

200A POWER LATCHING RELAY

- » ANSI C12.1 compliant
- » RoHS compliant
- » With positional sensor
- » 4,000V dielectric strength
- » Switching power up to 55,400VA
- » Outline dimensions:
(74.8 x 73.3 x 29.5)mm

A-Style terminal shown in photo.
Other styles available.



Contact Data [Click here for glossary of terms](#)

Rated load	200A 220Vac
Contact form	2A or 2B
Contact material	AgSnO ₂
Max. switching voltage	440Vac
Max. switching current	200A
Max. switching power:	
AC switching	55,400VA
DC switching	5,600W
Electrical endurance	6,000 cycles
Mechanical endurance	50,000 cycles

Characteristics [Click here for glossary of terms](#)

Insulation resistance	1,000MΩ (at 500VDC)
Dielectric strength:	
Coil to contact	4,000 Vac for 1 min.
Across open contacts	2,000 Vac for 1 min.
Contacts to position switch	4,000 Vac for 1 min.
Coil to position switch	1,500 Vac for 1 min.
Dielectric creepage: DPST	9.6mm
Operating temperature	-40°C to +85°C
Ambient humidity	98%RH, +40°C
Vibration	1.5mm (DA), 10 to 55 Hz
Shock resistance:	
Functional*	10G
Destructive	100G
Unit weight	Approx. 500g
Termination	PCB

Coil Data [Click here for glossary of terms](#)

	Single Coil (Latching)	Dual Coil (Latching)
Coil Consumption	12W	24W
Pulse Duration	Min. 80ms (Vdc) – 50ms (Vac)	Min. 80ms (Vdc) – 50ms (Vac)

Nominal Coil Voltage	Minimum Operating Voltage	Coil Resistance (Ω ± 10%) @ 23°C	
		Single Coil (Latching)	Dual Coil (Latching)
12Vdc	9.6Vdc	12Ω	2 x 6Ω
24Vdc	19.2Vdc	48Ω	2 x 24Ω
48Vdc	38.4Vdc	190Ω	2 x 95Ω
240Vac (FWR)**	192Vac (FWR)**	1000Ω	2 x 500Ω

* Unit may change state but is still functional.

** FWR = Full Wave Rectified

Ordering Information

	K245	A	-	D	012	P	-	2A	T
Relay Series:									
Terminal Type:	A: See drawings ¹ B: See drawings ¹ X: Custom design ²								
Coil Type:	S: Single coil D: Dual coil								
Coil Voltage³:	12, 24, 48 Vdc, 240Vac (FRW)								
Coil Polarity:	P: Positive N: Negative								
Contact Form:	2A: Form 2A – NO 2B: Form 2A – NC								
Contact Material:	T: AgSnO ₂								

¹ Other standard terminal type drawings available upon request.

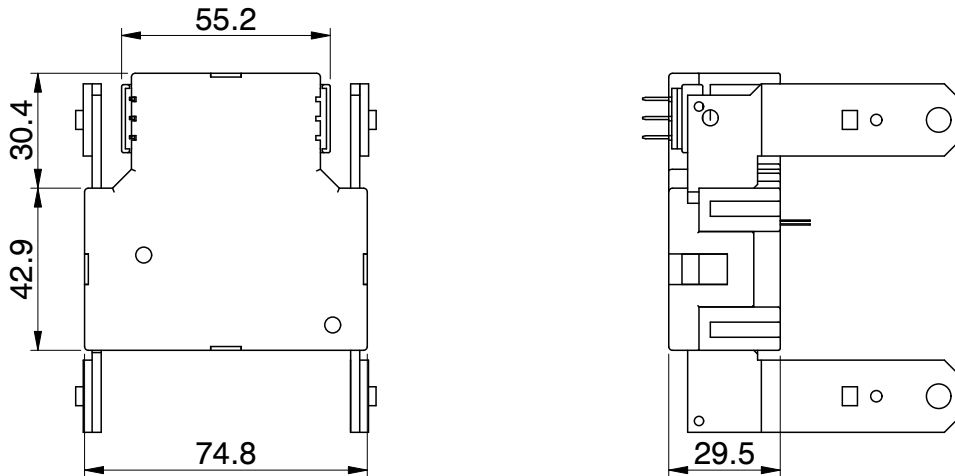
² For custom designs, please contact KG Technologies. Integrated shunts, flex-wire, copper extensions and brass terminals available.

³ Coil voltage should be indicated in three digit format (6Vdc = 006)

Dimensional Drawings

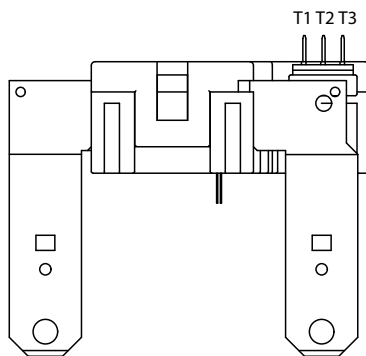
All dimensions in mm unless otherwise noted. For more information, please contact KG Technologies.

A-Style Terminals

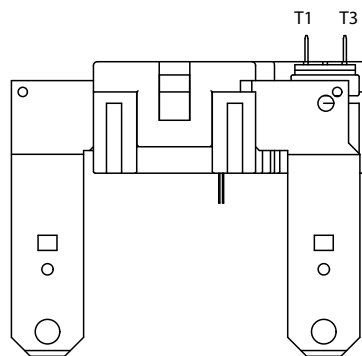


Wiring Diagrams

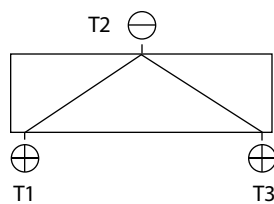
Dual Coil



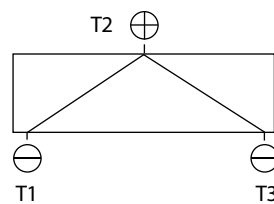
Single Coil



Dual Coil Connection

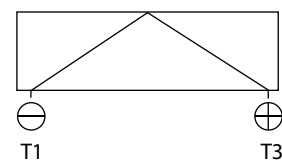


Positive Polarity



Negative Polarity

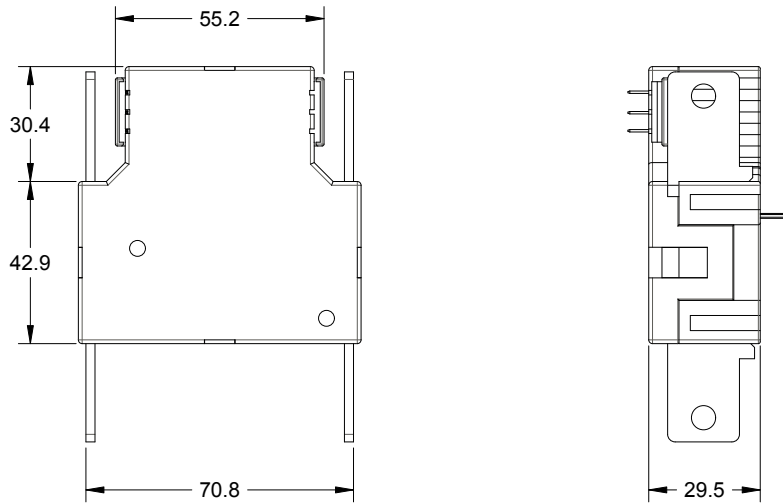
Single Coil Connection



Dimensional Drawings

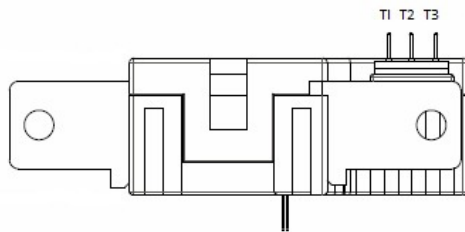
All dimensions in mm unless otherwise noted. For more information, please contact KG Technologies.

B-Style Terminals

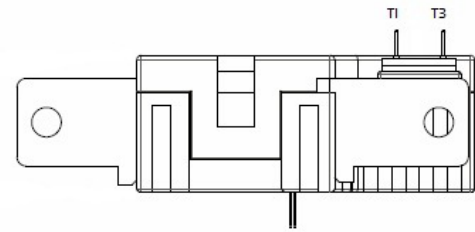


Wiring Diagrams

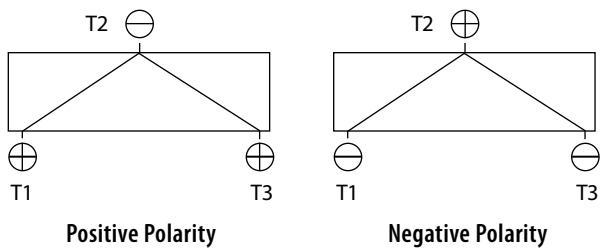
Dual Coil



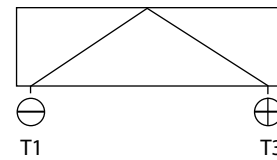
Single Coil



Dual Coil Connection



Single Coil Connection



Application Notes

Dual Coil – Positive Polarity: Place a negative connection on T2. Then apply a 50ms positive pulse to T1 to open the contacts or to T3 to close the contacts.

Dual Coil – Negative Polarity: Place positive connection on T2. Then apply a 50ms negative pulse to T1 to open the contacts or to T3 to close the contacts.

Single Coil: Place a negative connection on T1. Then apply a 50ms positive pulse to T3 to close the contacts. Reversing polarity will open the contacts.

Additional 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 incur).
- 3:** Relays without flex-wire cannot be tin-soldered. Moving or bending the terminals could cause damage to the internal structure of the relay.
- 4:** For definitions of terms used in this data sheet, see glossary at www.kgtechnologies.net.

Disclaimer: This data sheet 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 data sheet.