For new designs refer to RT series.

RKA series

5 To 10 Amp PC Board Miniature Relay

Meets VDE 8mm spacing, 5kV dielectric

File E22575
File LR35579
File Nos. 1661 & 1662

Features

- DC coils – SPST and DPDT contact arrangements.
- Immersion cleanable§, tape sealed case.
- Meets VDE 8mm spacing, 4kV dielectric, coil to contacts.
- Contacts rated up to 10A, resistive and TV-5 (5A Tungsten).

§ For more details, refer to application note 13C265, "Mounting, Termination and Cleaning of PC Board Relays."

Contact Data @ 25°C

Arrangements: 1 Form A (SPST-NO), 1 Form C (SPDT), 2 Form A (DPST-NO) and 2 Form C (DPDT).
Materials: Silver-cadmium oxide and silver-nickel alloy.
Expected Mechanical Life: 5 million operations.

Contact Ratings @ 25°C with relay properly vented. Remove tape over vent hole after soldering and cleaning.

Code	Arrangement*	Material	UL/CSA Ratings & Typical Life
G	SPST-NO or SPDT (diagram 1)	Silver-nickel alloy	10 amps, resistive @ 24VDC or 240VAC 100,000 operations 1/3 HP @ 120/240VAC 14 amps maximum carry current 150VDC maximum switched voltage
T (TV-5)	SPST-NO (diagram 1)	Silver-cadmium oxide	10 amps, resistive @ 24VDC or 240VAC 100,000 operations TV-5 1/3 HP @ 120/240VAC 78 amp inrush @ 120VAC lamp load
Z	DPST-NO or DPDT (diagram 2)	Silver-nickel alloy	5 amps, resistive @ 24VDC or 240VAC 50,000 operations 1/8 HP @ 120/240VAC 7 amps maximum carry current 150VDC maximum switched voltage
T (TV-3)	DPST-NO (diagram 2)	Silver-cadmium oxide	5 amps, resistive @ 24VDC or 240VAC 100,000 operations TV-3 1/8 HP @ 120/240VAC 51 amp inrush @ 120VAC lamp load

* Diagram numbers noted refer to the Wiring Diagrams and PC Board Layouts shown on the following page.

Initial Dielectric Strength

Between Open Contacts: 1,000V rms.
Between Adjacent Contacts: 2,500V rms.
Between Contacts and Coil: 5,000V rms.

Coil Data @ 25°C

Voltage: 3 to 110VDC.
Maximum Power @ 25°C: 1.4W.
Temperature Rise: 55°C per Watt.
Maximum Temperature Per UL508: Class B insulation.
Duty Cycle: Continuous.
Initial Insulation Resistance: 1,000 megohms, min., at 25°C, 500VDC and 50% rel. humidity.

Coil Data @ 25°C

Contact Codes Z & G				
Nominal DC Voltage	**Resistance in Ohms ±10%**	**Must Operate DC Voltage**	**Maximum DC Voltage**	**Must Operate Power in mW**
3	17	2.1	4.6	259
5	47	3.5	7.7	261
6	68	4.2	9.3	259
9	155	6.3	13.9	256
12	270	8.4	18.5	261
18	610	12.6	27.0	260
24	1,100	16.8	37.1	257
48	4,400	33.6	74.2	257
60	6,800	42.0	92.0	259
*110	22,000	77.0	169.0	270
Contact Code T				
Nominal DC Voltage	**Resistance in Ohms ±10%**	**Must Operate DC Voltage**	**Maximum DC Voltage**	**Must Operate Power in mW**
3	12.5	2.1	4.2	353
5	36	3.5	7.0	340
6	50	4.2	8.4	353
9	115	6.3	12.6	345
12	200	8.4	16.8	353
18	460	12.6	25.0	345
24	820	16.8	33.6	344
48	3,300	33.6	67.2	342
60	5,100	42.0	84.0	346
*110	16,800	77.0	154.0	353

*100-110VDC units not marked with VDE logo.

Operate Data @ 25°C

Must Operate Voltage: 70% of nom. voltage or less.
Operate Time (Excluding Bounce): 15 ms, typ., at nom. voltage.
Release Time (Excluding Bounce): 5 ms, typ., at nom. voltage.

Environmental Data

Temperature Range: **Storage:** -40°C to +105°C.
Operating: -40°C to +65°C.

Mechanical Data

Termination: Printed circuit terminals. Sockets are available. (See RKS data.)
Enclosure: Immersion cleanable, tape-sealed model.
Weight: 0.65 oz. (18.5g) approximately.

Ordering Information

Typical Part Number ▶	RK	A	-5	D	G	-06

1. Basic Series:
RK = Miniature, printed circuit board relay.

2. Enclosure:
A = Immersion cleanable, plastic tape-sealed case.

3. Contact Arrangement:
1 = 1 Form A (SPST-NO) 7 = 2 Form A (DPST-NO)
5 = 1 Form C (SPDT) 11 = 2 Form C (DPDT)

4. Coil Input:
D = DC voltage.

5. Contact Type & Wiring / PC Board Layout Diagram Codes:
Single Pole Relays:
G = 10 amp contacts, diagram code 1, SPST-NO or SPDT.
T = TV-5 rated, 10 amp contacts, diagram code 1, SPST-NO only.
Double Pole Relays:
Z = 5 amp contacts, diagram code 2, DPST-NO or DPDT.
T = TV-3 rated, 5 amp contacts, diagram code 2, DPST-NO only.
Note: See diagrams below.

6. Coil Voltage:

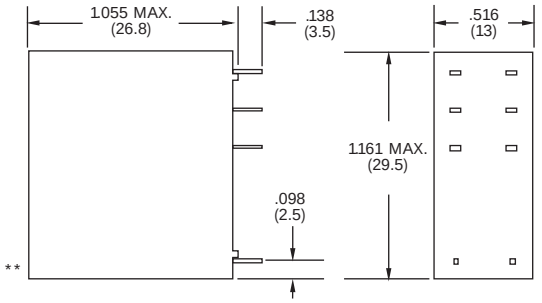
03 = 3VDC	06 = 6VDC	12 = 12VDC	18 = 18VDC	48 = 48VDC	110 = 110VDC
05 = 5VDC	09 = 9VDC	15 = 15VDC	24 = 24VDC	60 = 60VDC	

For new designs refer to RT series.

Stock Items – The following items are normally maintained in stock for immediate delivery.

RKA-1DG-05	RKA-5DG-48	RKA-11DZ-06
RKA-1DG-24	RKA-7DT-24	RKA-11DZ-09
RKA-5DG-06	RKA-7DZ-12	RKA-11DZ-12
RKA-5DG-12	RKA-7DZ-24	RKA-11DZ-24
RKA-5DG-24	RKA-11DZ-05	RKA-11DZ-48

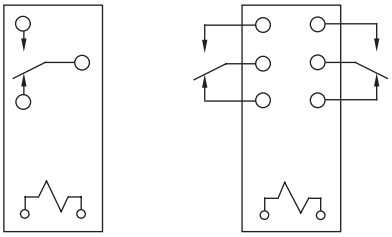
Outline Dimensions



** Recommended tape tab be punctured or removed before relay is put in service.

Wiring Diagrams (Bottom Views)

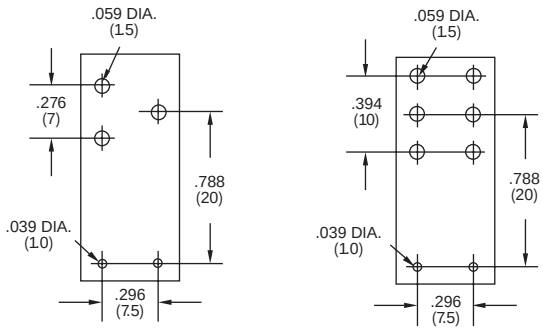
Code 1 **Code 2**



Note: On single throw models, only necessary terminals are present.

PC Board Layouts (Bottom Views)

Code 1 **Code 2**



Note: On single throw models only necessary terminals are present.

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