

www.vishay.com

Vishay ESTA

Medium Frequency Capacitors, Water Cooled All-Film Technology up to 100 000 Hz



FEATURES

- Dielectric liquid biodegradable
- High quality materials
- Massive connection studs (M12 or M20)

APPLICATIONS

- Induction furnaces and heaters
- Improve power factor
- Tune special furnace circuits

STANDARDS

• IEC CEI 60110-1

Note

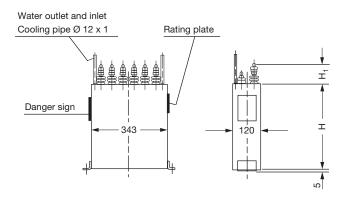
Capacitor in accordance with other standards available upon request

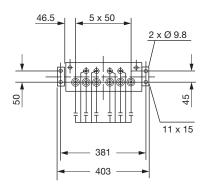
QUICK REFERENCE DATA					
eries Phawoc medium frequency capacitors					
Description	Medium frequency capacitors, water cooled, indoor				
Туре	Capacitors, induction heating				
Technology	All-film polypropylene / aluminum foil				
Voltage min. (V)	250				
Voltage max. (V)	1000				
Frequency min. (Hz)	10 000				
Frequency max. (Hz)	100 000				
Output min. (kvar)	100				
Output max. (kvar)	2000				

TECHNICAL DATA					
Internal connection	Live case				
Temperature category	+1 °C to +50 °C				
Capacitance tolerance	-10 % / +10 %				
Dielectric	All-film polypropylene / aluminum foil				
Impregnating agent	Synthetic oil (non-PCB)				
Protection	Pressure monitoring device / thermostat				
Standards	IEC CEI 60110-1				
Cooling system	Water cooling, outflowing water temperature 40 °C maximum				
Bushings	Porcelain, screw type, M12 / M20				
Casing	Brass sheet welded				
Mounting	Upright or horizontally position				
Standard color	RAL 7033 / other colors available upon request				
Erection	Indoor				

Vishay ESTA

FORMS OF CONSTRUCTION





Standard case dimensions: 343 mm x 120 mm x H mm

DIMENSIONS AND WEIGHT									
FREQUENCY f (Hz)	RATED VOLTAGE U _N (V)	OUTPUT Q _n (kvar)	CURRENT (A)	BUSHING	CASING DIMENSIONS L x W x H (mm)	WEIGHT (kg)			
10 000	500	980	1960	M12 / M20	343 x 120 x 300	21			
10 000	1000	1970	1970	M12 / M20	343 x 120 x 250	19			
20 000	500	900	1800	M12 / M20	343 x 120 x 250	19			
20 000	1000	1800	1800	M12 / M20	343 x 120 x 200	16			
30 000	500	840	1680	M12 / M20	343 x 120 x 250	19			
30 000	1000	1700	1700	M12 / M20	343 x 120 x 250	19			
40 000	500	810	1620	M12 / M20	343 x 120 x 200	16			
40 000	1000	1620	1620	M12 / M20	343 x 120 x 200	16			
50 000	500	1020	2040	M12 / M20	343 x 120 x 200	16			
50 000	1000	1570	1570	M12 / M20	343 x 120 x 200	16			
60 000	500	760	1520	M12 / M20	343 x 120 x 200	16			
60 000	1000	1520	1520	M12 / M20	343 x 120 x 200	16			
80 000	500	720	1440	M12 / M20	343 x 120 x 200	16			
80 000	1000	1450	1450	M12 / M20	343 x 120 x 250	19			
100 000	500	700	1400	M12 / M20	343 x 120 x 250	19			
100 000	1000	1050	1050	M12 / M20	343 x 120 x 250	19			

Note

Shown are the maximum power ratings. Other ratings, voltages, and subdivision are available on request

TYPE NOMENCLATURE									
P 1	h	a v 2		c 750	<u>)</u> /	1800	/ 10	k S 9	- KL
1	2	3	4	5	6	7	8	9	10
Ph: power capacitor	a: all film dielectric	w: water cooled	o: non PCB impregnating agent	Special type for higher frequencies	Voltage (V or kV)	Total output (kvar)	Frequency (kHz)	S: partial outputs	KL: PTC resistor n. E.: no device

• 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.