

This is a low-current, electromagnetic, polarized, hermetically sealed, two-position relay with four change-over contacts; designed to switch DC electrical circuits with frequency to 10000 Hz; manufactured according to GOST 16121-86 and ЯЛО.452.093 ТУ.

Environmental ratings: humid conditions.



Ordering data: **Relay RPS 47 PC4.520.764 ЯЛО.452.093 ТУ**

Technical Parameters

Type	Model	Rated Voltage, V	Coil Resistance I and II, Ohm	Operate Voltage in Delivery Time, V
RPS 47	PC4.520.764	15	200±40	5,0 – 8,2
RPS 47T	PC4.520.765			
RPS 47	PC4.520.765-01	24; 27	400±80	7,2 – 12,2
RPS 47T	PC4.520.764-01			
RPS 47	PC4.520.764-02	27	740±148	9,0 – 15,0
RPS 47T	PC4.520.765-02			

Technical Specifications

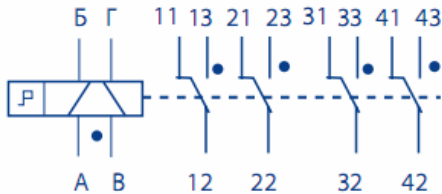
Operate Time, ms, not more than	5
Contact Resistance of Electrical Circuit when Voltage = (6±1)V and amperage =(10±1)mA, Ohm, not more than	0,25
Dielectric Strength between Current Carrying Circuits (effective value), V	
at normal climatic parameters	220
at high humidity, silver thaw, dew	150
at low air pressure	150
in conditions of salt fog, mold & fungi, static dust (climate model T)	150
Dielectric Strength between Current Carrying Circuits and Package (effective value),V	
at normal climatic parameters	220
in conditions of high humidity, silver thaw, dew	150
at low air pressure	150
in conditions of salt fog, mold & fungi, static dust (climate model T)	150
Dielectric Strength between Coil and Package (effective value), V	
at normal climatic parameters	300
at high humidity, silver thaw, dew	180
at low air pressure	180
in conditions of salt fog, mold & fungi, static dust (climate model T)	180
Insulation Resistance between Electrical Circuits, mOhm, not less:	
at normal climatic parameters	200
at maximal operating temperature	20
In Conditions of High Humidity, Silver Thaw, Dew:	
between coils and package	5
between electrical circuits and package	10
In Conditions of Salt Fog, Mold & Fungi, Static Dust (climate model T)	
between coils and package	5
between electrical circuits and package	10
Weight, g	12

Switching Modes

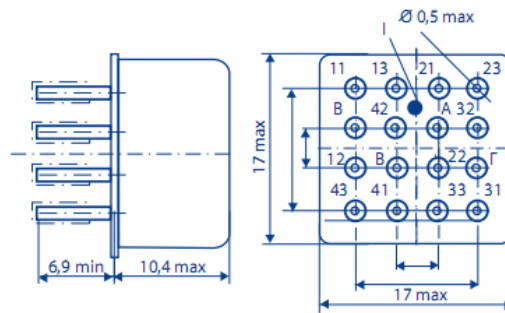
Switching Range		Type of Load	Current Type	Switching Frequency, Hz, not more than	Number of Switching Cycles	
I, A	U, V				Σ	t=+125°C
$5 \cdot 10^{-6} \div 10^{-3}$	0,05 ÷ 10	active	Var & const	5*	10^5	$0,5 \cdot 10^5$
$10^{-3} \div 0,1$	0,5 ÷ 36	active	Const	5*	10^5	$0,5 \cdot 10^5$
$10^{-2} \div 1,0$	6 ÷ 36	active	Const	5*	10^5	$0,5 \cdot 10^5$
$10^{-2} \div 0,15$	1,2 ÷ 60	active	Var ≤ 1100 Hz	3*	$5 \cdot 10^3$	$2,5 \cdot 10^3$
$5 \cdot 10^{-3} \div 0,15$	1,2 ÷ 36	inductive t < 0.005 s	Const	5*	10^5	$0,5 \cdot 10^5$
0,15 ÷ 0,5	1,2 ÷ 36	inductive t < 0.005 s	Const	1	$5 \cdot 10^3$	$2,5 \cdot 10^3$
0,05 ÷ 0,25	1,2 ÷ 36	inductive t < 0.015 s	Const	1	10^4	$0,5 \cdot 10^4$
1,0 ÷ 1,5	6 ÷ 30	active	Const	1	$2 \cdot 10^3$	-----

* At ambient temperature over 100°C the switching frequency is not more than 1Hz

Schematic Circuit Diagram



External and Mounting Dimensions



Operating Conditions

Ambient Temperature, °C	from minus 60 to plus 125
Relative Humidity at t ≤ 35°C, %	to 98
Sinusoidal Vibration: over 0,5 to 10Hz over 10 to 50Hz over 50 to 3000Hz over 3000 to 4000Hz over 4000 to 5000Hz	with amplitude to 3,5 mm with amplitude to 2 mm with acceleration to 200 m/sec ² (20g) with acceleration to 350 m/sec ² (35g) with acceleration to 100 m/sec ² (10g)
Air Pressure, Pa, (mm of Mercury)	$13 \cdot 10^{-5} \dots 297193$ ($10^{-6} \dots 2280$)
Shock Loads: single shocks duration of 0,1-2 ms single shocks duration of 1-5 ms multiple shocks duration of 1-5 ms multiple shocks duration of 2-10ms	3 shocks with acceleration to 5000 m/sec ² (500g), 9 shocks with acceleration to 1500 m/sec ² (150g) 4000 shocks with acceleration to 750 m/sec ² (75g) 10000 shocks with acceleration to 400 m/sec ² (40g)
Shock Resistance	when acceleration is to 1000 m/sec ² (100g)