High Voltage AC Power Capacitors
1-Phase Units

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

LINKS TO ADDITIONAL RESOURCES

3D Models

QUICK REFERENCE DATA	
Series	Pha… HVAC 1-phase
Description	High voltage AC power capacitors, indoor / outdoor
Type	High voltage AC 1-phase
Technology	All-film polypropylene / aluminum foil
Voltage min. (V)	1000
Voltage max. (V)	24 000
Frequency min. (Hz)	50
Frequency max. (Hz)	60
Output min. (kvar)	25
Output max. (kvar)	1000

TECHNICAL DATA	
Rated frequency	50 Hz or 60 Hz (other frequencies on request)
Insulation class	3.6 kV to 36 kV
Internal connection	1-phase (live or dead case)
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	-5 % / +10 %
Internal connection	Single phase (live or dead case)
Dielectric	All-film polypropylene / aluminum foil
Impregnating agent	Synthetic oil (non-PCB)
Protection	Internal fuses / pressure monitoring device
Inrush current	100 x I_N max.
Standards	IEC 60871, ANSI/IEEE 18, CSA C22.2 No. 190
Bushings	Porcelain, screw or welded type, M12 / M16
Casing	Stainless steel
Standard color	RAL 7033 / other colors available upon request

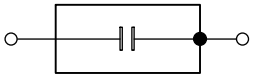
For technical questions, contact: esta@vishay.com

FORMS OF CONSTRUCTION

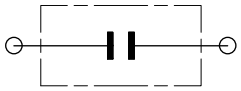
Mechanically suitable for horizontal arrangement

Mechanically suitable for vertical arrangement

CONNECTION



Live case



Dead case

CORROSION PROTECTION

Case material: stainless steel case AISI 409 (AISI 304 as option)

Thickness of material 1.5 mm, top cover and bottom 2.0 mm

Standard case dimensions: 345 mm x 110 mm / 135 mm / 175 mm x H mm

Special dimensions on request (replacement market)

DIMENSION AND WEIGHT

1-PHASE CAPACITORS 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)	CASING DIMENSIONS L x W x H (mm)	CASING DIMENSIONS L x W x H (mm) WITH INTERNAL FUSES
4.15	25	30	60	6	7	345 x 110 x 130	n/a
4.15	50	60	60	12	14	345 x 110 x 180	n/a
4.15	75	90	60	18	22	345 x 110 x 230	n/a
4.15	100	120	60	24	29	345 x 110 x 285	n/a
4.15	150	180	60	36	43	345 x 135 x 320	345 x 135 x 395
4.15	200	240	60	48	58	345 x 135 x 405	345 x 135 x 420
4.15	300	360	60	72	87	345 x 175 x 440	345 x 135 x 595
4.15	400	480	60	96	116	345 x 175 x 560	345 x 175 x 590
4.15	550	660	60	133	159	345 x 175 x 735	345 x 175 x 775
4.15	700	840	60	169	202	345 x 175 x 915	345 x 175 x 965
4.15	900	1080	60	217	260	345 x 175 x 1160	345 x 175 x 1200

1-PHASE CAPACITORS 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)	CASING DIMENSIONS L x W x H (mm)	CASING DIMENSIONS L x W x H (mm) WITH INTERNAL FUSES
6.92	25	30	75	4	4	345 x 110 x 140	n/a
6.92	50	60	75	7	9	345 x 110 x 190	n/a
6.92	75	90	75	11	13	345 x 110 x 245	n/a
6.92	100	120	75	14	17	345 x 110 x 305	n/a
6.92	150	180	75	22	26	345 x 135 x 345	n/a
6.92	200	240	75	29	35	345 x 135 x 430	345 x 135 x 495
6.92	300	360	75	43	52	345 x 135 x 615	345 x 135 x 620
6.92	400	480	75	58	69	345 x 135 x 775	345 x 135 x 790
6.92	550	660	75	79	95	345 x 175 x 780	345 x 175 x 815
6.92	700	840	75	101	121	345 x 175 x 965	345 x 175 x 1015
6.92	900	1080	75	130	156	345 x 175 x 1200	n/a

1-PHASE CAPACITORS 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)	CASING DIMENSIONS L x W x H (mm)	CASING DIMENSIONS L x W x H (mm) WITH INTERNAL FUSES
10.1	25	30	95	2	3	345 x 110 x 145	n/a
10.1	50	60	95	5	6	345 x 110 x 205	n/a
10.1	75	90	95	7	9	345 x 110 x 265	n/a
10.1	100	120	95	10	12	345 x 110 x 325	n/a
10.1	150	180	95	15	18	345 x 135 x 375	n/a
10.1	200	240	95	20	24	345 x 135 x 465	n/a
10.1	300	360	95	30	36	345 x 135 x 645	345 x 135 x 680
10.1	400	480	95	40	48	345 x 175 x 655	345 x 175 x 685
10.1	550	660	95	54	65	345 x 175 x 855	345 x 175 x 830
10.1	700	840	95	69	83	345 x 175 x 1050	345 x 175 x 1055
10.1	900	1080	95	89	107	345 x 175 x 1190	345 x 175 x 1200

1-PHASE CAPACITORS 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)	CASING DIMENSIONS L x W x H (mm)	CASING DIMENSIONS L x W x H (mm) WITH INTERNAL FUSES
13.85	25	30	95	2	2	345 x 110 x 175	n/a
13.85	50	60	95	4	4	345 x 110 x 190	n/a
13.85	75	90	95	5	6	345 x 135 x 225	n/a
13.85	100	120	95	7	9	345 x 135 x 270	n/a
13.85	150	180	95	11	13	345 x 135 x 360	n/a
13.85	200	240	95	14	17	345 x 135 x 435	n/a
13.85	300	360	95	22	26	345 x 135 x 575	345 x 135 x 925
13.85	400	480	95	29	35	345 x 175 x 590	345 x 135 x 945
13.85	550	660	95	40	48	345 x 175 x 770	345 x 175 x 870
13.85	700	840	95	51	61	345 x 175 x 950	345 x 175 x 1040
13.85	900	1080	95	65	78	345 x 175 x 1190	345 x 175 x 1200

TYPE NOMENCLATURE

P	h	a	f	s	o	6.3	/	200	/	1	D
1		2	3	4	5	6		7		8	9

1	2	3	4	5	6	7	8	9
Ph: power capacitor	a = all film dielectric	f: outdoor n. E.: indoor	s: live casing n. E.: dead casing	o: non PCB impregnating agent	Rated voltage (kV)	Rated output (kvar) Rated capacitance (µF)	1 = 1-phase capacitor n. E. = 3-phase capacitor	D = over pressure device

Note

- n. E. = no entry

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