This is a low-current, electromagnetic, monostable, not polarized, hermetically sealed relay with two change-over contacts, designed to switch DC & AC electrical circuits with frequency to 2500 Hz; models for space, military and general industry purposes as well as models with a higher leak integrity degree (symbol «□») are available.

Production is carried out in accordance with state standard 16121-86 and ИДЯУ.647611.001 ТУ.

Environmental ratings: cold temperate and humidity conditions.

Ordering Data: **Relay REK 87 ИДЯУ.647611.001-01, ИДЯУ.647611.001 ТУ with symbol «□»**

Technical Parameters

Type	Model	Rated voltage, V	Operate/release amperage, mA	Operate/release voltage, V	Coil resistance, Ohm
REK 87	ИДЯУ.647611.001-00	$6^{+2}_{-0,6}$	86/12	5,1/0,15	40^{+4}_{-2}
	ИДЯУ.647611.001-01	$12 \pm 1,2$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-02	$12^{+4}_{-1,2}$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-03	27 ± 3	23/3	22,8/0,6	$650^{+97,5}_{-65}$
	ИДЯУ.647611.001-04	$27^{+7}_{-5,5}$	21,5/2,5	20,4/0,6	650 ± 65
	ИДЯУ.647611.001-05	$6^{+2}_{-0,6}$	86/12	5,1/0,15	40^{+4}_{-2}
	ИДЯУ.647611.001-06	$12 \pm 1,2$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-07	$12^{+4}_{-1,2}$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-08	27 ± 3	23/3	22,8/0,6	$650^{+97,5}_{-65}$
	ИДЯУ.647611.001-09	$27^{+7}_{-5,5}$	21,5/2,5	20,4/0,6	650 ± 65
REK 87B	ИДЯУ.647611.001-10	$6^{+2}_{-0,6}$	86/12	5,1/0,15	40^{+4}_{-2}
	ИДЯУ.647611.001-11	$12 \pm 1,2$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-12	$12^{+4}_{-1,2}$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-13	27 ± 3	23/3	22,8/0,6	$650^{+97,5}_{-65}$
	ИДЯУ.647611.001-14	$27^{+7}_{-5,5}$	21,5/2,5	20,4/0,6	650 ± 65
	ИДЯУ.647611.001-15	$6^{+2}_{-0,6}$	86/12	5,1/0,15	40^{+4}_{-2}
REK 87B	ИДЯУ.647611.001-16	$12 \pm 1,2$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-17	$12^{+4}_{-1,2}$	42/4	10,3/0,3	$165^{+16,5}_{-8,2}$
	ИДЯУ.647611.001-18	27 ± 3	23/3	22,8/0,6	$650^{+97,5}_{-65}$
	ИДЯУ.647611.001-19	$27^{+7}_{-5,5}$	21,5/2,5	20,4/0,6	650 ± 65

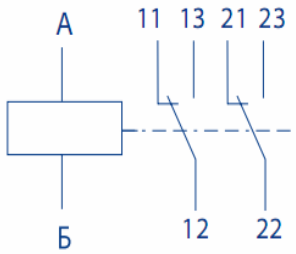
Technical Specifications

Contact resistance, Ohm, not more than	0,6
Operate time, ms, not more than	5
Release time, ms, not more than	1,5
Insulation resistance between relay circuits, MOhm : at normal ambient temperature at maximal operating temperature at a higher humidity, frost-dew, dew in conditions of salt fog, mold fungi, static dust (REK 87B)	 200 50 10 10
Electrical insulation strength between relay circuits and package (effective value of test voltage),V : at normal ambient temperature at a higher humidity, frost-dew, dew in conditions of salt fog, mold fungi, static dust (REK 87B)	 500 300 300
Leakage rate of tracer gas (leak integrity degree) : for relays without symbol «□», $m^{3Pa} c^{-1}$ (l ·mcm of Mercury ·c^{-1}), not more for relays with symbol «□» , $m^{3 Pa} c^{-1}$ (l ·mcm of Mercury ·c^{-1}), not more	 $6,6 \cdot 10^{-6} (5 \cdot 10^{-2})$ $6,6 \cdot 10^{-9} (5 \cdot 10^{-5})$
Weight, g, not more than	9

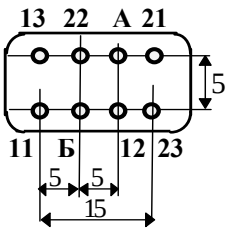
Switching Modes

Model	Switching range		Current type	Form of load	Fre-quency, Hz	Number of switch-ing cycles	
	Amper-age, A	Voltage, V				Σ	T = 85°C
ИДЯУ.647611.001-05-09 15-19	10^{-6}-0,1 10^{-3}-0,1	0,05-10 0,05-34	Const	актив	7	10^5 10^4	$5 \cdot 10^4$ $5 \cdot 10^3$
ИДЯУ.647611.001-00-04;10-14	0,01-0,5 0,5-1 0,05-0,3 0,02-0,3 0,05-0,3 1-1,5 1,5-2 2-3	5-34 5-34 12-115 5-34 12-150 5-34 5-30 5-34	Const Const 50-2500Hz Const Const Const Const Const	актив актив cosφ≥05 τ≤7мс актив актив актив актив	1 1 1 1 1 1 1 1	10^5 $5 \cdot 10^4$ $2 \cdot 10^4$ 10^4 $3 \cdot 10^4$ $1,5 \cdot 10^4$ $5 \cdot 10^3$ $2 \cdot 10^3$	$2,5 \cdot 10^4$ $1,25 \cdot 10^4$ $5 \cdot 10^3$ $2 \cdot 10^3$ 10^4 $3,75 \cdot 10^3$ $1,25 \cdot 10^3$ 10^3

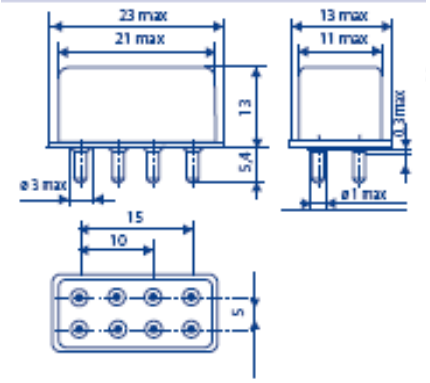
Schematic Circuit Diagram



Terminal Marking



External Dimensions



Operating Conditions

Ambient temperature, °C Models ИДЯУ.647611.001-02,04,05,07,09,10,12,14,15,17,19 Models ИДЯУ.647611.001-01,03,06,08,11,13,16,18	 From minus 60 to plus 75 From minus 60 to plus 85
Atmospheric pressure, Pa (mm of Mercury)	$1{,}33 \cdot 10^{-6}$ … $3 \cdot 10^{5}$ (10^{-8}…2280)
Sinusoidal vibration : from 5 to 50Hz from 50 to 1000Hz from 1000 to 3000Hz	 with travel range 1 mm with acceleration amplitude 150 m/sec^2 (15g) with acceleration amplitude 120 m/sec^2 (12g)
Mechanical shocks : single, duration 1-20 ms multiple, duration 1-20 ms	 2 shocks with acceleration to 5000 m/sec^2 (500g) 9 shocks with acceleration to 1500 m/sec^2 (150g) 4000 shocks with acceleration to 750m/sec^2 (75g) 10000 shocks with acceleration to 350 m/sec^2 (35g)
Linear acceleration	to 750 m/sec^2 (75g)