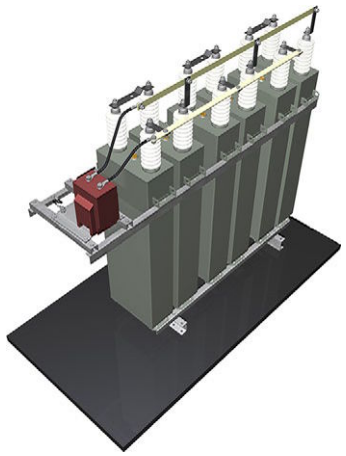
High Voltage AC Power Capacitors
3-Phase Capacitor Banks



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

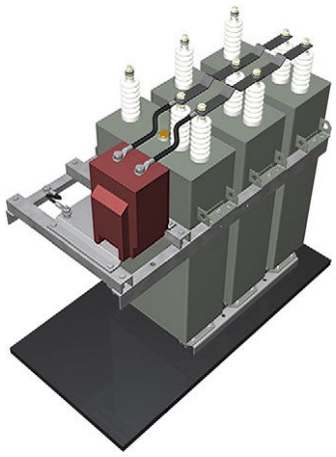
QUICK REFERENCE DATA	
Series	C/… HVAC 3-phase capacitor banks
Description	High voltage AC capacitor banks, indoor / outdoor
Type	High voltage AC 3-phase capacitor banks
Technology	All-film polypropylene / aluminum foil
Voltage min. (V)	1000
Voltage max. (V)	> 36 000
Frequency min. (Hz)	50
Frequency max.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

For technical questions, contact: esta@vishay.com

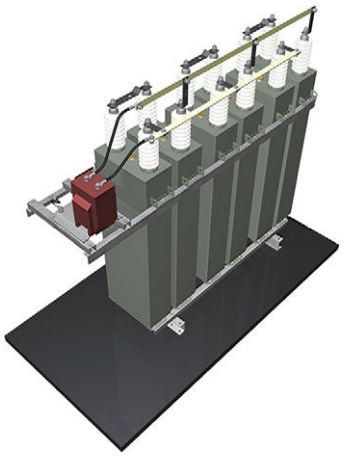
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

FORMS OF CONSTRUCTION



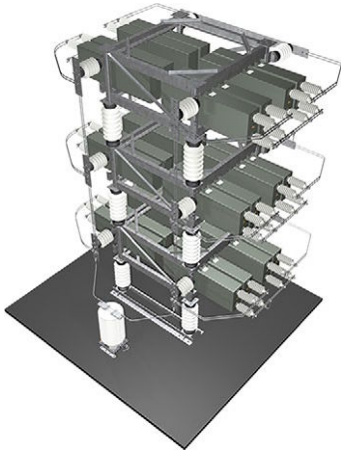
Form 1

Maximum voltage: 24 kV
Connection: double star with unbalance protection device
Protection level: IP00



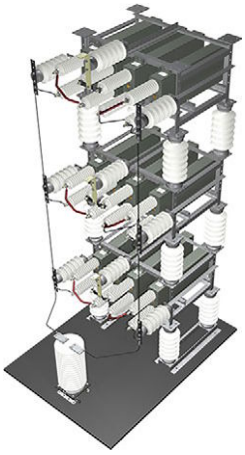
Form 2

Maximum voltage: 36 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



Form 4

Maximum voltage: > 36 kV
Connection: double star with unbalance protection device
Protection level: IP00

CORROSION PROTECTION

Rack material: hot-dip galvanized steel or aluminum.

For technical questions, contact: esta@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

DIMENSION AND WEIGHT

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 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

For technical questions, contact: esta@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

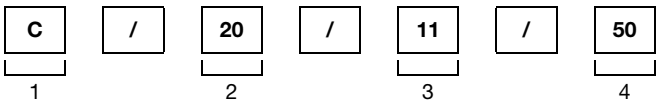
3-PHASE CAPACITOR BANK UP TO 24 kV, IP00

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



1	2	3	4
C: compensation	Voltage in kV	Rated power in Mvar	Frequency in Hz

For technical questions, contact: esta@vishay.com
THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

© 2024 VISHAY INTERTECHNOLOGY, INC. ALL RIGHTS RESERVED