



1a 10A, 1a1b/2a 8A small polarized power relays

DK RELAYS



RoHS compliant

Protective construction: Sealed type

FEATURES

- 1. Compact with high capacity**
High capacity switching in a small package: 1 Form A, 10 A 250 V AC; 1 Form A 1 Form B and 2 Form A, 8 A 250 V AC.
- 2. High sensitivity: 200 mW nominal operating power**
- 3. High breakdown voltage**
Independent coil and the contact structure improves breakdown voltage.

Between contact and coil	Between open contacts
4,000 Vrms for 1 min. 10,000 V surge breakdown voltage	1,000 Vrms for 1 min. 1,500 V surge breakdown voltage

Conforms with FCC Part 68

- 4. Latching types available**
- 5. Sealed construction allows automatic washing**
- 6. Sockets are available**
- 7. Complies with safety standards**
Complies with Japan Electrical Appliance and Material Safety Law requirements for operating 200 V power supply circuits, and complies with UL, CSA, and TÜV safety standards.

TYPICAL APPLICATIONS

- 1. Switching power supply**
- 2. Power switching for various OA equipment**
- 3. Control or driving relays for industrial machines (robotics, numerical control machines, etc.)**
- 4. Output relays for programmable logic controllers, temperature controllers, timers and so on**
- 5. Home appliances**

ORDERING INFORMATION

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Contact arrangement

- 1a: 1 Form A
2a: 2 Form A
1a1b: 1 Form A 1 Form B

Operating function

- Nil: Single side stable
L2: 2 coil latching

Nominal coil voltage (DC)

- 3, 5, 6, 9, 12, 24V

Contact material

- F: 1 Form A (Au-flashed AgSnO₂ type)
Nil: 2 Form A, 1 Form A 1 Form B (Au-flashed AgNi type)

- Notes: 1. Certified by UL, CSA and TÜV
2. VDE approved type is available.

TYPES

Contact arrangement	Nominal coil voltage	Single side stable		2 coil latching	
		Part No.		Part No.	
1 Form A	3V DC	DK1a-3V-F		DK1a-L2-3V-F	
	5V DC	DK1a-5V-F		DK1a-L2-5V-F	
	6V DC	DK1a-6V-F		DK1a-L2-6V-F	
	9V DC	DK1a-9V-F		DK1a-L2-9V-F	
	12V DC	DK1a-12V-F		DK1a-L2-12V-F	
1 Form A 1 Form B	24V DC	DK1a-24V-F		DK1a-L2-24V-F	
	3V DC	DK1a1b-3V		DK1a1b-L2-3V	
	5V DC	DK1a1b-5V		DK1a1b-L2-5V	
	6V DC	DK1a1b-6V		DK1a1b-L2-6V	
	9V DC	DK1a1b-9V		DK1a1b-L2-9V	
2 Form A	12V DC	DK1a1b-12V		DK1a1b-L2-12V	
	24V DC	DK1a1b-24V		DK1a1b-L2-24V	
	3V DC	DK2a-3V		DK2a-L2-3V	
	5V DC	DK2a-5V		DK2a-L2-5V	
	6V DC	DK2a-6V		DK2a-L2-6V	
	9V DC	DK2a-9V		DK2a-L2-9V	
	12V DC	DK2a-12V		DK2a-L2-12V	
	24V DC	DK2a-24V		DK2a-L2-24V	

Standard packing: Carton: 50 pcs.; Case: 500 pcs.

* Sockets available.

RATING

1. Coil data

1) Single side stable

Nominal coil voltage	Pick-up voltage (at 20°C 68°F)	Drop-out voltage (at 20°C 68°F)	Nominal operating current [±10%] (at 20°C 68°F)		Coil resistance [±10%] (at 20°C 68°F)	Nominal operating power	Max. applied voltage (at 20°C 68°F)
3V DC	70%V or less of nominal voltage (Initial)	10%V or more of nominal voltage (Initial)	66.6mA		45Ω	200mW	130%V of nominal voltage
5V DC			40mA		125Ω		
6V DC			33.3mA		180Ω		
9V DC			22.2mA		405Ω		
12V DC			16.6mA		720Ω		
24V DC			8.3mA		2,880Ω		

2) 2 coil latching

Nominal coil voltage	Set voltage (at 20°C 68°F)	Reset voltage (at 20°C 68°F)	Nominal operating current [±10%] (at 20°C 68°F)		Coil resistance [±10%] (at 20°C 68°F)		Nominal operating power		Max. applied voltage (at 20°C 68°F)
			Set coil	Reset coil	Set coil	Reset coil	Set coil	Reset coil	
3V DC	70%V or less of nominal voltage (Initial)	70%V or less of nominal voltage (Initial)	66.6mA	66.6mA	45Ω	45Ω	200mW	200mW	130%V of nominal voltage
5V DC			40mA	40mA	125Ω	125Ω			
6V DC			33.3mA	33.3mA	180Ω	180Ω			
9V DC			22.2mA	22.2mA	405Ω	405Ω			
12V DC			16.6mA	16.6mA	720Ω	720Ω			
24V DC			8.3mA	8.3mA	2,880Ω	2,880Ω			