

www.vishay.com

Vishay ESTA

Zinc Oxide RC-Surge Suppressor (Zoa) Capacitors, for HV-Motor and Transformers



FEATURES

- Zoa's are RC surge suppressors with included varistors
- Zoa's will protect transformers and motors from insulation failures
- Zoa's will significantly reduce the expenses for maintenance and insulation failures of motors and transformers
- Zoa's will eliminate striking (re- and pre-) transients of connected vacuum and other switchgears
- Zoa's prevent high frequency currents at zero crossing in the contact gap of the switch

APPLICATIONS

- Zoa's are optimized to be mounted inside the motor or transformer terminal boxes to be connected to each phase and earth
- Zoa's will protect vacuum and other switchgears
- Surge suppression

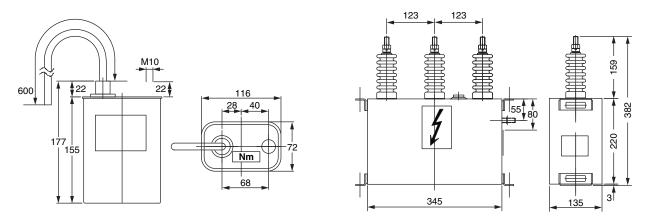
QUICK REFERENCE DATA					
Series	Zoa				
Description	Zinc oxide RC-surge suppressor (Zoa) for HV-motor and transformers				
Туре	Surge suppressor with integrated varistor				
Technology	All-film polypropylene / aluminum foil, MKP				
Voltage min. (V)	1000				
Voltage max. (V)	11 000				
Frequency min. (Hz)	50				
Frequency max. (Hz)	60				
Capacitance min. (µF)	0.1				
Capacitance max. (µF)	0.6				

TECHNICAL DATA				
Rated frequency	50 Hz or 60 Hz (other frequencies on request)			
Insulation class	3.3 kV to 11 kV			
Internal connection	Live case, star, or delta			
Temperature category	-25 °C to +50 °C			
Capacitance tolerance	-5 % / +10 %			
Dielectric	All-film polypropylene / aluminum foil			
Impregnating agent	Synthetic oil (non-PCB)			
Standards	IEEE and CIGRE for motor impulse withstand levels			
Bushings	Porcelain, welded type, M10 / M12			
Casing	Stainless steel			
Standard color	RAL 7033 / other colors available upon request			
Erection	Indoor			

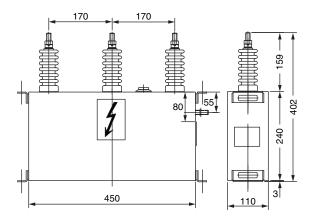
Revision: 14-Nov-2024 1 Document Number: 13192

Vishay ESTA

FORMS OF CONSTRUCTION



Form 1 Form 2



Form 3

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

DIMENSION AND WEIGHT

ZOA RC-SURGE SUPPRESSOR CAPACITORS 50 Hz / 60 Hz, IP00, INDOOR						
RATED VOLTAGE U _N (kV)	C _N (μF)	РН	CASING DIMENSIONS L x W x H (mm)	WEIGHT (kg)	FORM	
3.3	0.1	1	116 x 72 x 155	2	1	
6.6	0.1	1	116 x 72 x 155	2	1	
3.3	3 x 0.2	3	345 x 135 x 220	17	2	
6.6	3 x 0.2	3	345 x 135 x 220	19	2	
11	3 x 0.2	3	450 x 110 x 240	20	3	



www.vishay.com

Zoa... Surge Suppressor Capacitors

Vishay ESTA

TYPE NOMENCLATURE								
	Z 0	a	s o 4 5	3.3	7			
1	2	3	4	5	6	7		
Zinc oxide	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)		

Note

• n. E. = no entry



Legal Disclaimer Notice

Vishay

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.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. 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.