

HCBA

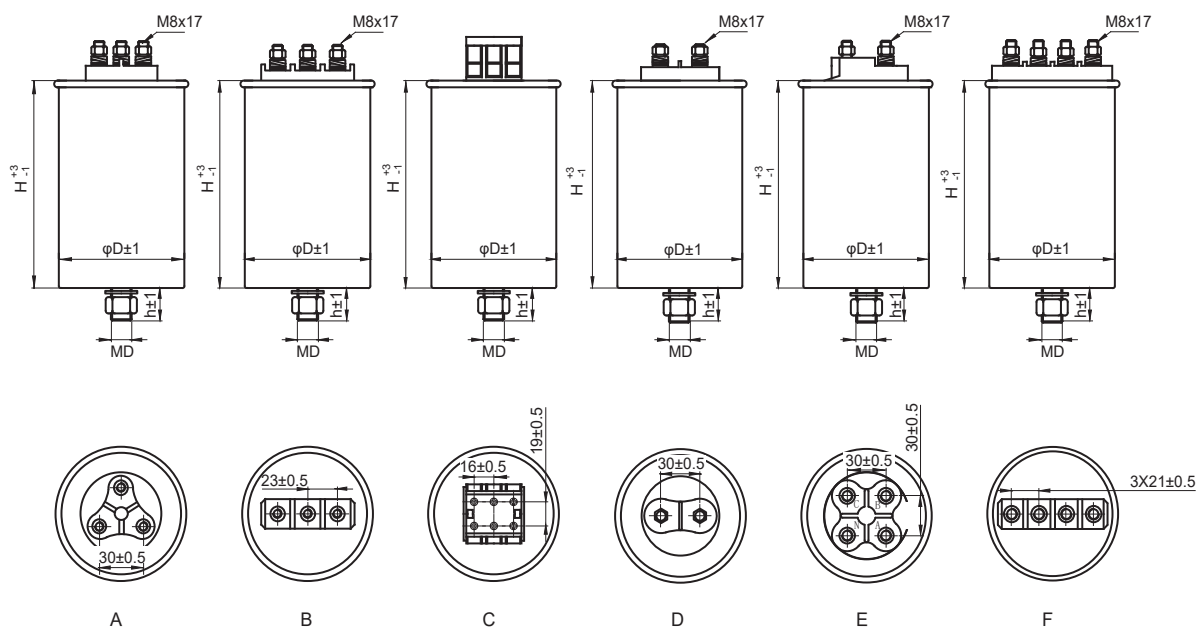
Reactive power compensation capacitor (Oil type)



Features

- Applied in reactive compensation system
- Low ESR, could withstand high ripple current
- Low self-inductance and Long life
- Mechanical explosion-proof structure, stable performance and high reliability

Outline Drawing



Note: $\phi D \leq 96\text{mm}$, the bottom bolt is M12×16; $\phi D > 96\text{mm}$, the bottom bolt is M16×25, if you need other dimension, please contact us.

Specifications

Reference standard		GB/T 12747.1, GB/T 12747.2
Rated voltage		250Va.c.~690Va.c.
Capacitance range		5kVar~50kVar
Climatic category		40/55/21
Temperature range		-40°C ~ 55°C
Capacitance range		±5%(J), ±10%(K)
Voltage proof	Between terminals	2.15U _N (10s, 20°C±5°C)
	Between terminals and case	3600Va.c.(2s,50Hz,20°C±5°C)
Dissipation factor		≤2×10 ⁻³ (100Hz)
Max. permissible voltage		1.10U _N , 8hours in every 24hours
		1.15U _N , 30minutes in every 24 hours
		1.20U _N ,5min (200 times in the life time)
		1.30U _N ,1min (200 times in the life time)
Max. permissible current		1.3I _N
Discharge performance		< 75V,3min
Max.operation altitude		2000m
Terminal torque		M8:6N·m
Installation		Terminal upright
Life expectancy		60000h @U _N , θ _{hs} =55 °C
Failure rate		300FIT

Ordering Information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
H	C	B	A	/														(×	×	×)
Series code				AC rated voltage		Rated capacitance value		Capacitance tolerance		Phase		Internal connection mode		Outline dimension code		Terminal code		Internal code		Internal code		
				E2=250V				J=±5%		1-single phase				see table1				0-Standard				
				G2=400V				K=±10%		3-three phase						see table2						
				S2=450V																		
				S3=480V																		
				S4=430V																		
				T6=525V																		
				U2=690V																		

Table1: Outline Dimension Code

Digit 15		Digit 16		Bottom bolt
Code	Diameter(mm)	Code	Height(mm)	
1	76	D	160	M12×16
1	76	F	180	M12×16
1	76	K	210	M12×16
1	76	N	240	M12×16
2	86	D	160	M12×16
2	86	F	180	M12×16
2	86	K	210	M12×16
2	86	N	240	M12×16
3	96	D	160	M12×16
3	96	F	180	M12×16
3	96	N	240	M12×16
4	106	F	180	M16×25
4	106	K	210	M16×25
4	106	N	240	M16×25
4	106	R	285	M16×25
5	116	F	180	M16×25
5	116	N	240	M16×25
5	116	R	285	M16×25
6	136	R	285	M16×25

Table 2: Terminal Code

Digit 17		D(mm)					Threaded stud	
							Specification	Distance(mm)
A	86	76	96	106	116	136	M8×17	30
B	/	/	96	106	116	136	M8×17	23
C	86	76	96	106	116	136	/	16
D	86	76	96	106	116	136	M8×17	30
E	86	/	96	106	116	136	M8×17	30
F	/	/	96	106	116	136	M8×17	21

Outline Dimensions

Single Phase

250Va.c.						250Va.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
5	254.8	20.0	76	160	HCBA/E25002-1N1D*0	15	764.3	60.0	116	180	HCBA/E21501-1N5F*0
7.5	382.2	30.0	86	180	HCBA/E27502-1N2F*0	20	1019	80.0	106	240	HCBA/E22001-1N4N*0
10	509.6	40.0	96	180	HCBA/E21001-1N3F*0	25	1274	100.0	116	240	HCBA/E22501-1N5N*0
12.5	636.9	50.0	106	180	HCBA/E21251-1N4F*0	30	1529	120.0	116	285	HCBA/E23001-1N5R*0
400Va.c.						400Va.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
7.5	149.3	18.8	76	160	HCBA/G27502-1N1D*0	22.5	447.9	56.3	116	180	HCBA/G22251-1N5F*0
10	199	25.0	86	160	HCBA/G21001-1N2D*0	30	597.1	75.0	106	240	HCBA/G23001-1N4N*0
12.5	248.8	31.3	86	180	HCBA/G21251-1N2F*0	35	696.7	87.5	116	240	HCBA/G23501-1N5N*0
15	298.6	37.5	96	180	HCBA/G21501-1N3F*0	40	796.2	100.0	116	285	HCBA/G24001-1N5R*0
20	398.1	50.0	106	180	HCBA/G22001-1N4F*0						
450Va.c.						450Va.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
7.5	118	16.7	76	160	HCBA/S27502-1N1D*0	25	393.2	55.6	116	180	HCBA/S22501-1N5F*0
10	157.3	22.2	86	160	HCBA/S21001-1N2D*0	30	471.8	66.7	106	240	HCBA/S23001-1N4N*0
12.5	196.6	27.8	96	160	HCBA/S21251-1N3D*0	35	550.4	77.8	116	240	HCBA/S23501-1N5N*0
15	235.9	33.3	96	180	HCBA/S21501-1N3F*0	40	629.1	88.9	116	240	HCBA/S24001-1N5N*0
20	314.5	44.4	106	180	HCBA/S22001-1N4F*0	50	786.3	111.1	116	285	HCBA/S25001-1N5R*0
480Va.c.						480Va.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
7.5	103.7	15.6	76	180	HCBA/S37502-1N1F*0	25	345.6	52.1	106	240	HCBA/S32501-1N4N*0
10	138.2	20.8	86	180	HCBA/S31001-1N2F*0	30	414.7	62.5	116	240	HCBA/S33001-1N5N*0
15	207.3	31.3	96	180	HCBA/S31501-1N3F*0	35	483.8	72.9	106	285	HCBA/S33501-1N4R*0
20	276.5	41.7	106	210	HCBA/S32001-1N4K*0	40	552.9	83.3	116	285	HCBA/S34001-1N5R*0

Notes: (1)“-”=capacitance tolerance code, J=±5%, K=±10%;

(2)“*”=terminal code (see table 2).

Outline Dimensions

Three-Phase Delta Connection

400V.a.c.						400V.a.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
7.5	149.3	10.8	76	180	HCBA/G27502-3D1F*0	20	398.1	28.9	96	240	HCBA/G22001-3D3N*0
10	199	14.4	86	180	HCBA/G21001-3D2F*0	25	497.6	36.1	106	240	HCBA/G22501-3D4N*0
12.5	248.8	18.0	96	180	HCBA/G21251-3D3F*0	30	597.1	43.3	116	240	HCBA/G23001-3D5N*0
15	298.6	21.7	106	180	HCBA/G21501-3D4F*0	40	796.2	57.7	116	285	HCBA/G24001-3D5R*0
17.5	348.3	25.3	116	180	HCBA/G21751-3D5F*0	50	995.2	72.2	136	285	HCBA/G25001-3D6R*0
450V.a.c.						450V.a.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
10	157.3	12.8	76	210	HCBA/S21001-3D1K*0	30	471.8	38.5	106	240	HCBA/S23001-3D4N*0
12.5	196.6	16.0	76	210	HCBA/S21251-3D1K*0	35	550.4	44.9	116	240	HCBA/S23501-3D5N*0
15	235.9	19.2	86	210	HCBA/S21501-3D2K*0	40	629.1	51.3	116	240	HCBA/S24001-3D5N*0
20	314.5	25.7	86	240	HCBA/S22001-3D2N*0	50	786.3	64.2	116	285	HCBA/S25001-3D5R*0
25	393.2	32.1	96	240	HCBA/S22501-3D3N*0						
480V.a.c.						480V.a.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
7.5	103.7	9.0	76	180	HCBA/S37502-3D1F*0	25	345.6	30.1	106	240	HCBA/S32501-3D4N*0
10	138.2	12.0	86	180	HCBA/S31001-3D2F*0	30	414.7	36.1	116	240	HCBA/S33001-3D5N*0
12.5	172.8	15.0	96	180	HCBA/S31251-3D3F*0	35	483.8	42.1	106	285	HCBA/S33501-3D4R*0
15	207.3	18.0	106	180	HCBA/S31501-3D4F*0	40	552.9	48.1	116	285	HCBA/S34001-3D5R*0
20	276.5	24.1	96	240	HCBA/S32001-3D3N*0	50	691.1	60.1	136	285	HCBA/S35001-3D6R*0
525V.a.c.						525V.a.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
7.5	86.66	8.2	76	180	HCBA/T67502-3D1F*0	25	288.9	27.5	106	240	HCBA/T62501-3D4N*0
10	115.5	11.0	86	180	HCBA/T61001-3D2F*0	30	346.6	33.0	116	240	HCBA/T63001-3D5N*0
12.5	144.4	13.7	96	180	HCBA/T61251-3D3F*0	40	462.2	44.0	116	285	HCBA/T64001-3D5R*0
15	173.3	16.5	106	180	HCBA/T61501-3D4F*0	50	577.7	55.0	136	285	HCBA/T65001-3D6R*0
20	231.1	22.0	106	210	HCBA/T62001-3D4K*0						

Notes: (1) "-"=capacitance tolerance code, J=±5%, K=±10%;

(2) "*"="terminal code (see table 2).

Outline Dimensions

Three-Phase Delta Connection

690VAC						690Va.c.					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
7.5	150.5	6.3	76	180	HCBA/U27502-3Y1F*0	25	501.7	20.9	106	240	HCBA/U22501-3Y4N*0
10	200.7	8.4	76	240	HCBA/U21001-3Y1N*0	30	602	25.1	116	240	HCBA/U23001-3Y5N*0
15	301	12.6	86	240	HCBA/U21501-3Y2N*0	35	702.4	29.3	116	285	HCBA/U23501-3Y5R*0
20	401.4	16.7	96	240	HCBA/U22001-3Y3N*0	50	1003	41.8	136	285	HCBA/U25001-3Y6R*0

Notes: (1)"-"=capacitance tolerance code, J=±5%, K=±10%;

(2)"**"=terminal code (see table 2).

Three-Phases Star Connection

400Va.c. (230√3)						430Va.c. (250√3)					
Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information	Q _N (kVar)	C _N (μF)	I _N (A)	D (mm)	H (mm)	Ordering Information
5	298.6	7.2	76	180	HCBA/G25002-3Y1F*0	5	258.4	6.7	76	180	HCBA/S45002-3Y1F*0
10	597.1	14.4	86	240	HCBA/G21001-3Y2N*0	10	516.7	13.4	86	240	HCBA/S41001-3Y2N*0
12	716.6	17.3	86	240	HCBA/G21201-3Y2N*0	12	620.1	16.1	96	240	HCBA/S41201-3Y3N*0
15	895.7	21.7	96	240	HCBA/G21501-3Y3N*0	15	775.1	20.1	106	240	HCBA/S41501-3Y4N*0
20	1194	28.9	106	240	HCBA/G22001-3Y4N*0	20	1033	26.9	116	240	HCBA/S42001-3Y5N*0
25	1493	36.1	116	240	HCBA/G22501-3Y5N*0	25	1292	33.6	116	285	HCBA/S42501-3Y5R*0
30	1791	43.3	116	285	HCBA/G23001-3Y5R*0	35	1809	47.0	136	285	HCBA/S43501-3Y6R*0

Notes: (1)"-"=capacitance tolerance code, J=±5%, K=±10%;

(2)"**"=terminal code (see table 2).