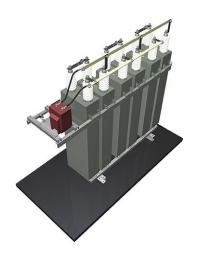


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Vishay ESTA

High Voltage AC Power Capacitors 3-Phase Capacitor Banks



FEATURES

- · Latest technology
- · High quality materials
- · Low losses design
- Dielectric liquid biodegradable

APPLICATIONS

- Power factor correction
- · Harmonic filtering
- Motor compensation
- · Industrial converter
- Thermal power station
- Solar
- Wind

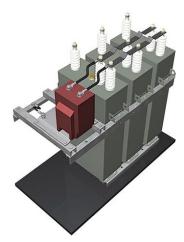
QUICK REFERENCE DATA					
Series	C/ HVAC 3-phase capacitor banks				
Description	High voltage AC capacitor banks, indoor / outdoor				
Туре	High voltage AC 3-phase capacitor banks				
Technology	All-film polypropylene / aluminum foil				
Voltage min. (V)	1000				
Voltage max. (V)	> 36 000				
Frequency min. (Hz)	50				
Frequency max. (Hz)	60				
Output min. (kvar)	150				
Output max. (kvar)	> 25 000				

TECHNICAL DATA	
Rated frequency	50 Hz or 60 Hz (other frequencies on request)
Insulation class	3.6 kV to 52 kV
Connection	Star, double star, H-bridge
Average losses	< 0.15 W/kvar
Discharge resistors	Internal (75 V/10 min) or (50 V/5 min)
Temperature category	-50 °C to +55 °C
Capacitance tolerance	0/+10 % (other tolerances on request)
Dielectric	All-film polypropylene / aluminum foil
Impregnating agent	Synthetic oil (non-PCB)
Protection	Internal fuses or fuseless / unbalance monitoring
Inrush current	100 x I _N max.
Standards	IEC 60871, ANSI/IEEE 18, CSA C22.2 No. 190
Bushings	Porcelain, screw and welded type, M12 / M16
Casing	Stainless steel
Racks	Hot-dip galvanized steel / aluminum
Standard color	RAL 7033 (other colors available on request)

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FORMS OF CONSTRUCTION

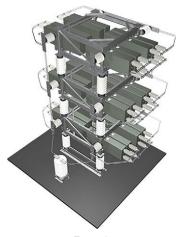


Form 1

Maximum voltage: 24 kV

Connection: double star with unbalance protection device

Protection level: IP00



Form 3

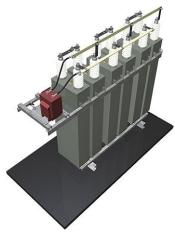
Maximum voltage: > 36 kV

Connection: double star with unbalance protection device

Protection level: IP00

CORROSION PROTECTION

Rack material: hot-dip galvanized steel or aluminum.

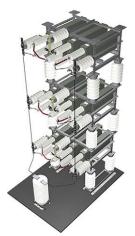


Form 2

Maximum voltage: 36 kV

Connection: double star with unbalance protection device

Protection level: IP00



Form 4

Maximum voltage: > 36 kV

Connection: double star with unbalance protection device

Protection level: IP00



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DIMENSION AND WEIGHT

3-PHASE CAP	3-PHASE CAPACITOR BANK UP TO 7.2 kV, IP00								
RATED VOLTAGE U _N (kV)	OUTPUT Q _N AT 50 Hz (kvar)	OUTPUT Q _N AT 60 Hz (kvar)	IMPULSE (kVp)	CURRENT AT 50 Hz (A)	CURRENT AT 60 Hz (A)	BANK DIMENSIONS L x W x H (mm)	WEIGHT (kg)	FORM	
7.2	1000	1200	60	139	167	855 x 435 x 940	188	1	
7.2	1300	1560	60	181	217	855 x 435 x 1040	222	1	
7.2	1900	2280	60	264	317	855 x 435 x 1175	312	1	
7.2	2800	3360	60	389	467	855 x 435 x 1475	375	1	
7.2	4000	4800	60	556	667	1750 x 500 x 1210	615	2	
7.2	5500	6600	60	764	917	1750 x 500 x 1460	750	2	
7.2	7300	8760	60	1014	1217	1500 x 1200 x 3000	1140	3	
7.2	9400	11 280	60	1306	1567	1600 x 1200 x 3000	1410	3	
7.2	11 800	14 160	60	1639	1967	2200 x 1500 x 3000	1890	4	
7.2	14 500	17 400	60	2014	2417	2400 x 1500 x 3000	2250	4	
7.2	17 500	21 000	60	2431	2917	2700 x 1500 x 3000	2640	4	

3-PHASE CAPA	3-PHASE CAPACITOR BANK UP TO 12 kV, IP00									
RATED VOLTAGE U _N (kV)	OUTPUT Q _N AT 50 Hz (kvar)	OUTPUT Q _N AT 60 Hz (kvar)	IMPULSE (kVp)	CURRENT AT 50 Hz (A)	CURRENT AT 60 Hz (A)	BANK DIMENSIONS L x W x H (mm)	WEIGHT (kg)	FORM		
12	1000	1200	75	83	100	855 x 435 x 940	199	1		
12	1300	1560	75	108	130	855 x 435 x 1040	233	1		
12	1900	2280	75	158	190	855 x 435 x 1175	323	1		
12	2800	3360	75	233	280	855 x 435 x 1475	387	1		
12	4000	4800	75	333	400	1750 x 500 x 1275	638	2		
12	5500	6600	75	458	550	1750 x 500 x 1460	773	2		
12	7300	8760	75	608	730	1500 x 1200 x 3000	1185	3		
12	9400	11 280	75	783	940	1600 x 1200 x 3000	1455	3		
12	11 800	14 160	75	983	1180	2200 x 1500 x 3000	1980	4		
12	14 500	17 400	75	1208	1450	2400 x 1500 x 3000	2340	4		
12	17 500	21 000	75	1458	1750	2700 x 1500 x 3000	2730	4		

3-PHASE CAPACITOR BANK UP TO 17.5 kV, IP00								
RATED VOLTAGE U _N (kV)	OUTPUT Q _N AT 50 Hz (kvar)	OUTPUT Q _N AT 60 Hz (kvar)	IMPULSE (kVp)	CURRENT AT 50 Hz (A)	CURRENT AT 60 Hz (A)	BANK DIMENSIONS L x W x H (mm)	WEIGHT (kg)	FORM
17.5	1000	1200	95	57	69	855 x 435 x 970	203	1
17.5	1300	1560	95	74	89	855 x 435 x 1070	237	1
17.5	1900	2280	95	109	130	855 x 435 x 1430	327	1
17.5	2800	3360	95	160	192	1750 x 500 x 1140	525	2
17.5	4000	4800	95	229	274	1750 x 500 x 1375	645	2
17.5	5500	6600	95	314	377	1750 x 500 x 1535	780	2
17.5	7300	8760	95	417	501	1530 x 1200 x 3000	1200	3
17.5	9400	11 280	95	537	645	1630 x 1200 x 3000	1470	3
17.5	11 800	14 160	95	674	809	2230 x 1500 x 3000	2010	4
17.5	14 500	17 400	95	829	994	2430 x 1500 x 3000	2370	4
17.5	17 500	21 000	95	1000	1200	2730 x 1500 x 3000	2760	4

C/... HVAC 3-Phase Capacitor Banks

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3-PHASE CAPACITOR BANK UP TO 24 kV, IP00								
RATED VOLTAGE U _N (kV)	OUTPUT Q _N AT 50 Hz (kvar)	OUTPUT Q _N AT 60 Hz (kvar)	IMPULSE (kVp)	CURRENT AT 50 Hz (A)	CURRENT AT 60 Hz (A)	BANK DIMENSIONS L x W x H (mm)	WEIGHT (kg)	FORM
24	1000	1200	125	42	50	855 x 435 x 995	207	1
24	1300	1560	125	54	65	855 x 435 x 1095	240	1
24	1900	2280	125	79	95	855 x 435 x 1455	330	1
24	2800	3360	125	117	140	1750 x 500 x 1165	533	2
24	4000	4800	125	167	200	1750 x 500 x 1400	653	2
24	5500	6600	125	229	275	1750 x 500 x 1560	788	2
24	7300	8760	125	304	365	1555 x 1200 x 3000	1215	3
24	9400	11 280	125	392	470	1655 x 1200 x 3000	1485	3
24	11 800	14 160	125	492	590	2255 x 1500 x 3000	2040	4
24	14 500	17 400	125	604	725	2455 x 1500 x 3000	2400	4
24	17 500	21 000	125	729	875	2755 x 1500 x 3000	2790	4

3-PHASE CAPACITOR BANK UP TO 36 kV, IP00									
RATED VOLTAGE U _N (kV)	OUTPUT Q _N AT 50 Hz (kvar)	OUTPUT Q _N AT 60 Hz (kvar)	IMPULSE (kVp)	CURRENT AT 50 Hz (A)	CURRENT AT 60 Hz (A)	BANK DIMENSIONS L x W x H (mm)	WEIGHT (kg)	FORM	
36	1000	1200	170	28	33	1750 x 500 x 855	270	2	
36	1300	1560	170	36	43	1750 x 500 x 955	308	2	
36	1900	2280	170	53	63	1750 x 500 x 1055	383	2	
36	2800	3360	170	78	93	1750 x 500 x 1200	510	2	
36	4000	4800	170	111	133	1300 x 1200 x 3000	720	3	
36	5500	6600	170	153	183	1500 x 1200 x 3000	990	3	
36	7300	8760	170	203	243	1500 x 1200 x 3000	1215	3	
36	9400	11 280	170	261	313	1600 x 1200 x 3000	1485	3	
36	11 800	14 160	170	328	393	2255 x 1500 x 3000	2040	4	
36	14 500	17 400	170	403	483	2455 x 1500 x 3000	2400	4	
36	17 500	21 000	170	486	583	2755 x 1500 x 3000	2820	4	

TYPE NOMENCLATURE								
	C / 20 .	3 / 50						
1	2	3	4					
C: compensation	Voltage in kV	Rated power in Mvar	Frequency in Hz					



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