

RY2KS Series — Miniature Magnetic Latching Relays

Key features of the RY2KS series include:

- Standard “ice cube” base, solder lug (14-pin) termination
- Operates by pulse input and maintains condition even during power failure
- High vibration and shock resistance
- Excellent self-holding performance
- Optional manual check button for circuit testing
- DIN rail, surface, and panel mount sockets available for a wide range of mounting applications



Specifications	Contact Material	Silver, gold-plated
	Contact Resistance	50mΩ maximum (initial value)
	Minimum Applicable Load	5V DC, 100mA
	Operating Time	25ms maximum
	Release Time	25ms maximum
	Maximum Continuous Applied Voltage (AC/DC) at 20°C	110% of the rated voltage
	Set and Reset Voltages (AC/DC) at 20°C	80% of the rated voltage
	Power Consumption	AC: approximately 1.6V (50Hz), 1.5VA (60Hz) DC: approximately 1.2W
	Insulation Resistance	100MΩ minimum (with 500V DC megger)
	Dielectric Strength	Between live and dead parts: 1,500V AC, 1 minute Between contact circuit and opposite coil: 1,000V AC, 1 minute Between contact circuits: 1,000V AC, 1 minute (700V between NO-NC contacts)
	Frequency Response	1,800 operations/hour
	Temperature Rise	Coil: 85°C maximum Contact: 65°C maximum
	Vibration Resistance	0 to 6G (55Hz maximum)
	Shock Resistance	20G minimum
	Life Expectancy	Electrical: over 200,000 operations (240V AC, 3A) Mechanical: over 5,000,000 operations
Operating Temperature	-30 to +70°C	
Weight	67g (approximately)	



UL Recognized
File No. E55996



CSA Certified
File No. LR35144

E
Relays

Ordering Information

Order standard voltages for fastest delivery. Allow extra delivery time for non-standard voltages.

Basic Part No.		Coil Voltage:
<u>RY2KS-U</u>	-	<u>AC120V</u>

Part Numbers

Part Numbers: RY2KS Series

Termination	Contact Configuration	Standard	With Check Button
S: Solder/plug-in	DPDT	RY2KS-U	RY2KS-UC


Ratings

Coil Ratings

Rated Voltage		Rated Current ±15% at 20°C		Coil Resistance ±10% at 20°C
		60Hz	50Hz	
AC	6V	250mA	260mA	6.3Ω
	12V	115mA	120mA	30.3Ω
	24V	56mA	58mA	132Ω
	120V	10.8mA	11.2mA	3,840Ω
DC	6V	200mA		30Ω
	12V	100mA		120Ω
	24V	50mA		480Ω
	48V	25mA		1,920Ω
	110V	11mA		10,000Ω

Contact Ratings


Voltage	Resistive			Inductive		
	Nominal	UL	CSA	Nominal	UL	CSA
30V DC	3A	3A	3A	1.5A	—	1.5A
100V DC	0.2A	—	—	0.12A	—	0.2A
120V AC	3A	3A	3A	1.5A	1.5A	1.5A
240V AC	3A	3A	3A	0.8A	0.8A	0.8A

 2. Inductive load $\cos \phi = 0.3$, $L/R = 7ms$.

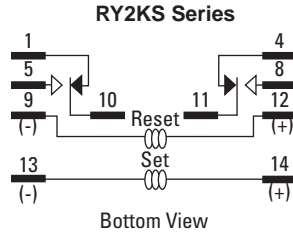
Applicable Sockets

Part Numbers: Sockets

Relay	Standard DIN Rail Mount	Finger-Safe DIN Rail Mount	Panel Mount	PC Mount	Spring (optional)
RY2KS	SY4S-05	SY4S-05C	SY4S-51	SY4S-61 SY4S-62	SFA-202 SY4S-51F3

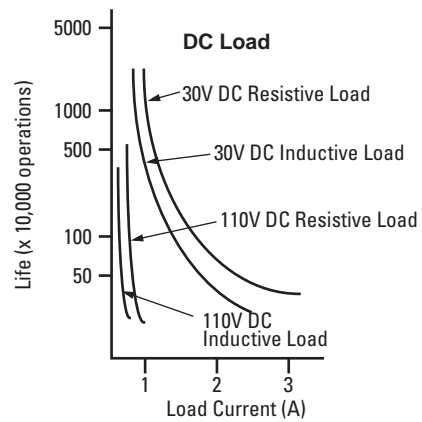
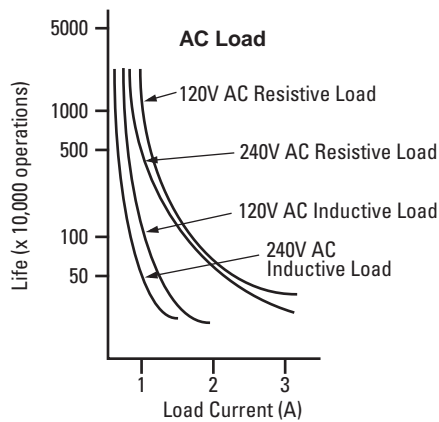
 1. See Section F for details on sockets. All DIN rail mount sockets shown above can be mounted using DIN rail BNDN1000.

Internal Circuits



Shown in reset (unlatched) position.

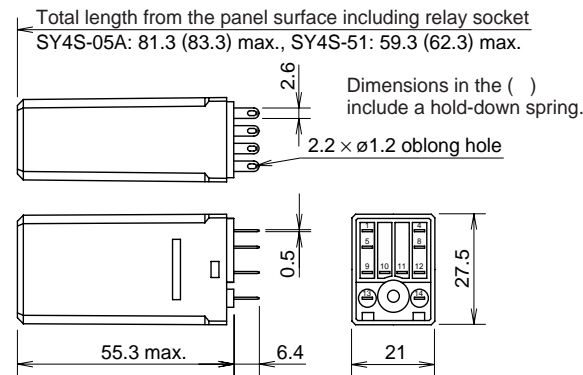
Electrical Life Curves



E
Relays

Dimensions

**Plug-in
RY2KS**



All dimensions in mm.