

HIGH POWER LATCHING RELAY

200A Latching Relay

Electrical endurance: 6000 cycles

4kV dielectric strength between coil and contacts

According to ANSI C12.1

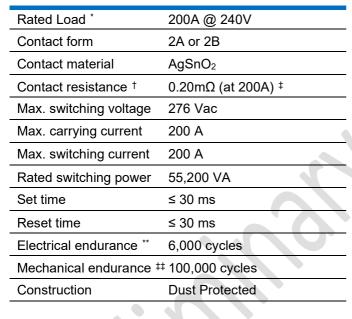
(Carrying current: 12kA / 66.7ms; 7kA /100ms)

• Outline dimensions: (74.8 x 98.1 x 29.5)mm

Contact resistance: ≤0.20mΩ

RoHS compliant materials and process

Contact Data





Characteristics

Insulation resistance	1,000MΩ (at 500 Vdc)
Dielectric strength:	
Coil to contact	4kVac for 1 min.
Across open contacts	2kVac for 1min.
Dielectric creepage	9.6 mm
Ambient temperature	-40°C to +85°C
Ambient humidity	5% - 85% RH
Vibration	1.5 mm (DA) 10 Hz to 55 Hz
Shock resistance:	
Functional §	98 m/s ²
Survival ††	980 m/s ²
Coil termination	PCB & QC
Load termination	QC
Unit weight	±400g

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^{*} Load at which the relay can pass ANSI C12.1

[†] Data shown are initial values for each respective load contact pair

[‡] Typical value for Initial Contact Resistance: Using a sample quantity of at least 20 units, take the average value from 5 continuous measurements from each sample

[§] Unit may change state but is still functional

^{**} Applies to both Form 2A and Form 2B products; Power Factor: 1.0; 240Vac / 200A @ 23°C; Duty Cycle: 1s ON/ 9s OFF

^{††} Acceleration 980 m/s² (Duration 6 ms)

^{##} Duty Cycle: 1s ON/ 1s OFF @ 23°C

Coil Data

	Single Coil (Latching)	Dual Coil (Latching)
Coil Consumption	12W	24W
Pulse Duration	50~100ms	50~100ms

Coil Resistance

(Ω±10%) at 23°C

Nominal Coil Voltage	Min Set/Reset Voltage	Single Coil (Latching)	Dual Coil (Latching)
6Vdc	4.8Vdc	3Ω	2 x 1.5Ω
9Vdc	7.2Vdc	6.75Ω	2 x 3.3Ω
12Vdc	9.6Vdc	12Ω	2 x 6Ω
24Vdc	19.2Vdc	48Ω	2 x 24Ω
48Vdc	38.4Vdc	190Ω	2 x 95Ω

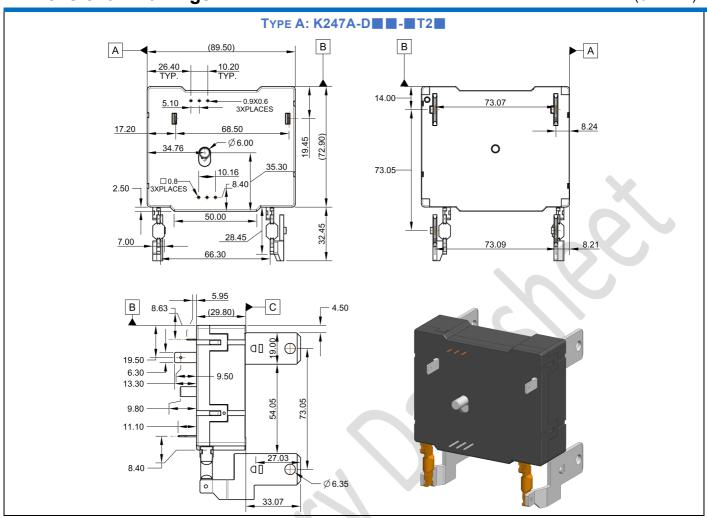
Ordering Information

	K247 - T - Cxx
Relay Series	
Terminal Type:	A: See drawing X: Custom Design §§
Coil Type:	S: Single Coil D: Dual Coil
Coil Voltage ***:	6, 9, 12, 24, 48 Vdc
Coil Polarity:	P: Positive N: Negative
Contact Form:	2A: Form 2A – Normally Open (NO) 2B: Form 2B – Normally Closed (NC)
Contact Material:	T: AgSnO ₂
Manual Actuation:	1: No 2: Yes
Auxiliary Switch Type:	NIL: No auxiliary contact A: Switch state same as relay state B: Switch state opposite to relay state
Custom Number:	Cxxxx: Where xxxx represents a unique number for custom relay terminal designs

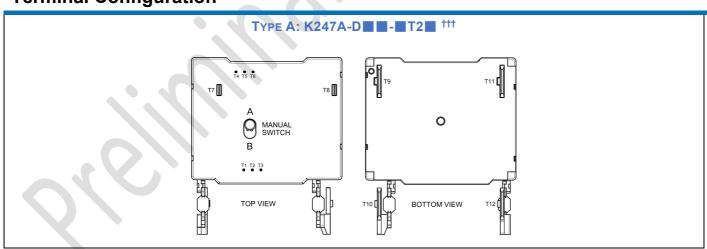
^{§§} For custom designs, please contact KG Technologies. Integrated CT's, Hall-effect sensors, flex-wire, copper extension and brass terminals available

^{***} Coil voltage should be indicated in three-digit format (6Vdc = 006)

Dimensional Drawings



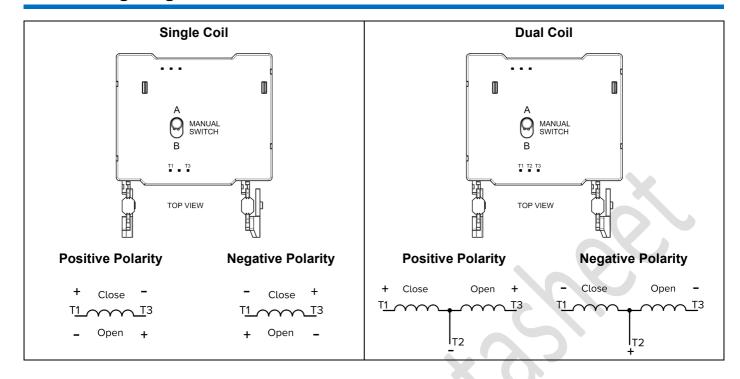
Terminal Configuration



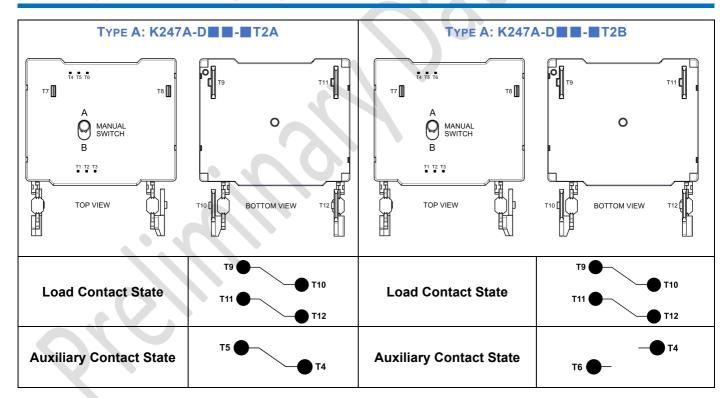
- ††† T1, T2, T3: Coil interface pins (T2 is not present for the single coil version)
 - T4, T5, T6: Auxiliary contact pins
 - (T4: Common, T5: Type A Same state as main load terminals)
 - (T4: Common, T6: Type B Opposite in state to the main load terminals)
 - (T9 & T10: Load contact pair #1, T11 & T12: Load contact pair #2)
 - T7: Electrically connected to T11 (Voltage sensing or low current application)
 - T8: Electrically connected to T9 (Voltage sensing or low current application)

KG Technologies Inc. K247_EN Rev 1.0 Phone: +1.888.513.1874 Email: info@kgtechnologies.net

Coil Wiring Diagrams



Auxiliary Contact Wiring Diagrams



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Application Notes

- 1. It is possible that during transit or final assembly the relay could change state. Therefore, it is recommended that all relays be set to the desired state via a power supply.
- 2. In order to maintain an "Open" or "Closed" state of the relay, the coil voltage should reach the rated voltage. The pulse width should be 50ms minimum to ensure a proper change of state. DO NOT energize both T1 and T3 at the same time on a Dual Coil or energize the coil for longer than 1 minute (damage to the coil could occur).
- 3. Applying excessive heat to the relay terminals (soldering or welding) can cause damage to the internal structure of the relay and should be avoided.
- 4. Moving or bending the terminals can cause damage to the internal structure of the relay and should be avoided.
- 5. For definitions of terms used in this data sheet, see glossary at www.kgtechnologies.net.





6028 State Farm Drive, Rohnert Park, CA 94928
Tel: +1.888.513.1874 Fax: +1.707.665.5966
Email: techinfo@kgtechnologies.net
www.kgtechnologies.net



Scan here for more information

Disclaimer: This datasheet is for reference only. All specifications are subject to change without prior notice. KG Technologies, Inc. cannot predict every possible application for our relays. While we do our best to make our relays as versatile as possible, we highly recommend contacting our engineering team if you have any questions. KG Technologies, Inc. is not responsible for malfunctioning relays when operated outside the specified parameters given in this datasheet.

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