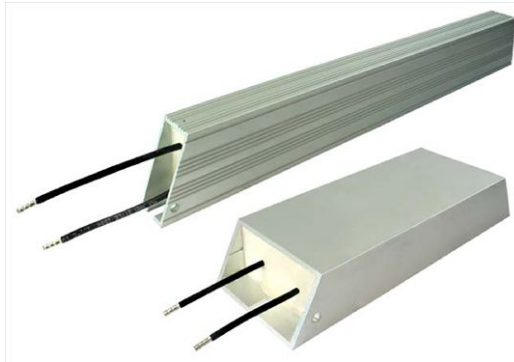


Aluminum Housed Compact Wirewound Resistor



FEATURES

- Power rating up to 500 W
- High overload capacity
- Protection IP20 or IP65
- Enhanced humidity protection
- Complete housed construction
- Multiple construction for higher power rating
- Heatsink mounting
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

APPLICATIONS

- Drive controllers
- Railway
- Frequency inverter
- Renewable energy

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	POWER RATING W $P_{40^\circ\text{C}}$	RESISTANCE RANGE ⁽¹⁾ Ω	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE \pm %	PROTECTION	MAX. PERMISSIBLE OPERATING VOLTAGE
VACR0500	50	3.0 to 560	50 to 150	10	IP65	UL 600 V/UL 1000 V
VACR1000	100	3.0 to 560	50 to 150	10	IP65	EN 1000 V DC
VACR1001		2.7 to 910	50 to 150	10	IP65	UL 600 V/UL 1000 V
VACR1003		6.2 to 1.2K	50 to 150	10	IP65	UL 600 V/UL 1000 V
VACR1202	120	4.7 to 1.0K	50 to 150	10	IP65	UL 600 V/UL 1000 V
VACR1301	130	2.7 to 910	50 to 150	10	IP65	EN 1000 V DC
VACR1501	150	2.7 to 910	50 to 150	10	IP20	UL 600 V/UL 1000 V
VACR1502		4.7 to 1.0K	50 to 150	10	IP65	EN 1000 V DC
VACR1503		6.2 to 1.2K	50 to 150	10	IP65	EN 1000 V DC
VACR1504		6.2 to 1.2K	50 to 150	10	IP65	UL 600 V/UL 1000 V
VACR1505		9.1 to 1.5K	50 to 150	10	IP65	UL 600 V/UL 1000 V
VACR1804	180	6.2 to 1.2K	50 to 150	10	IP65	EN 1000 V DC
VACR1806		8.2 to 1.8K	50 to 150	10	IP65	UL 600 V/UL 1000 V
VACR2001	200	3.3 to 910	50 to 150	10	IP20	EN 1000 V DC
VACR2005		9.1 to 1.5K	50 to 150	10	IP65	EN 1000 V DC
VACR2502	250	4.7 to 1.0K	50 to 150	10	IP20	UL 600 V/UL 1000 V
VACR2506		8.2 to 1.8K	50 to 150	10	IP65	EN 1000 V DC
VACR3002	300	4.7 to 1.0K	50 to 150	10	IP20	EN 1000 V DC
VACR3004		6.2 to 1.2K	50 to 150	10	IP20	UL 600 V/UL 1000 V
VACR4004	400	6.2 to 1.2K	50 to 150	10	IP20	EN 1000 V DC
VACR4006		8.2 to 1.8K	50 to 150	10	IP20	UL 600 V/UL 1000 V
VACR5006	500	8.2 to 1.8K	50 to 150	10	IP20	EN 1000 V DC

Notes

- VACR100 and VACR200 as special flat version on request.
- ⁽¹⁾ Resistance value to be selected from E24 series, other values on request.



PULSE POWER ⁽¹⁾ in W at T _a = 40 °C									
MODEL	MAX. PERMISSIBLE OPERATING VOLTAGE	SIZE: 40 mm x 20 mm				SIZE: 60 mm x 30 mm			
		PULSE TIME ⁽²⁾							
		6 %	15 %	25 %	40 %	6 %	15 %	25 %	40 %
VACR050	UL 600 V/UL 1000 V	550	200	150	100	-	-	-	-
VACR100 ⁽³⁾	UL 600 V/UL 1000 V	950	400	250	150	900	500	300	200
	EN 1000 V DC	1600	650	400	250	-	-	-	-
VACR120	UL 600 V/UL 1000 V	-	-	-	-	1080	600	360	240
VACR130	EN 1000 V DC	-	-	-	-	1170	650	390	260
VACR150	UL 600 V/UL 1000 V	1600	650	400	250	1350	750	450	300
	EN 1000 V DC	2200	900	550	350	1350	750	450	300
VACR180	UL 600 V/UL 1000 V	-	-	-	-	1620	900	540	360
	EN 1000 V DC	-	-	-	-	1620	900	540	360
VACR200 ⁽³⁾	EN 1000 V DC	3200	1300	750	500	1800	1000	600	400
VACR250	UL 600 V/UL 1000 V	-	-	-	-	2250	1250	750	500
	EN 1000 V DC	-	-	-	-	2250	1250	750	500
VACR300	UL 600 V/UL 1000 V	-	-	-	-	2700	1500	900	600
	EN 1000 V DC	-	-	-	-	2700	1500	900	600
VACR400	UL 600 V/UL 1000 V	-	-	-	-	3600	2000	1200	800
	EN 1000 V DC	-	-	-	-	3600	2000	1200	800
VACR500	EN 1000 V DC	-	-	-	-	4500	2500	1500	1000

Notes

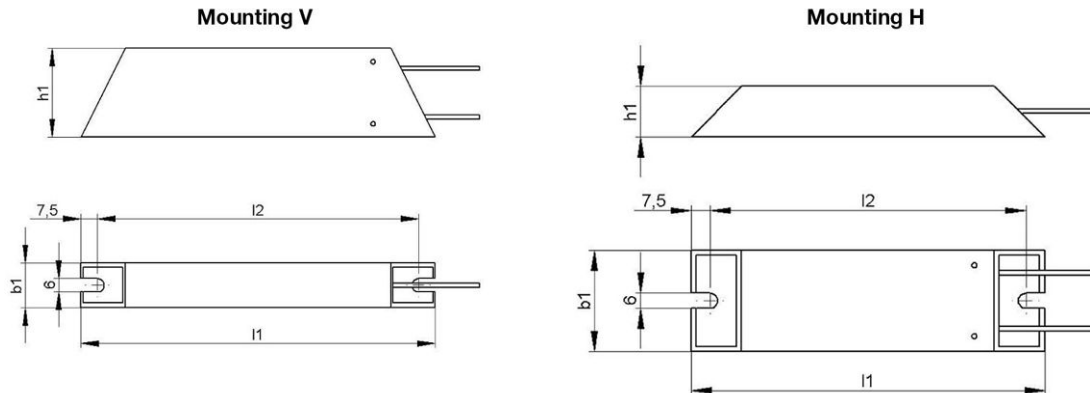
⁽¹⁾ Approximate value (depending on resistance)

⁽²⁾ Cycle duration of 120 s

PART NUMBER AND PRODUCT DESCRIPTION																	
Part Number: VACR1003VUB100K00																	
V	A	C	R	1	0	0	3	V	U	B	1	0	0	0	K	0	0
MODEL		MOUNTING	MAX. PERMISSIBLE VOLTAGE	PROTECTION	VALUE	TOLERANCE	SPECIAL										
VACR050 0 = VACR100 ⁽³⁾ 160 x 40 x 20 VACR120 160 x 20 x 40 VACR130 1 = VACR150 167 x 60 x 30 VACR180 167 x 30 x 60 VACR200 ⁽³⁾ 2 = VACR250 217 x 60 x 30 VACR300 217 x 30 x 60 VACR400 3 = VACR500 240 x 40 x 20 240 x 20 x 40 4 = 267 x 60 x 30 267 x 30 x 60 5 = 300 x 40 x 20 300 x 20 x 40 6 = 337 x 60 x 30 337 x 30 x 60		V = Vertical H = Horizontal	E = EN1000 (EN 1000 V DC) U = UL 1000 V V = UL 600 V	A = IP20 B = IP65 C = IP54 (on request)	3 digit value 1 digit multiplier MULTIPLIER 8 = *10 ⁻² 9 = *10 ⁻¹ 0 = *10 ⁰ 1 = *10 ¹ 2 = *10 ² 3 = *10 ³	K = ± 10.0 %	00 = Standard Two digits code for special parts, edited by marketing.										
Product Description: VACR1003 V UL 1000 V IP65 100R 10 %																	
VACR1003		V	UL 1000 V	IP65	100R	10 %											
MODEL		MOUNTING	MAX. PERMISSIBLE VOLTAGE	PROTECTION	VALUE	TOLERANCE											

Note

⁽³⁾ Special flat version on request.

DIMENSIONS in millimeters


MODEL	MOUNTING	b1	h1	l1 ⁽¹⁾	l2	MASS (kg)
VACR0500	H	40	20	160	145	0.26
	V	20	40	160	145	
VACR1003	H	40	20	240	225	0.26
	V	20	40	240	225	
VACR1000	H	40	20	160	145	0.26
	V	20	40	160	145	
VACR1001	H	60	30	167	150	0.7
	V	30	60	167	150	
VACR1202	H	60	30	217	200	0.7
	V	30	60	217	200	
VACR1301	H	60	30	167	150	0.5
	V	30	60	167	150	
VACR1505	H	40	20	300	285	0.43
	V	20	40	300	285	
VACR1503	H	40	20	240	225	0.43
	V	20	40	240	225	
VACR1501	H	60	30	167	150	0.43
	V	30	60	167	150	
VACR1502	H	60	30	217	200	0.43
	V	30	60	217	200	
VACR1504	H	60	30	267	250	0.43
	V	30	60	267	250	
VACR1804	H	60	30	267	250	0.9
	V	30	60	267	250	
VACR1806	H	60	30	337	320	0.9
	V	30	60	337	320	
VACR2005	H	40	20	300	285	0.55
	V	20	40	300	285	
VACR2001	H	60	30	167	150	0.55
	V	30	60	167	150	
VACR2502	H	60	30	217	200	0.7
	V	30	60	217	200	
VACR2506	H	60	30	337	320	0.7
	V	30	60	337	320	
VACR3002	H	60	30	217	200	0.7
	V	30	60	217	200	
VACR3004	H	60	30	287	250	0.7
	V	30	60	267	250	
VACR4004	H	60	30	267	250	0.9
	V	30	60	267	250	
VACR4006	H	60	30	337	320	0.9
	V	30	60	337	320	
VACR5006	H	60	30	337	320	1.1
	V	30	60	337	320	

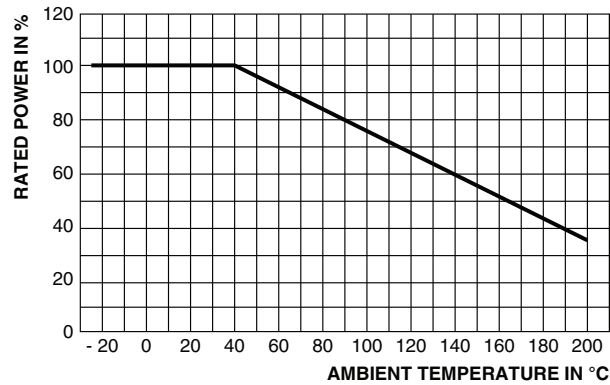
Notes

- VACR100 and VACR200 as special flat version on request.

(1) Mounting note: The length l1 increases at 0.85 mm/100 mm while heating (mounting with fixed and movable bearing).



DERATING



TEMPERATURE			
POWER RATING W	SURFACE TEMPERATURE at T ₄₀ °C	MAX. PERMISSIBLE OPERATING VOLTAGE V	SIZE mm
50 to 100	180	UL 600 V/UL 1000 V	40 x 20
100 to 200	250	EN 1000 V DC	40 x 20
200 to 500	360	EN 1000 V DC	60 x 30
150 to 400	340	UL 600 V/UL 1000 V	60 x 30
130 to 250	230	EN 1000 V DC	60 x 30
100 to 180	210	UL 600 V/UL 1000 V	60 x 30



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.

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.