K50-27

ALUMINUM ELECTROLYTIC CAPACITOR

elecond-market@elcudm.ru
+7 (34147) 2-99-89

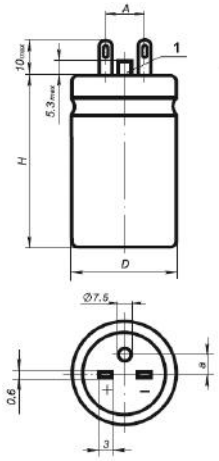
OZH0.464.197 TU Figure 2
OZH0.464.147 TU Figure 2

Are intended for work in chains of direct, pulsating currents and in a pulsed mode. They are manufactured in climatic version B (non-insulated) and UHL (insulated and non-insulated).

A feature of these capacitors is the presence of high-voltage ratings with a voltage of 400 and 450 V, a high value of the minimum operating time (more than 10,000 hours at a temperature of 60°C). They are used in converter technology, secondary power supplies, in general and special-purpose products.

MAIN PARAMETERS

Name	Value
Rated voltage, V	160...450
Rated capacitance, µF	100...1 000
Capacitance tolerance (25 °C, 50 Hz), %	+50...-20; +30...-10
Maximum operating temperature Tenv, °C	+85
Minimal operating temperature Tenv, °C	-40



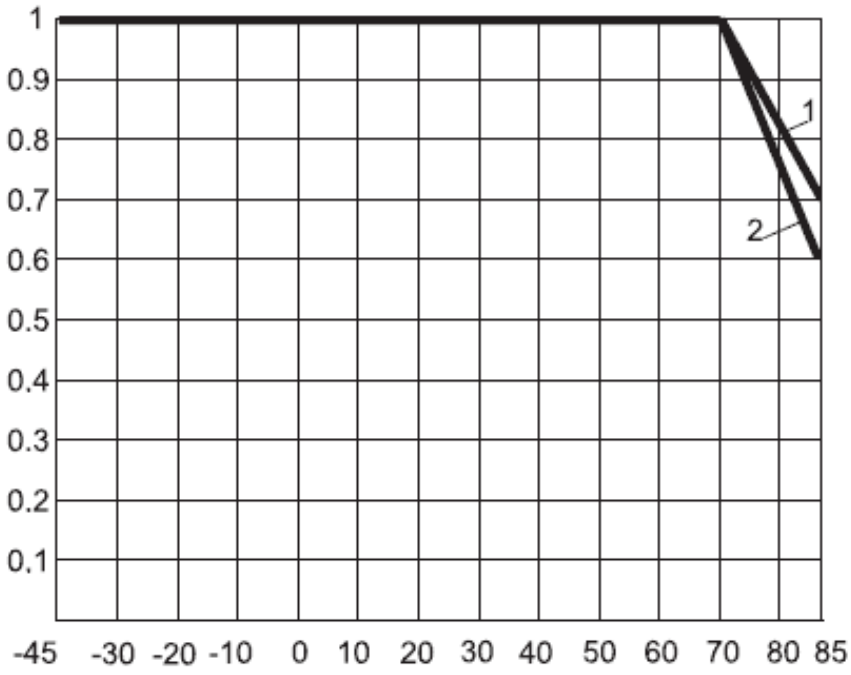
1 – Explosion-proof valve

DxH, mm	A, mm	a, mm
30x62	13±0.5	6±0.15
34x92	13±0.5	6±0.15
24x62	10±0.5	5.5±0.15
30x77	13±0.5	6±0.15

CAPACITORS OVERALL DIMENSIONS AND MASS

U_R, V	160	250	300	350	450
C_R, µF	DxH, mm mass, g				
100				24x62 60	30x62 80
220		24x62 60	30x62 80	30x77 120	34x92 140
470	30x62 80	30x77 120	34x92 140		
1 000	34x92 140				

VOLTAGE VERSUS TEMPERATURE



1 – for capacitors with $U_R \leq 250$ V
2 – for capacitors with $U_R \geq 300$ V

CAPACITOR ELECTRIC PARAMETERS VALUE WHEN DELIVERED

U_R, V	C_R, µF	tg δ, %, 25 °C, 50 Hz, max	I_{LEAK}, µA, 25 °C, after 5 min., max	Z, Ohm, 25 °C, 10kHz, max
160	470	15	2 256	6
	1 000		4 820	3
250	220		1 670	12
	470		3 545	6
300	220		2 000	12
	470		4 250	6
350	100		1 070	25
	220		2 330	12
450	100		1 370	25
	220		2 990	12

CAPACITORS RELIABILITY

Modes and operating conditions	Minimal nonfailure operating time, t_λ, hours	Capacitor failure rate, λ, 1/hour, max
Maximum-permissible mode (0.6-0.7U_R, Tenv=85 °C)	5 000	$5x10^{-8}$
Maximum-permissible mode (U_R, Tenv=70 °C)	10 000	
Light mode (U_R, Tenv=70 °C)	15 000	
Storageability Gamma-rated time of capacitor storageability Tcy at y=99.5%, years, min	12	

CODED SYMBOL FOR CAPACITORS (IDENTIFICATION NUMBER (PARTNUMBER))

CAPACITOR K50-27 - 160V - 470MF (+50; -20)% - OZH0.464.197TU
(K50-27- Q -477S –D30H62-PET-0-197-UHL)

1	2	3	4	5	6	7	8	9
Capacitor K50-27	160V	470μF	(+50; –20)%	D=30mm	H=62mm	PET-0	OZH0.464.197TU	UHL
K50-27	**Q**	**477**	**S**	**D30**	**H62**	**PET-0**	**197**	**UHL**

1. K50-27 - capacitor K50-27

2. Rated voltage code

Code	Q	W	T00	T	U
U_R, V	160	250	300	350	450

3. Nominal capacity code

Code	107	227	477	108
C_R, μF	100	220	470	1000

4. Capacity approval code

Code	S	Q
Admittance, %	+50; –20	+30; –10

5. Condenser diameter code

Code	D24	D30	D34
Diameter, mm	24	30	34

6. Condenser height code

Code	H62	H77	H92
Height, mm	62	77	92

7. Isolation code

Code	Decryption
PET-0	Uninsulated, packed in box for hand assembly equipment
PET	Isolated, packed in box for hand assembly equipment

8. Code TU

Code	TU designation
197	OZH0.464.197TU

9. Climatic performance

Code	Decryption
B	Capacitors designed for indoor installation with requirements for resistance to high humidity 98% at 35°C
UHL	Capacitors are designed for interior installation with resistance requirements to high air humidity 98% at 25°C (climatic version UHL)

EXAMPLE OF REFERENCE DESIGNATION FOR ORDERING

CAPACITOR K50-27 – 450V – 100μF (+50 -20)% B OZH0.464.197 TU

CAPACITOR K50-27 – 450V – 220μF (+50 -20)% I OZH0.464.147 TU