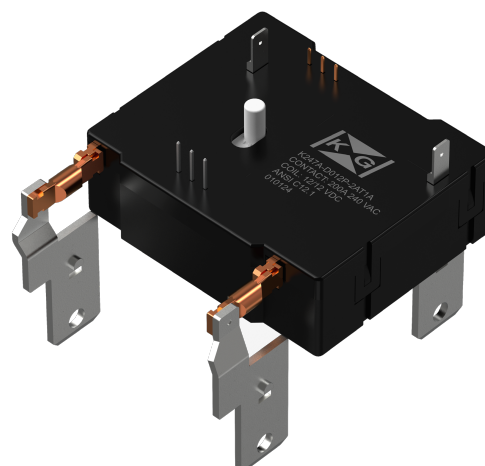


HIGH POWER LATCHING RELAY

- 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: $\leq 0.20\text{m}\Omega$
- RoHS compliant materials and process



Contact Data

Rated Load *	200A @ 240V
Contact form	2A or 2B
Contact material	AgSnO ₂
Contact resistance †	0.20m Ω (at 200A) ‡
Max. switching voltage	276 Vac
Max. carrying current	200 A
Max. switching current	200 A
Rated switching power	55,200 VA
Set time	≤ 30 ms
Reset time	≤ 30 ms
Electrical endurance **	6,000 cycles
Mechanical endurance ‡‡	100,000 cycles
Construction	Dust Protected

Characteristics

Insulation resistance	1,000M Ω (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	$\pm 400\text{g}$

* 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

($\Omega \pm 10\%$) at 23°C

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

Ordering Information

	K247	■	- ■	■	■	- ■	T	■	■	-Cxxxx
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									

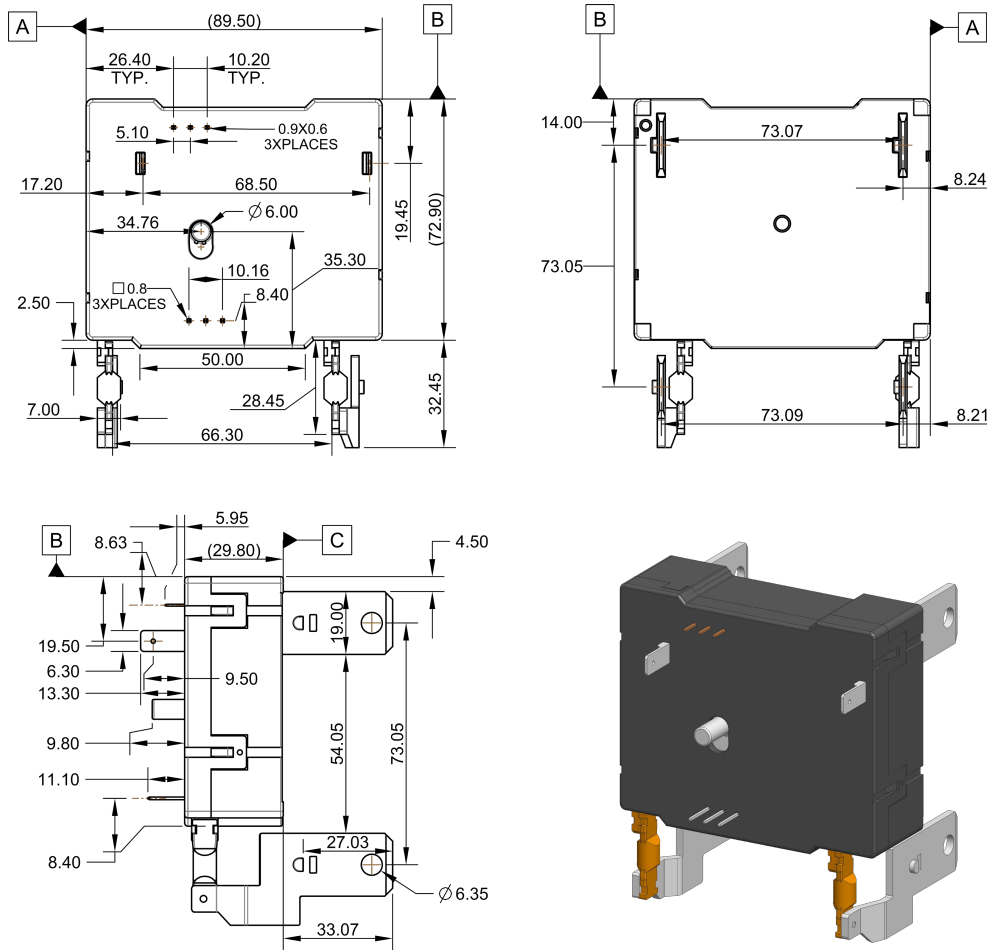
^{§§} For custom designs, please contact KG Technologies. Integrated CT's, Hall-effect sensors, flex-wire, copper extension and brass terminals available

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

Dimensional Drawings

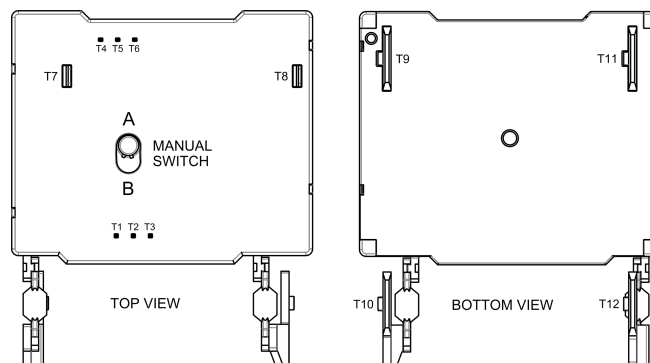
(Unit: mm)

K247A-D- -T2



Terminal Configuration

K247A-D- -T2 †††



††† 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)

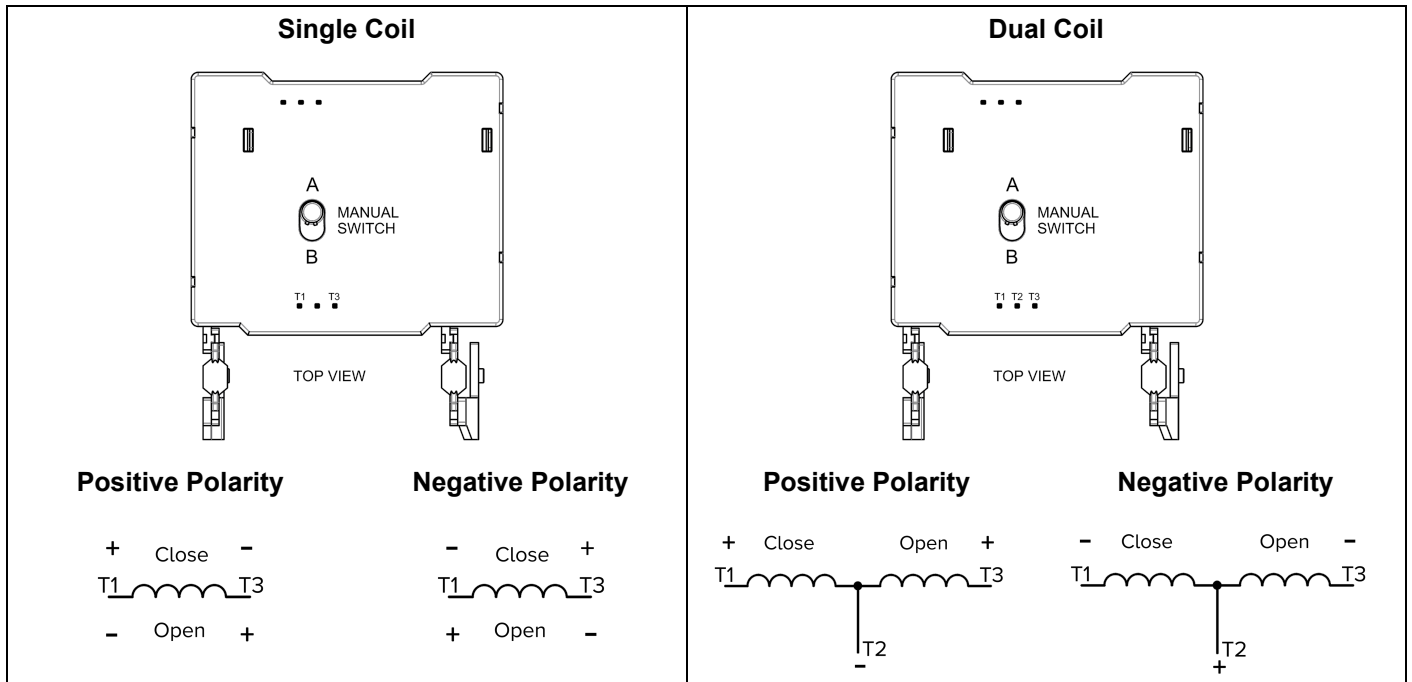
(T4: Common, T6: Type B – Opposite in state to the main load terminals)

(T9 & T10: Load contact pair #1, T11 & T12: Load contact pair #2)

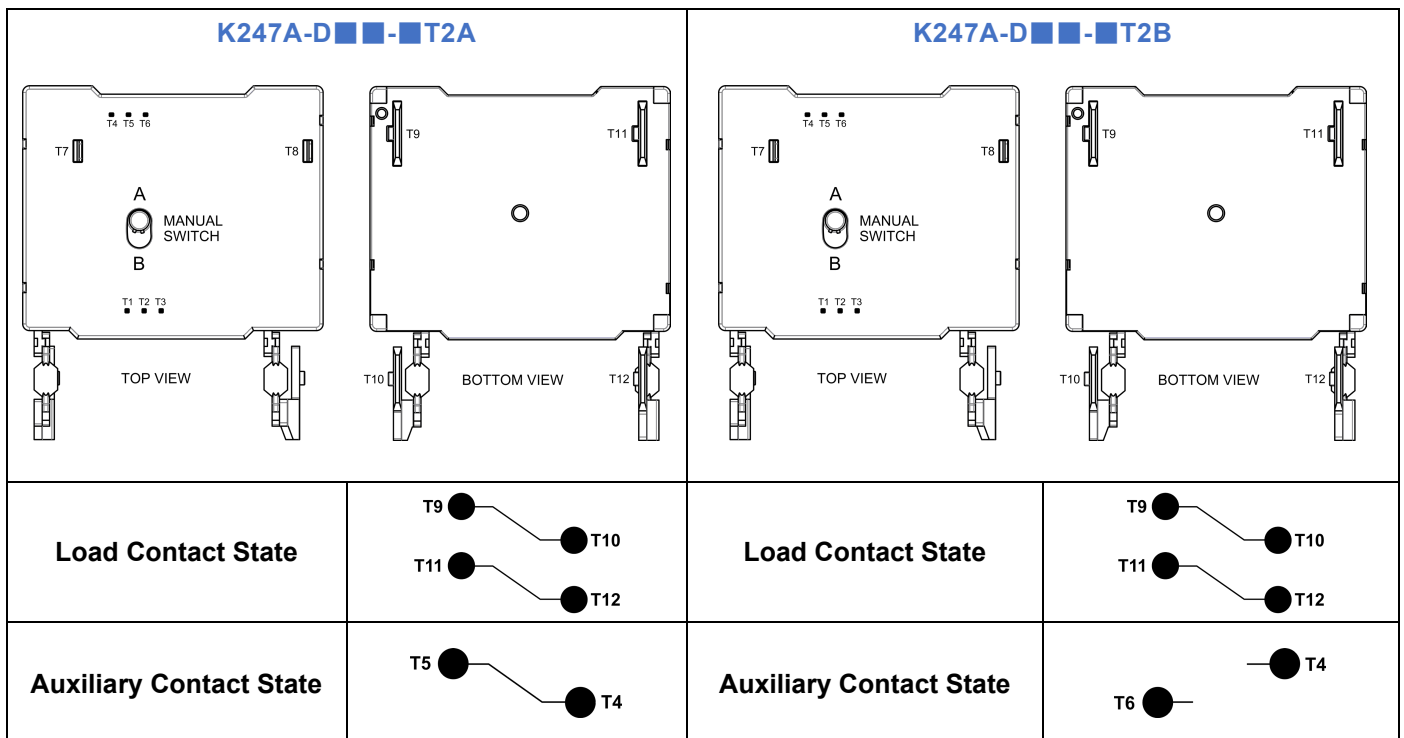
T7: Electrically connected to T11 (Voltage sensing or low current application)

T8: Electrically connected to T9 (Voltage sensing or low current application)

Coil Wiring Diagrams



Auxiliary Contact Wiring Diagrams



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](http://www.kgtechnologies.net/glossary) at www.kgtechnologies.net.



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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.