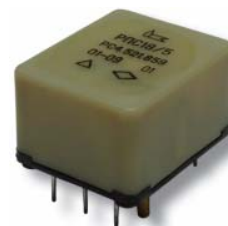


This is a low-current, electromagnetic, polarized, not hermetically sealed relay with one change-over contact; designed to switch DC electrical circuits; manufactured according to GOST 16121-86 and ЯЛ0.452.088 ТУ for RPS 18/4 (two-position, bistable relay); ЯЛ0.452.089 ТУ for RPS 18/5 (three-position, monostable relay) ЯЛ0.452.090 ТУ for RPS 18/7 (two-position, monostable relay) Environmental ratings: temperate and cold climate.



Ordering data: **Relay RPS 18/4 PC4.521.853 ЯЛ0.452.088 ТУ**

## Technical Parameters

Type	Model	Rated Current Strength mA	Coil Resistance, Ohm	Operate Current Strength during Relay Location, mA		Release Current Strength during Relay Location, mA		Time, ms, not more than,
				Single in-line	Multiple in-line	Single in-line	Multiple in-line	
RPS 18/4	PC4.521.853	1,6-2,4	2500±500	0,4-0,8	0,25-1,2	-	-	10
	PC4.521.855	4-6	275±55	1,2-2,4	0,8-3,4	-	-	10
RPS 18/5	PC4.521.852	27-33	6±1,2	6-14	4-21	1,5		5
	PC4.521.854	2,7-3,3	2500±500	0,6-1,4	0,4-2,1	0,2		10
	PC4.521.859	6,4-9,6	275±55	1-4	0,7-5,8	0,2		10
	PC4.521.860	1,6-2,4	12000±2400	0,3-0,9	0,2-1,3	0,1		10
RPS 18/7	PC4.521.851	1,3-2,4 (coil I and II)	12000±2400	0,6-0,9	0,5-1,1	0,2-0,5	0,16-0,7	12
		5,2-9,6 (coil III)	4500±900	2,4-3,6	2-4,3	0,8-2	0,6-2,7	12
	PC4.521.856	2,9-4,2	2500±500	0,6-1,8	0,5-2,2	0,2-0,6	0,16-0,8	10
	PC4.521.857	8-12	275±55	2-5	1,6-6	0,3-1,5	0,24-2	10
	PC4.521.858	1,6-2,4 (coil I and II)	12000±2400	0,6-1	0,5-1,2	0,2-0,5	0,16-0,7	12
		6,4-9,6 (coil III)	4500±900	2,4-4	2-4,8	0,8-2	0,6-2,7	12
	PC4.521.861	3,2-4,8	1600±320	1,2-2	1-2,4	0,5-0,85	0,4-1,2	12
PC4.521.862	1,6-2,4	24000±4800	0,6-1	-	0,36-0,6	-	25	

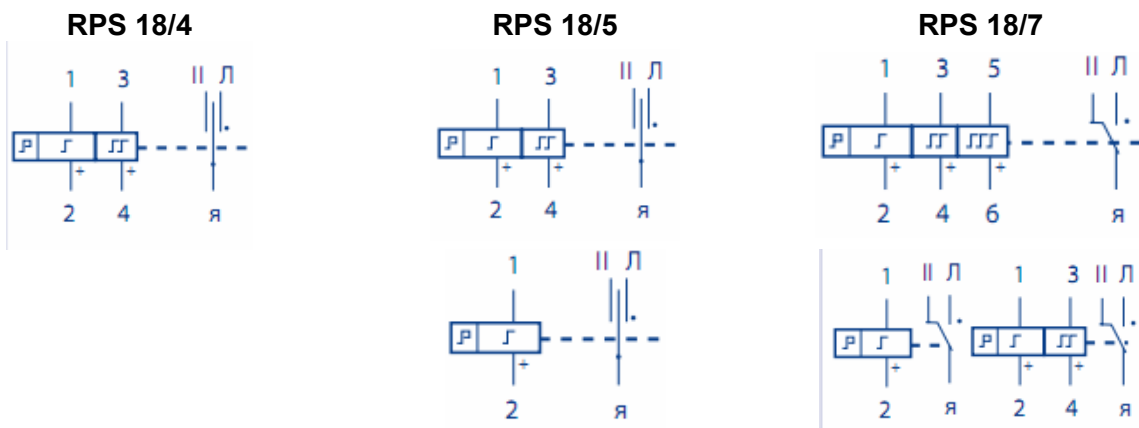
## Technical Specifications

Insulation Resistance between Electrical Circuits and between Electrical Circuits and Package, mOhm, not less than:	
at normal ambient temperature	200
at maximal temperature	20
in conditions of high humidity	10
Test Voltage (effective value), V :	
at normal ambient temperature between electrical circuits and package	500
at normal ambient temperature between contacts	350
in conditions of high humidity between electrical circuits and package	300
in conditions of high humidity between contacts	210
at low air pressure between electrical circuits and package	150
at low air pressure between contacts	150
Contact Resistance, Ohm	1,5
Weight, g, not more than	80

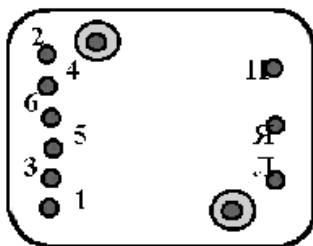
## Switching Modes

Type	Switching Range		Current Type	Type of Load	Switching Frequency, Hz, not more than	Number of Switching Cycles	
	I, A	U, V				$\Sigma$	t=80°C
RPS 18/4	0,2-0,3	6-34	const	active	10	RPS 18/4	0,2-0,3
RPS 18/5	0,2-0,3	6-34	const	active	10	RPS 18/5	0,2-0,3
RPS 18/7	0,2-0,3	6-34	const	active	10	RPS 18/7	0,2-0,3
RPS 18/4	0,1-0,15	6-34	const	inductive $\tau \leq 15 \text{ мс}$	2	RPS 18/4	0,1-0,15

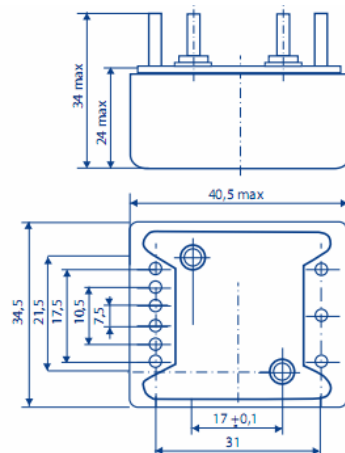
### Schematic Circuit Diagram



### Terminal Position



### External and Mounting Dimensions



## Operating Conditions

Ambient Temperature, °C	from minus 50 to plus 80
Air Pressure, Pa, (mm of Mercury)	$6,6 \cdot 10^2 \dots 2,02 \cdot 10^5$ ( $5 \dots 1,5 \cdot 10^3$ )
Relative Humidity at 25 °C, %	to 98
Shock Loads: single shocks multiple shocks	9 shocks with acceleration of 1470 m/sec <sup>2</sup> (150g) 10000 shocks with acceleration of 343 m/sec <sup>2</sup> (35g)
Linear Loads	to 196 m/sec <sup>2</sup> (23g)
Vibration Loads: RPS 18/4: over 5 to 50Hz over 50 to 600Hz RPS 18/5: over 5 to 50Hz over 50 to 250Hz over 250 to 600Hz At Minimal Rated Coil Frequency between 250 and 600Hz RPS 18/7: over 5 to 50Hz over 50 to 600Hz	with amplitude to 0,5 mm with acceleration of 24,5 m/sec <sup>2</sup> (2,5g)  with amplitude to 1 mm with acceleration to 98 m/sec <sup>2</sup> (10g) with acceleration to 19,6 m/sec <sup>2</sup> (2g) with acceleration to 98 m/sec <sup>2</sup> (10g)  with amplitude of 1 mm with acceleration to 49 m/sec <sup>2</sup> (5g)