluminum case, compact integrated structure.
- Dry filled, good anti-vibration performance and no leakage.
- Tightly sealed, good environment adaptability.

Electrical features

- Long life expectancy up to 100 000 hours at temperature class -40/85.
- Low dissipation factor, high pulse current withstand capability.
- Used in DC-Link circuits, be able to replace electrolytic capacitor
- Good self-healing and voltage withstand, high long term stability.

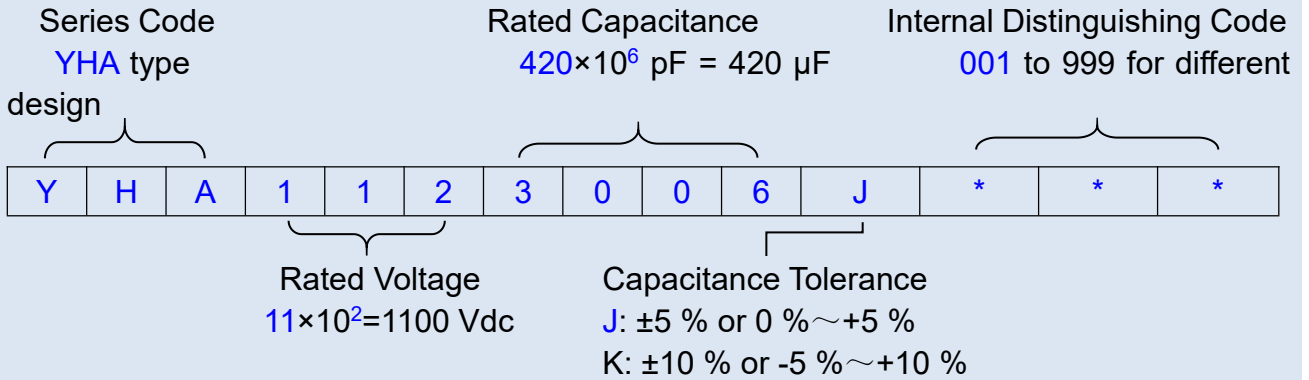
Technical data and limit values **YHA**

No.	Items	Technical data or limit values
1	Rated Voltage U_N	600 Vdc~1500 Vdc
2	Power C_N	90 μ F~5600 μ F
3	Losses	$\leq 2 \times 10^{-4}$
4	Temperature Class	40/85/21
	Operating Temperature Range	-40 $^{\circ}$ C~+70 $^{\circ}$ C (Θ hotspot \leq 85 $^{\circ}$ C)
	Storage Temperature Range	-40 $^{\circ}$ C~+85 $^{\circ}$ C
5	Max. Humidity H_{max}	95 %RH
6	Max. Altitude	2000 m
	Insulation resistance ($R_i \times C_N$)	≥ 5000 s (500V, 20 $^{\circ}$ C)
	Interpole voltage resistance test(U_{TT})	1.5 U_N (20 $^{\circ}$ C, 10S)
	Voltage tolerance between polar shells (U_{TC})	4000VAC (50Hz, 20 $^{\circ}$ C, 10S)
7	Admissible Voltage Levels	1.1 U_N : up to 8 h daily 1.15 U_N : up to 30 min daily 1.2 U_N : up to 5 min daily 1.3 U_N : up to 1 min daily 1.5 U_N : up to 30ms every time, 1000times
8	Safety	Self-healing
9	Mean Life Expectancy t_{LD}	Up to 100 000 h (U_N 70 $^{\circ}$ C)
10	Case and Shape	Aluminum, cylindrical
11	Terminal	Tinned brass
12	Max Torque of terminals	5N \cdot m (M6)
13	Max Torque of installation	10N \cdot m (M12) 13N \cdot m (M16)
14	Sealing material	Polyurethane resin
14	Cooling	Natural or forced cooled
15	Standard	GB/T 17702-2013 (idt IEC 61071:2007)
16	Product Picture	

Part number

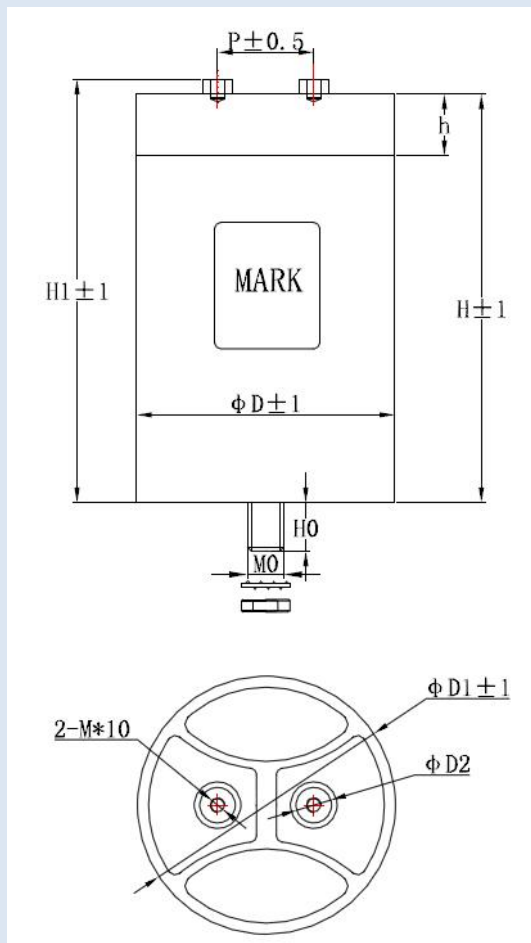
YHA

The 14 digits part number is formed as follow:



Outline drawing

YHA



D	D1	P	h	M0×H0	H1	M	D2
76	76	32	20	M12*16	H+5	M6	16
86	86	32	20	M12*16	H+5	M6	14
86	88	32	35	M12*16	H+4	M6	12
96	97	45	30	M12*16	H+5	M6	15
116	116	50	22	M12*16	H+5	M6	16
136	136	50	30	M16*25	H+5	M6	16

Specification and dimension table

YHA

YHA 600, $U_N = 600Vdc$, $U_{TT} = 900Vdc$, $U_r = 175V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i}_s (KA)	Ls (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
480	1.5	5.6	70	1.56	4.68	45	76	95	0.60	YHA6014806J001
650	1.9	4.7	70	1.56	4.68	50	76	120	0.70	YHA6016506J001
780	2.2	4.6	67	1.55	4.65	55	76	140	0.75	YHA6017806J001
820	1.5	4.3	70	3.06	9.18	40	76	155	0.90	YHA6018206J001
950	1.5	4.2	70	3.09	9.27	45	76	174	1.00	YHA6019506J001
650	1.2	5.1	70	2.12	6.36	45	86	95	0.72	YHA6016506J001
880	1.5	4.7	70	2.11	6.33	50	86	120	1.00	YHA6018806J001
1000	1.8	4.6	70	2.07	6.21	55	86	136	1.10	YHA6011007J001
1100	1.7	4.6	70	2.18	6.54	55	86	140	1.15	YHA6011107J001
1100	1.4	4.4	70	4.11	12.33	40	86	155	1.25	YHA6011107J002
1300	1.4	4.3	70	4.23	12.69	45	86	174	1.30	YHA6011307J001
2000	1.1	3.0	70	6.51	19.53	55	86	252	1.80	YHA6012007J001
880	1.3	4.7	70	2.9	8.7	45	96	95	1.20	YHA6018806J001
1000	1.4	4.1	70	2.85	8.55	50	96	120	1.48	YHA6011007J002
1200	1.5	3.9	70	2.87	8.61	55	96	136	1.66	YHA6011207J001
1300	1.6	3.8	70	2.74	8.22	55	96	140	1.72	YHA6011307J002
1400	1.0	3.5	70	5.92	17.76	40	96	155	1.99	YHA6011407J001
1600	1.0	3.2	70	5.8	17.4	45	96	174	2.28	YHA6011607J001
1200	0.7	5.4	80	3.9	11.7	45	116	95	1.20	YHA6011207J002
1600	1.0	5.0	80	3.83	11.49	50	116	120	1.50	YHA6011607J002
2000	1.1	4.9	80	3.96	11.88	55	116	140	1.75	YHA6012007J002
2100	0.8	3.6	100	7.84	23.52	40	116	158	2.00	YHA6012107J001
2400	0.9	3.4	100	7.81	23.43	45	116	174	2.20	YHA6012407J001
3000	0.8	2.7	100	11.2	33.6	50	116	230	2.80	YHA6013007J001
5600	0.8	2.0	100	15.94	47.82	60	136	295	4.90	YHA6015607J001

YHA 700, $U_N = 700Vdc$, $U_{TT} = 1050Vdc$, $U_r = 200V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i}_s (KA)	Ls (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
300	1.7	5.6	65	2.9	6.6	55	76	95	0.60	YHA7013006J001
400	2.2	4.7	60	3.2	6.4	60	76	120	0.70	YHA7014006J001
480	1.6	4.3	65	3.84	7.68	50	76	155	0.90	YHA7014806J001
380	1.4	5.1	65	3.8	7.6	55	86	95	0.72	YHA7013806J001
520	1.8	4.7	65	4.16	8.32	60	86	120	1.0	YHA7015206J001
580	2.0	4.6	65	4.06	8.12	65	86	135	1.1	YHA7015806J001
650	1.5	4.4	65	5.85	11.7	50	86	155	1.25	YHA7016506J001
750	1.6	4.3	65	6.75	13.5	55	86	175	1.3	YHA7017506J001
980	1.1	5.0	80	5.85	11.8	60	116	120	1.5	YHA7019806J001
1200	0.85	3.6	100	10.8	21.6	50	116	160	2.1	YHA7011207J001
1500	1.0	3.4	100	10.5	21	60	116	175	2.3	YHA7011507J001

1800	0.8	2.7	100	14.4	28.8	50	116	230	2.9	YHA7011807J001
YHA 800, U _N =800Vdc, U _{TT} =1200Vdc, U _r = 200V										
C _N (μ F)	ESR (mΩ)	R _{th} (°C/W)	I _{max.} (A)	I _p (kA)	î _s (KA)	Ls (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
209	1.7	5.6	69	1.53	4.59	45	76	95	0.60	YHA8012096J001
400	2.2	4.7	66	1.53	4.59	50	76	120	0.70	YHA8014006J001
480	2.5	4.6	63	1.56	4.68	55	76	140	0.75	YHA8014806J001
480	1.6	4.3	70	1.54	4.62	40	76	155	0.90	YHA8014806J002
560	1.7	4.2	70	2.91	8.73	45	76	174	1.00	YHA8015606J001
380	1.4	5.1	70	2.96	8.88	45	86	95	0.72	YHA8013806J001
520	1.8	4.7	70	2.01	6.03	50	86	120	1.00	YHA8015206J001
580	2.0	4.6	70	2.02	6.06	55	86	136	1.10	YHA8015806J001
630	2.1	4.6	68	1.95	5.85	55	86	140	1.15	YHA8016306J001
650	1.5	4.4	70	2.03	6.09	40	86	155	1.25	YHA8016506J001
750	1.6	4.3	70	3.94	11.82	45	86	174	1.30	YHA8017506J001
1100	1.2	3.0	70	3.96	11.88	55	86	252	1.80	YHA8011107J001
500	1.4	4.7	70	2.62	7.86	45	96	95	1.20	YHA8015006J001
680	1.6	4.1	70	2.7	8.1	50	96	120	1.47	YHA8016806J001
780	1.8	3.9	70	2.66	7.98	55	96	136	1.65	YHA8017806J001
830	1.8	3.8	70	2.7	8.1	55	96	140	1.68	YHA8018306J001
880	1.1	3.5	70	5.4	16.2	40	96	155	1.98	YHA8018806J001
980	1.1	3.2	70	5.23	15.69	45	96	174	2.28	YHA8019806J001
720	0.8	5.4	80	3.8	11.4	45	116	95	1.20	YHA8017206J001
980	1.1	5.0	80	3.81	11.43	50	116	120	1.50	YHA8019806J001
1200	1.2	4.9	80	3.86	11.58	55	116	140	1.75	YHA8011207J001
1200	0.85	3.6	100	7.28	21.84	40	116	158	2.00	YHA8011207J002
1500	1.0	3.4	100	7.92	23.76	45	116	174	2.20	YHA8011507J001
1800	0.8	2.7	100	10.91	32.73	50	116	230	2.80	YHA8011807J001
3200	0.8	2.0	100	14.78	44.34	60	136	295	4.90	YHA8013207J001
YHA 900, U _N =900Vdc, U _{TT} =1350Vdc, U _r = 225V										
C _N (μ F)	ESR (mΩ)	R _{th} (°C/W)	I _{max.} (A)	I _p (kA)	î _s (KA)	Ls (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
300	2.9	4.7	57	2.7	5.4	60	76	120	0.60	YHA9013006J001
360	1.9	4.3	65	3.24	6.5	50	76	155	0.9	YHA9013606J001
420	2.0	4.2	65	3.78	7.55	55	76	175	1.0	YHA9014206J001
400	2.3	4.7	64	3.6	7.2	60	86	120	1.0	YHA9014006J001
470	2.2	4.6	65	3.76	7.5	65	86	135	1.1	YHA9014706J001
500	1.6	4.4	65	5	10	50	86	155	1.25	YHA9015006J001
560	1.7	4.3	65	5.6	11.2	55	86	175	1.3	YHA9015606J001
680	1.6	4.1	70	2.7	8.1	50	96	120	1.47	YHA9016806J001
780	1.8	3.9	70	2.66	7.98	55	96	136	1.65	YHA9017806J001
830	1.8	3.8	70	2.7	8.1	55	96	140	1.68	YHA9018306J001
880	1.1	3.5	70	5.4	16.2	40	96	155	1.98	YHA9018806J001

740	1.4	5.0	80	5.18	10.36	60	116	120	1.5	YHA9017406J001
900	1.5	4.9	78	6.3	12.6	65	116	140	1.75	YHA9019006J001
1200	0.9	3.6	100	7.28	21.84	40	116	158	2.00	YHA9011207J002
1500	1.1	3.4	100	7.92	23.76	45	116	174	2.20	YHA9011507J001
1800	0.8	2.7	100	10.91	32.73	50	116	230	2.80	YHA9011807J001
3200	0.8	2.0	100	14.78	44.34	60	136	295	4.90	YHA9013207J001

YHA 1000, $U_N=1000V_{dc}$, $U_{TT}=1500V_{dc}$, $U_r=250V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i} (KA)	L_s (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
220	2.2	5.6	60	1.46	4.38	45	76	95	0.60	YHA1022206J001
300	2.9	4.7	57	1.46	4.38	50	76	120	0.70	YHA1023006J001
360	3.3	4.6	54	1.45	4.35	55	76	140	0.75	YHA1023606J001
360	1.9	4.3	70	2.74	8.22	40	76	155	0.90	YHA1023606J002
420	2.0	4.2	70	2.78	8.34	45	76	174	1.00	YHA1024206J001
290	1.8	5.1	70	1.92	5.76	45	86	95	0.72	YHA1022906J001
400	2.3	4.7	65	1.95	5.85	50	86	120	1.00	YHA1024006J001
470	2.2	4.6	67	1.98	5.94	55	86	136	1.10	YHA1024706J001
480	2.6	4.6	61	1.93	5.79	55	86	140	1.15	YHA1024806J001
500	1.6	4.4	70	3.8	11.4	40	86	155	1.25	YHA1025006J001
560	1.7	4.3	70	3.71	11.13	45	86	174	1.30	YHA1025606J001
900	1.3	3.0	70	5.96	17.88	55	86	252	1.80	YHA1029006J001
360	1.5	4.7	70	2.49	7.47	45	96	95	1.18	YHA1023606J001
480	1.8	4.1	70	2.41	7.23	50	96	120	1.47	YHA1024806J002
580	1.9	3.9	70	2.5	7.5	55	96	136	1.63	YHA1025806J001
630	1.9	3.8	70	2.59	7.77	55	96	140	1.66	YHA1026306J001
630	1.1	3.5	70	4.89	14.67	40	96	155	1.97	YHA1026306J002
760	1.1	3.2	70	5.11	15.33	45	96	174	2.24	YHA1027606J001
540	1.0	5.4	80	3.57	10.71	45	116	95	1.20	YHA1025406J001
740	1.4	5.0	80	3.61	10.83	50	116	120	1.50	YHA1027406J001
900	1.5	4.9	78	3.62	10.86	55	116	140	1.75	YHA1029006J001
900	0.95	3.6	100	6.84	20.52	40	116	158	2.00	YHA1029006J002
1100	1.2	3.4	100	7.28	21.84	45	116	174	2.20	YHA1021107J001
1400	0.9	2.7	100	10.28	30.84	50	116	230	2.80	YHA1021407J001
2500	0.9	2.0	100	14.47	43.41	60	136	295	4.90	YHA1022507J001

YHA 1100, $U_N=1100V_{dc}$, $U_{TT}=1650V_{dc}$, $U_r=250V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i} (KA)	L_s (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
180	2.3	5.6	59	2.16	4.32	55	76	95	0.6	YHA1121806J001
300	3.5	4.6	52	2.7	5.4	65	76	140	0.75	YHA1123006J001
360	2.0	4.2	65	3.6	7.2	55	76	175	1.0	YHA1123606J001
240	1.9	5.1	65	2.88	5.76	55	86	95	0.72	YHA1122406J001
330	2.4	4.7	63	3.3	6.6	60	86	120	1.0	YHA1123306J001

420	2.0	4.5	60	4.2	8.4	65	86	135	1.1	YHA1124206J001
420	1.6	4.4	75	4.7	9.4	50	86	155	1.25	YHA1124206J002
500	1.8	4.3	65	5.28	10.56	55	86	175	1.3	YHA1125006J001
620	1.4	5.0	80	4.96	9.92	60	116	120	1.5	YHA1126206J001
750	1.6	4.9	75	6.0	12	65	116	140	1.75	YHA1127506J001
780	0.9	3.6	100	8.58	17.16	50	116	160	2.0	YHA1127806J001
920	1.1	3.4	100	7.36	14.72	60	116	175	2.2	YHA1129206J001
1020	1.0	2.7	100	10.2	20.4	50	116	230	2.8	YHA1121027J001
1200	0.9	2.7	100	10.8	21.6	50	116	230	2.9	YHA1121207J001

YHA 1200, $U_N=1200V_{dc}$, $U_{TT}=1800V_{dc}$, $U_r=300V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i} (KA)	L_s (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
120	2.9	5.6	52	1.68	3.36	55	76	95	0.6	YHA1221206J001
200	2.1	4.3	65	2.52	5.04	50	76	155	0.9	YHA1222006J001
240	2.3	4.2	65	2.88	5.76	55	76	175	1.0	YHA1222406J001
170	2.2	5.1	63	2.38	4.76	55	86	95	0.72	YHA1221706J001
230	2.8	4.7	58	2.76	5.52	60	86	120	1.0	YHA1222306J001
270	2.8	4.6	59	2.97	5.94	65	86	135	1.1	YHA1222706J001
280	1.8	4.4	65	3.64	7.28	50	86	155	1.25	YHA1222806J001
350	3.0	4.0	40	3.0	9.0	60	86	115	1.0	YHA1223506J001
500	2.0	4.0	60	5.0	15	60	86	180	1.4	YHA1225006J001
600	1.2	4.2	70	4.8	14.4	60	86	225	1.62	YHA1226006J002
540	1.0	3.6	100	7.02	14.04	50	116	160	2.1	YHA1225406J001
630	1.2	3.4	100	6.3	12.6	60	116	175	2.2	YHA1226306J001
820	0.9	2.7	100	9.02	18.04	50	116	230	2.9	YHA1228206J001
620	1.0	3.6	100	6.78	20.34	40	116	158	2.00	YHA1226206J001
950	0.9	2.7	100	10.21	30.63	50	116	230	2.80	YHA1229506J001
1500	1.5	4.5	90	10.2	30.6	60	136	260	4.90	YHA1221507J001
1700	1.5	4.5	90	10.2	30.6	60	136	260	4.90	YHA1221707J001

YHA 1300, $U_N=1300V_{dc}$, $U_{TT}=1950V_{dc}$, $U_r=300V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i} (KA)	L_s (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
120	2.9	5.6	53	1.31	3.93	45	76	95	0.60	YHA1321206J001
170	3.7	4.7	51	1.36	4.08	50	76	120	0.70	YHA1321706J001
210	4.1	4.6	49	1.39	4.17	55	76	140	0.75	YHA1322106J001
210	2.1	4.3	70	2.64	7.92	40	76	155	0.90	YHA1322106J002
240	2.3	4.2	68	2.62	7.86	45	76	174	1.00	YHA1322406J001
170	2.2	5.1	63	1.85	5.55	45	86	95	0.72	YHA1321706J001
230	2.8	4.7	58	1.84	5.52	50	86	120	1.00	YHA1322306J001
270	2.8	4.6	59	1.86	5.58	55	86	136	1.10	YHA1322706J001
270	3.3	4.6	54	1.78	5.34	55	86	140	1.15	YHA1322706J002
280	1.8	4.4	70	3.51	4.53	40	86	155	1.25	YHA1322806J001
320	1.9	4.3	70	3.49	10.47	45	86	174	1.30	YHA1323206J001

520	1.5	3.0	70	5.67	17.01	55	86	252	1.80	YHA1325206J001
190	1.8	4.7	69	2.27	6.81	45	96	95	1.19	YHA1321906J001
260	2.1	4.1	67	2.23	6.69	50	96	120	1.47	YHA1322606J001
310	2.3	3.9	66	2.27	6.81	55	96	136	1.64	YHA1323106J001
340	2.3	3.8	67	2.37	7.11	55	96	140	1.67	YHA1323406J001
360	1.2	3.5	70	4.72	14.16	40	96	155	1.96	YHA1323606J001
400	1.3	3.2	70	4.54	13.62	45	96	174	2.26	YHA1324006J001
320	1.2	5.4	80	3.49	10.47	45	116	95	1.20	YHA1323206J002
430	1.6	5.0	75	3.44	10.32	50	116	120	1.50	YHA1324306J001
520	1.8	4.9	71	3.43	10.29	55	116	140	1.75	YHA1325206J002
540	1.0	3.6	100	6.77	20.31	40	116	158	2.00	YHA1325406J001
630	1.2	3.4	100	6.76	20.28	45	116	174	2.20	YHA1326306J001
820	0.9	2.7	100	10.1	30.3	50	116	230	2.80	YHA1328206J001
1500	1.0	2.0	100	14.08	42.24	60	136	295	4.90	YHA1321507J001

YHA 1400, $U_N=1400V_{dc}$, $U_{TT}=2100V_{dc}$, $U_r=330V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i} (KA)	L_s (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
100	3.1	5.6	51	1.26	3.78	45	76	95	0.60	YHA1421006J001
140	4.0	4.7	49	1.29	3.87	50	76	120	0.70	YHA1421406J001
170	4.6	4.6	46	1.29	3.87	55	76	140	0.75	YHA1421706J001
170	2.3	4.3	67	2.46	7.38	40	76	155	0.90	YHA1421706J002
200	2.4	4.2	67	2.52	7.56	45	76	174	1.00	YHA1422006J001
140	2.4	5.1	61	1.76	5.28	45	86	95	0.72	YHA1421406J002
190	3.1	4.7	56	1.75	5.25	50	86	120	1.00	YHA1421906J001
230	2.9	4.6	58	1.8	5.4	55	86	136	1.10	YHA1422306J001
240	1.9	4.4	70	3.47	10.41	40	86	155	1.25	YHA1422406J001
270	2.1	4.3	70	3.4	10.2	45	86	174	1.30	YHA1422706J001
420	1.5	3.0	70	5.21	15.63	55	86	252	1.80	YHA1424206J001
160	1.8	4.7	68	2.24	6.72	45	96	95	1.19	YHA1421606J001
230	2.2	4.1	67	2.3	6.9	50	96	120	1.45	YHA1422306J001
270	2.4	3.9	65	2.3	6.9	55	96	136	1.63	YHA1422706J002
300	1.2	3.5	70	4.58	13.74	40	96	155	1.96	YHA1423006J001
340	1.3	3.2	70	4.49	13.47	45	96	174	2.26	YHA1423406J001
260	1.3	5.4	80	3.22	9.66	45	116	95	1.20	YHA1422606J001
360	1.8	5.0	70	3.28	9.84	50	116	120	1.50	YHA1423606J001
450	2.0	4.9	67	3.39	10.17	55	116	140	1.75	YHA1424506J001
460	1.1	3.6	100	6.54	19.62	40	116	158	2.00	YHA1424606J001
540	1.3	3.4	89	6.69	20.07	45	116	174	2.20	YHA1425406J001
700	0.9	2.7	100	9.95	29.85	50	116	230	2.80	YHA1427006J001
1300	1.05	2.0	100	14.08	42.24	60	136	295	4.90	YHA1421307J001

YHA 1500, $U_N=1500V_{dc}$, $U_{TT}=2250V_{dc}$, $U_r=350V$

C_N (μF)	ESR ($m\Omega$)	R_{th} ($^{\circ}C/W$)	$I_{max.}$ (A)	I_p (kA)	\hat{i} (KA)	L_s (nH)	ΦD (mm)	H (mm)	Weight (kg)	Part Number
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90	3.3	5.6	49	1.44	2.88	55	76	95	0.6	YHA1529005J001
120	4.4	4.7	46	1.68	3.36	60	76	120	0.7	YHA1521206J001
150	2.4	4.3	65	2.1	4.2	50	76	155	0.9	YHA1521506J001
170	2.5	4.2	65	2.38	4.76	55	76	175	1.0	YHA1521706J001
200	3.0	4.6	57	2.6	5.2	65	86	135	1.1	YHA1522006J001
210	2.0	4.4	65	2.73	5.46	50	86	155	1.25	YHA1522106J001
240	2.1	4.3	65	3.6	7.2	55	86	175	1.3	YHA1522406J001
320	1.9	5.0	68	4.48	8.96	60	116	120	1.5	YHA1523206J001
420	1.1	3.6	100	5.04	10.08	50	116	160	2.1	YHA1524206J001
470	1.3	3.4	89	5.64	11.28	60	116	175	2.2	YHA1524706J001
600	1.0	2.7	100	7.8	15.6	50	116	230	2.9	YHA1526006J001

Main technologies

Zinc/aluminium metallized polypropylene film with heavy edge

Polypropylene film has the advantages of high dielectric strength, low dielectric loss, good temperature and frequency characteristics. Therefore, low film thickness allowing significantly more compact dimensions and a lower weight, as well as high performance. Zinc/aluminum alloy metallization has good self-healing property and durability. The heavy edge technology produces a maximum effective surface for the metal spraying and enhance current impulse capability.

Sealed packaging and various filling technologies

The winding element is heated and dried within a certain period of time, and the filling material is potted under vacuum. In this way, air and moisture are extracted from the inner capacitor and filling materials, and oxidation of the electrodes as well as partial discharges are avoided. Afterwards, the capacitor elements are hermetically sealed in aluminum cases. This elaborate process ensures excellent capacitance stability and long useful life.

Self-healing property

In the event of thermal or electrical overload, an electric breakdown occurs. The dielectric in the breakdown channel is broken down into highly compressed plasma that explodes out of the breakdown channel and pushes the dielectric layers apart. The discharge continues within the spreading plasma via the metal layers so that the metal surrounding the faulty area is completely burnt out. This produces perfect isolation of the faulty area within microseconds. The self-healing process results in negligible capacitance loss-less than 100 pF per event. The capacitor remains fully functional during the entire process. This property is called self-healing.

Cautions and Warnings

1. Do not store or install capacitors in corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present, and avoid dust accumulation near the terminals.
2. If there is a pit in the capacitance surface with a depth of more than 1 mm or other visible mechanical damage, or oil leakage, it shall not be used. In any case, resonance conditions must be avoided by appropriate application design.
3. The capacitor should be installed in a cool and ventilated place, avoid direct sunlight or close to other heating objects.
4. The capacitor must be mounted vertically with the terminals upwards. The bottom stud should be well grounded.
5. During installation, a gap of at least 20 mm should be left at the side of each product to facilitate the heat dissipation of the product..
6. Before operating the capacitors (installation, disassemble, etc.), the capacitor must be fully discharged (discharge through resistance, and then short-circuit discharge and grounding).
7. Don't hesitate to contact our technical service for any doubts and more detail

information.

Operation and maintenance requirements

1. Must pay attention to the temperature category of the capacitor, the ambient air temperature shall not exceed the upper limit of the temperature category. Under forced cooling conditions higher ambient air temperature is possible, but should guarantee the capacitor shell temperature no more than maximum 85 °C normally.
2. In case of voltage interruption, a sufficient discharge time has to be ensured, maximum permitted voltage is 10% of rated voltage before they are switched in again, this prevent phase-opposition and an electric impulse discharge with high inrush currents in the application which influences the capacitor's service life, and protects against electric shock.
3. Check tightness of the connections and terminals periodically, check short circuit protection fuses whether normal work. Clean the terminals periodically to avoid dust or other conductive garbage can cause a short-circuit.
4. Use a harmonic analyser or current clamp table or other on-line measuring tools of current, take current reading and compare with nominal current every six month. In case of current above the nominal current, must check the power supply and capacitors in time.
5. Resonance cases must be avoided by appropriate application design in any case. Maximum total RMS capacitor current (include fundamental and harmonic current) specified in technical data must not be exceeded.
6. All capacitors do not have an unlimited service life expectancy, this applies to self-healing type Dc-Link capacitors too. The maximum service life expectancy may vary depending on the application the capacitor is used in, such as, ambient temperature, voltage, current, altitude and heat dissipation, etc.
7. Check the temperature of capacitors directly after operation for a longer period. In case of excessive temperature of individual capacitors, it is recommended to replace these capacitors, as this should be an indication for loss factor increase, which is a sign for reaching end of life.

Packing and Shipment

For the packing box with capacitors ,any kinds of shipments are permitted. But the sprinkle of rain or snow and mechanical damage must be avoided.

Notes

1. Some parts of this manual contain statements about the applicability of our capacitors in certain applications. These statements are based on our understanding of the typical requirements of our products in the relevant application areas, and such statements cannot be considered as binding statements about the suitability of our products for specific customer applications. In general, we are either unfamiliar or not as familiar as the customer himself with the actual application. For these reasons, it is ultimately the responsibility of the customer to check and determine whether a product with the characteristics described in the product specification is suitable for use in a particular customer application.
2. In some cases, under the existing technical level, the possibility of failure before the end of normal service life cannot be completely ruled out even if the operation is carried out according to the regulations. In customer applications where operational safety requirements are extremely high, especially when a failure may endanger human life or health, proper design of the customer application or other measures taken by the customer, such as installing protective circuits or redundancy, must be used to ensure that no injury or damage occurs in the event of a failure.
3. We are constantly trying to improve our products, the products described in this manual may change. Therefore, we cannot guarantee that all products specified in this manual will always be available. We reserve the right to stop production and delivery of products. Please check to what extent the product description contained in this manual is still applicable before placing an order. If you have any questions or different requirements, you can contact us for confirmation.



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