

This is a low-current, electromagnetic, not polarized, monostable, not hermetically sealed reed relay for DC with one make contact in a plastic package; designed to switch DC & AC electrical circuits with frequency to 10000 Hz; manufactured according to GOST 16121-86 and ИДЯУ.647613.017 ТУ.



Environmental ratings: temperate, cold and humid climate.

Model types:

- print board mount with through-hole technology RGK 35;
- surface mount technology with incurved terminals RGK 38-1;
- surface mount technology with out curved terminals RGK 38-2.

Ordering data: **RGK 38 ИДЯУ.647613.017-01 ИДЯУ.647613.017 ТУ**

Technical Parameters

Type	Model	Shielded	Shielded	Rated Voltage, V	Operate Voltage, V (not more than)	Release Voltage < V, (not less than)	Coil Resistance
1	2	3	4	5	6	7	8
RGK 38	ИДЯУ.647613.017-00	+	+	6 ± 0,6	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-01	+	+	5 ± 0,5	3,5	0,5	500 ± 50
	ИДЯУ.647613.017-02	+	+	12 ± 1,2	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-03	+	+	12 ± 1,2	8,7	1,2	2500 ± 250
	ИДЯУ.647613.017-04	+	+	27 ^{+2,7} _{-5,4}	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-05	+	-	6 ± 0,6	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-06	+	-	5 ± 0,5	3,5	0,5	500 ± 50
	ИДЯУ.647613.017-07	+	-	12 ± 1,2	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-08	+	-	12 ± 1,2	8,7	1,2	2500 ± 250
	ИДЯУ.647613.017-09	+	-	27 ^{+2,7} _{-5,4}	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-10	-	+	6 ± 0,6	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-11	-	+	12 ± 1,2	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-12	-	+	27 ^{+2,7} _{-5,4}	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-13	-	-	6 ± 0,6	3,7	0,5	200 ± 20
RGK 38	ИДЯУ.647613.017-14	-	-	12 ± 1,2	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-15	-	-	27 ^{+2,7} _{-5,4}	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-16	+	+	6 ± 0,6	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-17	+	+	5 ± 0,5	3,5	0,5	500 ± 50
	ИДЯУ.647613.017-18	+	+	12 ± 1,2	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-19	+	+	12 ± 1,2	8,7	1,2	2500 ± 250
	ИДЯУ.647613.017-20	+	+	27 ^{+2,7} _{-5,4}	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-21	+	-	6 ± 0,6	3,7	0,5	200 ± 20

RGK 38	ИДЯУ.647613.017-22	+	-	$5 \pm 0,5$	3,5	0,5	500 ± 50	
	ИДЯУ.647613.017-23	+	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
	ИДЯУ.647613.017-24	+	-	$12 \pm 1,2$	8,7	1,2	2500 ± 250	
	ИДЯУ.647613.017-25	+	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
	ИДЯУ.647613.017-26	-	+	$6 \pm 0,6$	3,7	0,5	200 ± 20	
	ИДЯУ.647613.017-27	-	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
	ИДЯУ.647613.017-28	-	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
	ИДЯУ.647613.017-29	-	-	$6 \pm 0,6$	3,7	0,5	200 ± 20	
	ИДЯУ.647613.017-30	-	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
	ИДЯУ.647613.017-31	-	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
	ИДЯУ.647613.017-32	+	+	$6 \pm 0,6$	3,7	0,5	200 ± 20	
	ИДЯУ.647613.017-33	+	+	$5 \pm 0,5$	3,5	0,5	500 ± 50	
	ИДЯУ.647613.017-34	+	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
	ИДЯУ.647613.017-35	+	+	$12 \pm 1,2$	8,7	1,2	2500 ± 250	
	ИДЯУ.647613.017-36	+	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
	ИДЯУ.647613.017-37	+	-	$6 \pm 0,6$	3,7	0,5	200 ± 20	
	ИДЯУ.647613.017-38	+	-	$5 \pm 0,5$	3,5	0,5	500 ± 50	
	ИДЯУ.647613.017-39	+	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
	ИДЯУ.647613.017-40	+	-	$12 \pm 1,2$	8,7	1,2	2500 ± 250	
	ИДЯУ.647613.017-41	+	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
	RGK 38B	ИДЯУ.647613.017-42	-	+	$6 \pm 0,6$	3,7	0,5	200 ± 20
		ИДЯУ.647613.017-43	-	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100
ИДЯУ.647613.017-44		-	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
ИДЯУ.647613.017-45		-	-	$6 \pm 0,6$	3,7	0,5	200 ± 20	
ИДЯУ.647613.017-46		-	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
ИДЯУ.647613.017-47		-	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
ИДЯУ.647613.017-48		+	+	$6 \pm 0,6$	3,7	0,5	200 ± 20	
ИДЯУ.647613.017-49		+	+	$5 \pm 0,5$	3,5	0,5	500 ± 50	
ИДЯУ.647613.017-50		+	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
ИДЯУ.647613.017-51		+	+	$12 \pm 1,2$	8,7	1,2	2500 ± 250	
ИДЯУ.647613.017-52		+	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
ИДЯУ.647613.017-53		+	-	$6 \pm 0,6$	3,7	0,5	200 ± 20	
ИДЯУ.647613.017-54		+	-	$5 \pm 0,5$	3,5	0,5	500 ± 50	
ИДЯУ.647613.017-55		+	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
ИДЯУ.647613.017-56		+	-	$12 \pm 1,2$	8,7	1,2	2500 ± 250	
ИДЯУ.647613.017-57		+	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
ИДЯУ.647613.017-58		-	+	$6 \pm 0,6$	3,7	0,5	200 ± 20	
ИДЯУ.647613.017-59		-	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
ИДЯУ.647613.017-60		-	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
ИДЯУ.647613.017-61		-	-	$6 \pm 0,6$	3,7	0,5	200 ± 20	

RGK 38B	ИДЯУ.647613.017-62	-	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-63	-	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-64	+	+	$6 \pm 0,6$	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-65	+	+	$5 \pm 0,5$	3,5	0,5	500 ± 50
	ИДЯУ.647613.017-66	+	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-67	+	+	$12 \pm 1,2$	8,7	1,2	2500 ± 250
	ИДЯУ.647613.017-68	+	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-69	+	-	$6 \pm 0,6$	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-70	+	-	$5 \pm 0,5$	3,5	0,5	500 ± 50
	ИДЯУ.647613.017-71	+	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-72	+	-	$12 \pm 1,2$	8,7	1,2	2500 ± 250
	ИДЯУ.647613.017-73	+	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-74	-	+	$6 \pm 0,6$	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-75	-	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-76	-	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-77	-	-	$6 \pm 0,6$	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-78	-	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-79	-	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-80	+	+	$6 \pm 0,6$	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-81	+	+	$5 \pm 0,5$	3,5	0,5	500 ± 50
	ИДЯУ.647613.017-82	+	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-83	+	+	$12 \pm 1,2$	8,7	1,2	2500 ± 250
	ИДЯУ.647613.017-84	+	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-85	+	-	$6 \pm 0,6$	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-86	+	-	$5 \pm 0,5$	3,5	0,5	500 ± 50
	ИДЯУ.647613.017-87	+	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100
	ИДЯУ.647613.017-88	+	-	$12 \pm 1,2$	8,7	1,2	2500 ± 250
	ИДЯУ.647613.017-89	+	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250
	ИДЯУ.647613.017-90	-	+	$6 \pm 0,6$	3,7	0,5	200 ± 20
	ИДЯУ.647613.017-91	-	+	$12 \pm 1,2$	8,4	1,2	1000 ± 100
ИДЯУ.647613.017-92	-	+	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	
ИДЯУ.647613.017-93	-	-	$6 \pm 0,6$	3,7	0,5	200 ± 20	
ИДЯУ.647613.017-94	-	-	$12 \pm 1,2$	8,4	1,2	1000 ± 100	
ИДЯУ.647613.017-95	-	-	$27^{+2,7}_{-5,4}$	18,9	2,7	2500 ± 250	

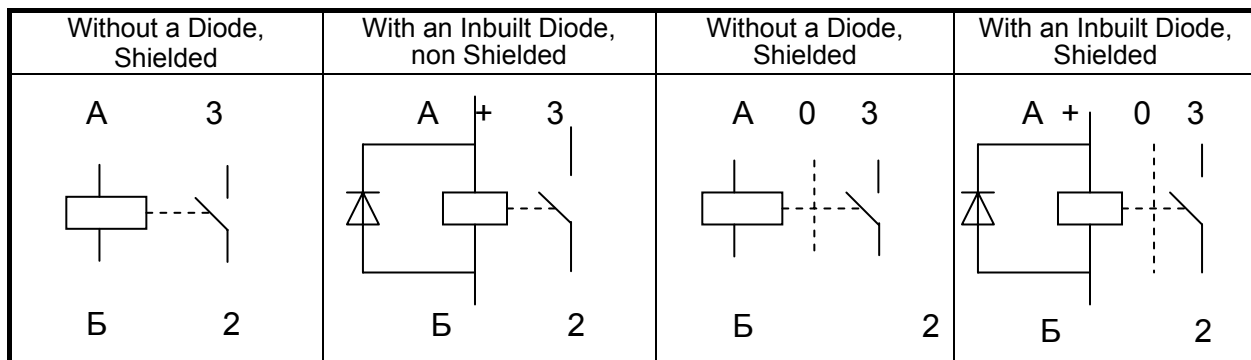
Technical Specifications

Contact resistance, Ohm, not more than	0,15	
Operate Time, ms, not more than	1,0	
Release Time, ms, not more than	0,5	
Insulation Resistance between Relay Circuits, mOhm, not less than		
at normal ambient temperature	1000	
at maximal operating temperature	100	
in conditions of high humidity, silver thaw, dew	10	
in conditions of salt fog, mold & fungi, static dust	5	
Relay's Insulation Strength (effective value), V	Between relay circuits	Between contacts
at normal ambient temperature	500	160
in conditions of high humidity, silver thaw, dew	300	100
at low air pressure	250	100
in conditions of salt fog, mold & fungi, static dust	200	100
Weight, g, not more than	3,0	

Switching Modes

Switching Range		Current Type	Type of Load	Switching Frequency, Hz	Number of Switching Cycles	
I, A	U, V				I, A	U, V
5·10 ⁻⁹ - 0,01	5·10 ⁻⁵ - 6	const & var.	Active	100	10 ⁶	5·10 ⁵
0,01 - 0,05	6 - 100	const & var	Active	50	10 ⁶	5·10 ⁵
0,05 - 0,1	6 - 100	const & var	Active	20	10 ⁶	5·10 ⁵
0,1 - 0,5	6 - 20	const & var	Active	10	10 ⁶	5·10 ⁶
0,1 - 0,5	6 - 40	const & var	Active	1	10 ⁴	10 ⁴

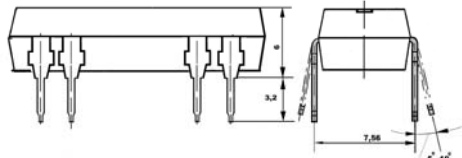
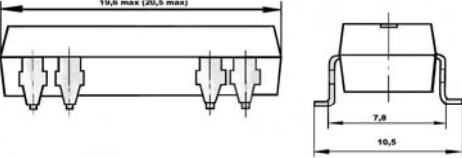
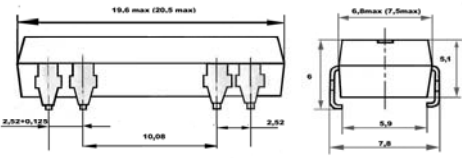
Schematic Circuit Diagram



Terminal Position

Model	Relay Type	Shield Availability	Terminal-and Coil Position
from ИДЯУ.647613.017-00 до -09 -16...-25, -32...-41	RGK 38	shielded	
-48...-57, -64...-73, -80...-89	RGK 38B		
-10...-15, -26...-31, -42...-47	RGK 38B	non shielded	
-58...-63, -74...-79, -90...-95	RGK 38B		

External and Mounting Dimensions

<p>1. Relay for Print Board Mount with Through-Hole Technology RGK 38</p>	
<p>2. Relay for Surface Mount Technology with Out-curved Terminals RGK 38-2</p>	
<p>3. Relay for Surface Mount Technology with In-curved Terminals RGK 38-1</p>	

Operating Conditions

<p>Ambient Temperature, °C</p>	<p>from minus 50 to plus 70</p>
<p>Relative Humidity at $t \leq 35^\circ\text{C}$, %</p>	<p>to 98</p>
<p>Air Pressure, Pa (mm of Mercury.)</p>	<p>$670 \dots 30,3 \cdot 10^4$ (5...2280)</p>
<p>Sinusoidal Vibration: over 1 to 50Hz over 50 to 2000Hz</p>	<p>with motion amplitude of 1,5 mm with acceleration amplitude of 200 m/sec² (20g)</p>
<p>Mechanical Shocks: single shock duration of 0,1-2 ms multiple shock duration of 2-10 ms</p>	<p>9 shocks with acceleration to 1500 m/sec² (150g) with acceleration to 400 m/sec² (40g)</p>
<p>This relay ensures safe operation under the influence of: constant and variable frequencies magnetic field strength</p>	<p>500Hz from 40Am^{-1} to 400Am^{-1} (5E)</p>