

This is a low-current, electromagnetic, polarized, bistable, not hermetically sealed, two-position relay with two change-over contacts; designed to switch DC & AC electrical circuits with frequency to 400Hz; manufactured according to GOST 16121-86 and PCO.452.055 TY.



Ordering data: **Relay RPS20 PC4.521.753 PCO.452.055 TY**

## Technical Parameters

Model	Rated Voltage, V	Coil Resistance, Ohm	Operate Voltage, V		Contact Resistance, Ohm, not more than
			Delivery Time	Operation Process	
PC4.521.751	$6^{+1,2}_{-0,6}$	$30 \pm 3$	3,6	5	1,0 when $U = 6 \pm 1 B$ $I = 100 \pm 10 mA$
PC4.521.752	$12^{+2,0}_{-1,2}$	$130 \pm 19,5$	7,8	10,2	
PC4.521.753	$15^{+3,0}_{-1,5}$	$175 \pm 26$	10	13,4	
PC4.521.754	$27^{+5,0}_{-3,0}$	$660 \pm 132$	18	23,5	
PC4.521.756	$27^{+7,0}_{-6,0}$	$500 \pm 75$	16	20,5	0,25 when $U = 6 \pm 1 B$ $I = 10 \pm 1 mA$
PC4.521.757	$20 \pm 2$	$310 \pm 46,5$	13	17	1,0 when $U = 6 \pm 1 B$ $I = 100 \pm 10 mA$
PC4.521.758	$4,6 \pm 0,6$	$18 \pm 1,8$	2,8	3,6	
PC4.521.759	$27^{+7,0}_{-6,0}$	$500 \pm 75$	16	22	
PC4.521.760	$15^{+3,0}_{-1,5}$	$175 \pm 26$	10	13,4	0,25 when $U = 6 \pm 1 B$ $I = 10 \pm 1 mA$
PC4.521.761	$6^{+1,2}_{-0,6}$	$30 \pm 3$	3,6	5	
PC4.521.762	$12^{+2,0}_{-1,2}$	$130 \pm 19,5$	7,8	10,2	
PC4.521.763	$27^{+5,0}_{-3,0}$	$660 \pm 132$	18	23,5	

## Technical Specifications

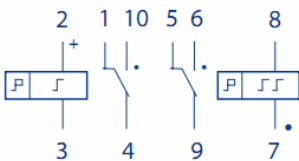
Operate Time, ms, not more than	10
Electrical Insulation Strength between Electrical Circuits and between Electrical Circuits and Package, (effective value), V :	
at normal climatic parameters;	500
in conditions of high humidity ;	300
at low air pressure;	180
Insulation Resistance between Electrical Circuits and between Electrical Circuits and Package, mOhm, not less :	
at normal ambient temperature ( coil is de-energized)	200
at maximal temperature (after coil voltage test )	20
in conditions of high humidity	10
Weight, g, not more than	20

## Switching Modes

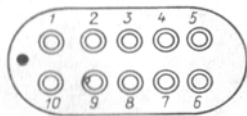
Switching Range		Type of Load	Current Type	Switching Frequency, Hz, not more than	Number of Switching Cycles	
I, A	U, V				At Normal Temperature	At Maximum Temperature >0°C
0,08-2	6-34	Active	Const	3	104	0,25·104
2-3	6-27					
0,05-0,5	12-115		var 50-400Hz	0,5		
0,5-10	12-115					
0,04-0,15	6-34	Inductive $t < 15$ ms	Const	3		
0,15-1,00	6-34			1		
0,05-0,5	12-115	inductive $\cos \varphi < 0,3$ мс	Var 50-400 Hz	1	0,5·104	0,125·104
5·10 <sup>-6</sup> -0,001	0,05-10*	Active	Const & var 50-400 Hz	3	104	0,25·104
0,001-0,01	3-32		Const			
0,01-0,1	10-32					
0,001-0,05	5-115		var 50—400 Hz			

\* -  $5\text{кОМ} \leq R_{\text{нагрузки}} \leq 500\text{кОМ}$

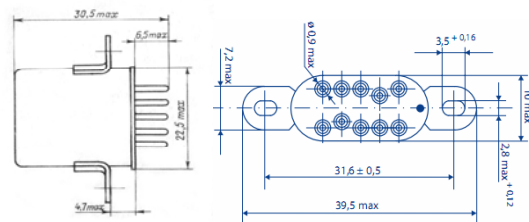
### Schematic Circuit Diagram



### Terminal Position



### External Dimensions



## Operating Conditions

Ambient Temperature, °C	from minus 60 to plus 60
Air Pressure, mm of Mercury	$10^{-6} \dots 7,8 \cdot 10^2$
Relative Humidity at 40 °C, %	to 98
Vibration Loads: over 5 to 50Hz over 50 to 600Hz over 600 to 2000Hz	with amplitude of 1,0 mm with acceleration to $120 \text{ m/sec}^2$ (12g) with acceleration to $100 \text{ m/sec}^2$ (10g)
Shock Loads : single shocks multiple shocks	9 shocks with acceleration of $1470 \text{ m/sec}^2$ (150g) 4000 shocks with acceleration to $750 \text{ m/sec}^2$ (75g) or 10000 with acceleration to $343 \text{ m/sec}^2$ (35g)
Shock Resistance	With acceleration to $750 \text{ m/sec}^2$ (75g)