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Vishay ESTA

High Voltage AC Power Capacitors 3-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

QUICK REFERENCE DATA						
Series	Pha HVAC 3-phase					
Description	High voltage power capacitors, indoor					
Туре	High voltage AC power capacitors, 3-phase units					
Technology	All-film polypropylene / aluminum foil					
Voltage min. (V)	1000					
Voltage max. (V)	17 500					
Frequency min. (Hz)	50					
Frequency max. (Hz)	60					
Output min. (kvar)	25					
Output max. (kvar)	900					

TECHNICAL DATA	
Rated frequency	50 Hz or 60 Hz (other frequencies on request)
Insulation class	7.2 kV / 12 kV / 17.5 kV
Internal connection	Star or delta
Average losses	< 0.15 W/kvar
Discharge resistors	Internal (75 V/10 min)
Temperature category	-50 °C to +55 °C
Capacitance tolerance	-5 % / +10 %
Internal connection	Star or delta
Impregnating agent	Synthetic oil (non-PCB)
Protection	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



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FORMS OF CONSTRUCTION

IP00 3-phase capacitor are provided with three bushings, dead casing with grounding connection point. They are connected either in star or in delta, with pressure monitoring device.

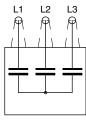






Form 3

CONNECTIONS



Star

Special dimensions on request (replacement market)

L1 L2 L3

Delta

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

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DIMENSION AND WEIGHT

3-PHASE CA	PACITORS	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)	WEIGHT (kg)	FORM
7.2	25	30	60	2	2	345 x 110 x 300	22	1
7.2	50	60	60	4	5	345 x 110 x 300	22	1
7.2	75	90	60	6	7	345 x 110 x 300	22	1
7.2	100	120	60	8	10	345 x 110 x 330	24	1
7.2	150	180	60	12	14	345 x 135 x 370	30	1
7.2	200	240	60	16	19	345 x 135 x 470	36	1
7.2	300	360	60	24	29	345 x 135 x 630	47	1
7.2	400	480	60	32	39	345 x 175 x 635	58	1
7.2	550	660	60	44	53	345 x 175 x 825	73	1
7.2	700	840	60	56	67	345 x 175 x 1010	88	1
7.2	800	960	60	64	77	345 x 175 x 1155	100	1

3-PHASE CA	3-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)	WEIGHT (kg)	FORM	
12	50	60	75	2	3	450 x 110 x 335	30	2	
12	75	90	75	4	4	450 x 110 x 340	30	2	
12	100	120	75	5	6	450 x 110 x 350	31	2	
12	150	180	75	7	9	450 x 110 x 445	37	2	
12	200	240	75	10	12	450 x 135 x 470	45	2	
12	300	360	75	14	17	450 x 135 x 650	59	2	
12	400	480	75	19	23	450 x 175 x 650	73	2	
12	550	660	75	26	32	450 x 175 x 815	90	2	
12	700	840	75	34	40	450 x 175 x 1015	110	2	
12	800	960	75	38	46	450 x 175 x 1130	122	2	

3-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)	WEIGHT (kg)	FORM	
17.5	50	60	95	2	2	450 x 110 x 460	41	3	
17.5	75	90	95	2	3	450 x 110 x 475	43	3	
17.5	100	120	95	3	4	450 x 110 x 495	44	3	
17.5	150	180	95	5	6	450 x 110 x 495	44	3	
17.5	200	240	95	7	8	450 x 110 x 560	48	3	
17.5	300	360	95	10	12	450 x 135 x 675	65	3	
17.5	400	480	95	13	16	450 x 135 x 825	77	3	
17.5	550	660	95	18	22	450 x 175 x 825	95	3	
17.5	700	840	95	23	28	450 x 175 x 995	113	3	



Pha... HVAC Capacitors 3-Phase

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TYPE NOI	MENCLATU	RE						
P 1	h a			6.3	1	200 7	1 8	D
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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