

## Medium Frequency Capacitors, Water Cooled All-Film Technology up to 10 000 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

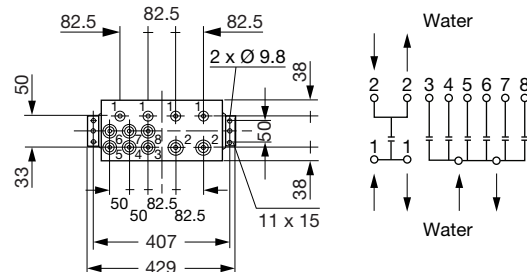
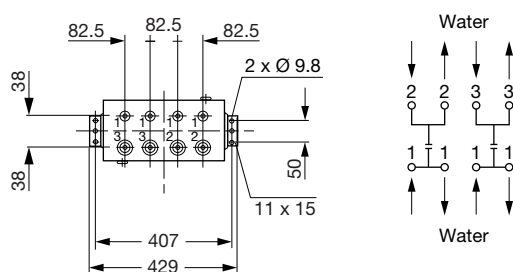
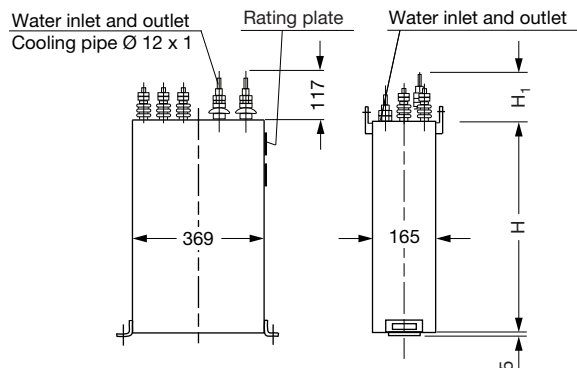
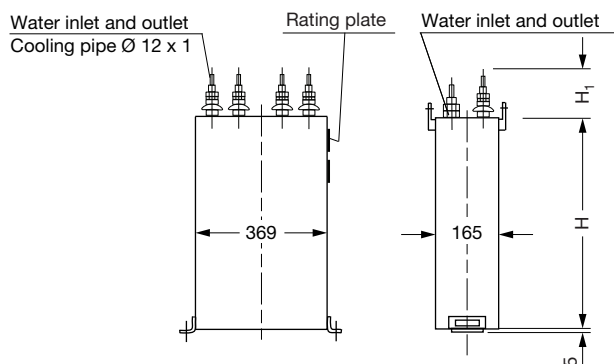
### QUICK REFERENCE DATA

Series	Phawoz medium frequency capacitors
Description	Medium frequency capacitors, water cooled, indoor
Type	Capacitors, induction heating
Technology	All-film polypropylene / aluminum foil
Voltage min. (V)	250
Voltage max. (V)	2400
Frequency min. (Hz)	1000
Frequency max. (Hz)	10 000
Output min. (kvar)	600
Output max. (kvar)	6000

### 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

## FORMS OF CONSTRUCTION



Version A

Version B

Standard case dimensions: 369 mm x 165 mm x H mm (other dimensions upon request)

DIMENSIONS AND WEIGHT						
FREQUENCY f (Hz)	RATED VOLTAGE U <sub>N</sub> (V)	OUTPUT Q <sub>n</sub> (kvar)	CURRENT (A)	BUSHING	CASING DIMENSIONS L x W x H (mm)	WEIGHT (kg)
150	600	760	1267	M12 / M20	369 x 165 x 1000	87
150	3000	2000	667	M12 / M20	369 x 165 x 1000	87
300	600	1020	1700	M12 / M20	369 x 165 x 800	72
300	3000	4000	1333	M12 / M20	369 x 165 x 1000	87
600	250	420	1680	M12 / M20	369 x 165 x 850	76
600	3000	6000	2000	M12 / M20	369 x 165 x 1000	87
1000	250	660	2640	M12 / M20	369 x 165 x 1000	87
1000	2450	4900	2000	M12 / M20	369 x 165 x 1000	87
3000	250	660	2640	M12 / M20	369 x 165 x 400	38
3000	1500	3960	2640	M12 / M20	369 x 165 x 350	33
5000	250	640	2560	M12 / M20	369 x 165 x 300	29
5000	1500	3840	2560	M12 / M20	369 x 165 x 350	33
8000	250	600	2400	M12 / M20	369 x 165 x 250	25
8000	1500	3500	2333	M12 / M20	369 x 165 x 300	29
10 000	250	570	2280	M12 / M20	369 x 165 x 300	29
10 000	1500	3400	2267	M12 / M20	369 x 165 x 300	29

### Note

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



## TYPE NOMENCLATURE

<div>P</div>	<div>h</div>	<div>a</div>	<div>w</div>	<div>o</div>	<div>z</div>	<div>750</div>	<div>/</div>	<div>1800</div>	<div>/</div>	<div>1k</div>	<div>S</div>	<div>-</div>	<div>DR</div>
1	2	3	4	5	6	7	8	9	10				
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	z: twin outputs c: special type for higher frequencies n. E.: standard types	Voltage (V or kV)	Total output (kvar)	Frequency (kHz)	S: version B n. E.: version A	DR: pressure switch ST: thermostat KL: PTC resistor n. E.: no device				

### Note

- n. E. = no entry



## 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.