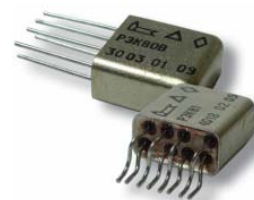


This is a low-current, electromagnetic, monostable, not polarized, hermetically sealed, subminiature relay with two change-over contacts; designed to switch DC & AC electrical circuits with frequency to 10000 Hz; manufactured according to GOST 16121-86 and ИДЯУ.647611.001 ТУ.

Environmental ratings: temperate, cold and humid climate. Models for general industry purposes, space and defense business are also available.



Ordering data: **Relay REK 80 ИДЯУ.647611.002-01 ИДЯУ.647611.002 ТУ with a symbol «□»**

Technical Parameters

Type	Model	Rated Voltage, V	Operate Resistance/Release Resistance, Ohm	Resistance, Ohm	Contact Resistance, Ohm, not more than
1	2	3	4	5	6
REK 80	ИДЯУ.647611.002-00	27±2,7	14,2/2,21	1700 ⁺²⁵⁵ ₋₁₇₀	0,5
REK 80 B	ИДЯУ.647611.002-20	27 ^{+4,05} _{-2,7}			
REK 81	ИДЯУ.647611.002-40	27 ^{+5,4} _{-4,05}			
REK 81 B	ИДЯУ.647611.002-60	27 ⁺⁷ ₋₄			
REK 80	ИДЯУ.647611.002-01	15±1,5	8,5/1,43	610±61	0,5
REK 80 B	ИДЯУ.647611.002-21	15 ^{+2,3} _{-1,5}			
REK 81	ИДЯУ.647611.002-41	15 ⁺³ _{-1,5}			
REK 81 B	ИДЯУ.647611.002-61	15 ⁺³ ₋₄			
REK 80	ИДЯУ.647611.002-02	6,3±0,63	3,4/0,58	105±10,5	0,5
REK 80 B	ИДЯУ.647611.002-22	6,3 ^{+0,95} _{-0,63}			
REK 81	ИДЯУ.647611.002-42	6 ^{+1,26} _{-0,95}			
REK 81 B	ИДЯУ.647611.002-62	6 ^{+1,26} _{-1,15}			
REK 80	ИДЯУ.647611.002-03	4,4±0,4	2,35/0,48	55±5,5	0,5
REK 80 B	ИДЯУ.647611.002-23	4 ^{+0,8} _{-0,4}			
REK 81	ИДЯУ.647611.002-43	4 ^{+1,0} _{-0,5}			
REK 81 B	ИДЯУ.647611.002-63	4 ^{+0,6} _{-0,5}			
REK 80	ИДЯУ.647611.002-04	3±0,3	1,7/0,35	30±3	0,5
REK 80 B	ИДЯУ.647611.002-24	3 ^{+0,45} _{-0,3}			
REK 81	ИДЯУ.647611.002-44	3 ^{+0,6} _{-0,45}			
REK 81 B	ИДЯУ.647611.002-64	3 ^{+0,6} _{-0,45}			
REK 80	ИДЯУ.647611.002-05	27±2,7	15,2/2,0	1620 ⁺²⁴³ ₋₁₆₂	0,5
REK 80 B	ИДЯУ.647611.002-25	27 ^{+4,05} _{-2,7}			
REK 81	ИДЯУ.647611.002-45	27 ^{+5,4} _{-4,05}			
REK 81 B	ИДЯУ.647611.002-65	27 ⁺⁷ ₋₄			



1	2	3	4	5	6
РЕК 80	ИДЯУ.647611.002-10	27±2,7	14,2/2,21	1700 ⁺²⁵⁵ ₋₁₇₀	0,25
РЕК 80 В	ИДЯУ.647611.002-30	27 ^{+4,05} _{-2,7}			
РЕК 81	ИДЯУ.647611.002-50	27 ^{+5,4} _{-4,05}			
РЕК 81 В	ИДЯУ.647611.002-70	27 ⁺⁷ ₋₄			
РЕК 80	ИДЯУ.647611.002-11	15±1,5	8,5/1,43	610±61	0,25
РЕК 80 В	ИДЯУ.647611.002-31	15 ^{+2,3} _{-1,5}			
РЕК 81	ИДЯУ.647611.002-51	15 ⁺³ _{-1,5}			
РЕК 81 В	ИДЯУ.647611.002-71	15 ⁺³ _{-1,5}			
РЕК 80	ИДЯУ.647611.002-12	6,3±0,63	3,4/0,58	105±10,5	0,25
РЕК 80 В	ИДЯУ.647611.002-32	6 ^{+0,95} _{-0,63}			
РЕК 81	ИДЯУ.647611.002-52	6 ^{+1,26} _{-0,95}			
РЕК 81 В	ИДЯУ.647611.002-72	6 ^{+1,26} _{-1,15}			
РЕК 80	ИДЯУ.647611.002-13	4,4±0,4	2,35/0,48	55±5,5	0,25
РЕК 80 В	ИДЯУ.647611.002-33	4 ^{+0,8} _{-0,4}			
РЕК 81	ИДЯУ.647611.002-53	4 ^{+1,0} _{-0,5}			
РЕК 81 В	ИДЯУ.647611.002-73	4 ^{+0,6} _{-0,5}			
РЕК 80	ИДЯУ.647611.002-14	3±0,3	1,7/0,35	30±3	0,25
РЕК 80 В	ИДЯУ.647611.002-34	3 ^{+0,45} _{-0,3}			
РЕК 81	ИДЯУ.647611.002-54	3 ^{+0,6} _{-0,45}			
РЕК 81 В	ИДЯУ.647611.002-74	3 ^{+0,6} _{-0,45}			
РЕК 80	ИДЯУ.647611.002-15	27±2,7	15,2/2,0	1620 ⁺²⁴³ ₋₁₆₂	0,25
РЕК 80 В	ИДЯУ.647611.002-35	27 ^{+4,05} _{-2,7}			
РЕК 81	ИДЯУ.647611.002-55	27 ^{+5,4} _{-4,05}			
РЕК 81 В	ИДЯУ.647611.002-75	27 ⁺⁷ ₋₄			

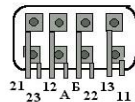
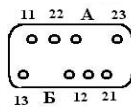
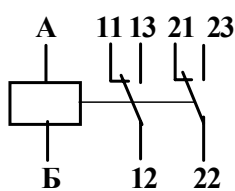
Technical Specifications

Operate Time, ms, not more than	2/1,5
Insulation Resistance between Electrical Circuits, mOhm, not less	200
at normal ambient temperature	20
at maximal operating temperature	10
at high humidity, silver thaw, dew	
in conditions of salt fog, mold & fungi, static dust	
(РЕК 80В, -81В)	10
Electrical Insulation Strength between Relay Circuits and Package (effective value of test voltage), V	200
at normal ambient temperature	150
at high humidity, silver thaw, dew	
in conditions of salt fog, mold & fungi, static dust	
(РЕК 80В, - 81В)	150
of Tracer Gas Leak Rate :	
for relays without symbol «□», m ³ Pa c ⁻¹ (l ·mcm of Mercury ·c ⁻¹), not more	666,6 ·10 ⁻⁸ (5 ·10 ⁻²)
for relays with symbol «□», m ³ Pa c ⁻¹ (l ·mcm of Mercury ·c ⁻¹), not more	666,6 ·10 ⁻¹¹ (5 ·10 ⁻⁵)
External Dimensions (with terminals), mm	10,6x5,5x11(15,7)
Weight, g, not more than	2,1

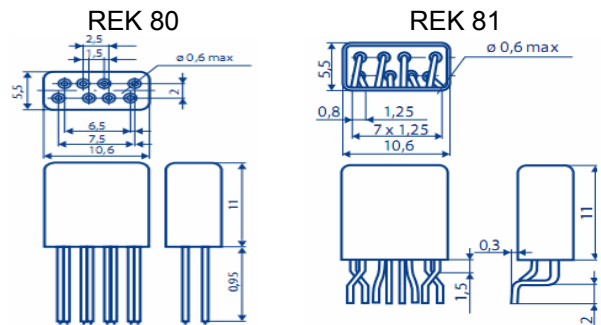
Switching Modes

Model	Switching Range		Current Type	Type of Load	Switching Frequency, Hz	Number of Switching Cycles	
	I, A	U, V				Σ	T = 85°C
ИДЯУ.647611.002 -10...-15, -30...-35, -50...-55,-70...75	$5 \cdot 10^{-6}$ -0,01	0,05-10	Const	active	10	$1,5 \cdot 10^5$	$0,75 \cdot 10^5$
	0,001-0,10	0,05-36			10	10^5	$0,5 \cdot 10^5$
	0,001-0,10	0,05-36	Var (50-10000) Hz	inductive $\tau \leq 0,005$	7	$8 \cdot 10^4$	$4 \cdot 10^4$
	$5 \cdot 10^{-6}$ -0,01	0,05-10			10	10^5	$0,5 \cdot 10^5$
ИДЯУ.647611.002 -00...-05, -20...-25, -40...-45,-60...-65	0,01-0,25	6-36	Const	active	10	10^5	$0,5 \cdot 10^5$
	0,25-0,5	6-36			10	$5 \cdot 10^4$	$2,5 \cdot 10^4$
	0,50-1,00	6-36			1	$0,5 \cdot 10^4$	$0,25 \cdot 10^4$
	0,01-0,15	6-60eff	Var (50-10000) Hz	active	10	10^5	$0,5 \cdot 10^5$
	0,05-0,15	6-36			3	$2,5 \cdot 10^4$	$1,25 \cdot 10^4$
	0,15-0,25	6-36	Const	inductive $\tau \leq 0,015$ c	3	$12,5 \cdot 10^3$	$0,25 \cdot 10^3$
	0,25-0,50	6-36			1	$5 \cdot 10^3$	$2,5 \cdot 10^3$
	0,01-0,25	6-44 eff			7	$4 \cdot 10^4$	$2 \cdot 10^4$
	0,25-0,50	6-44 eff	Var (50-10000) Hz	active	5	$5 \cdot 10^4$	$2,5 \cdot 10^4$
	0,5-1,0	6-44 eff			1	$2 \cdot 10^3$	10^3
	0,5-1,0	6-30	Const	active	1	10^4	$0,5 \cdot 10^4$

Schematic Circuit Diagram REK 80, REK 81



External Dimensions



Operating Conditions

Ambient Temperature, °C: for models ИДЯУ.647611.002-00, -05, -10, -15, -20, -25, -30, -35, -40, -45, -50, -55, -60, -65, -70, -75); for models ИДЯУ.647611.002-02, -012 -22, -32, -42, -52, -62, -72); for other models	from minus 60 to plus 125 from minus 60 to plus 100 from minus 60 to plus 85
Relative Humidity at a temperature not more than 35 °C	98
Air Pressure, Pa, (mm of Mercury)	$1,33 \cdot 10^{-6} \dots 303 \cdot 10^5$ ($10^{-8} \dots 2280$)
Sinusoidal Vibration: over 0,5 to 10Hz over 10 to 55Hz over 55 to 4000Hz	with acceleration amplitude of 20 m/sec^2 (2g) with travel range to 2 mm with acceleration amplitude of 200 m/sec^2 (20g)
Mechanical Shocks, Duration (1-20 ms): single multiple	2 shocks with acceleration to 5000 m/sec^2 (500g) 9 shocks with acceleration to 500 m/sec^2 (150g) 4000 shocks with acceleration to 750 m/sec^2 (75g)
Linear Acceleration	to 1500 m/sec^2 (150g)