

80A Power Latching Relay

- 90A Switching Capability
- IEC 62055-31:UC2 Compliant
- RoHS Compliant
- 4kV Dielectric Strength
- UL & CQC Certified
- Switching capacity up to 22.5kVA



K112 Specifications

Contact Data		Characteristics	
Contact Arrangement	1A	Insulation resistance	1000MΩ (at 500VDC)
		Dielectric strength:	
		coil to contact	4000 Vac for 1 min.
Contact material	AgSnO ₂	across open contacts	1500 Vac for 1 min.
Initial contact resistance	50mV (1A @ 6VDC)	Dielectric Creepage: SPST	≥8mm
Rated Load	80A @ 250Vac		
	80A @ 28Vdc	Set time – latching	20ms Max.
		Reset time - latching	20ms Max.
Max. Switching Voltage	250VAC	Operating temperature	-40 C to + 70°C
Max. Switching Current	90A	Storage temperature	-40 C to + 100°C
Max. Switching Power	22500VA	Humidity	98%RH, 40°C
		Vibration	1.5mm (DA), 10~55 Hz
Expected life:			
electrical (rated load)	1 x 10 ⁴ Operations (1 x Set + Reset)	Shock:	
mechanical	1 x 10 ⁶ Operations (1 x Set + Reset)	Functional	294m/s ² (30g)
		Destructive	980m/s ² (100g)
		Dimensions	38.0 x 30.0 x 16.9 mm
		Unit Weight	Approx. 45g
		Termination	PCB & QC
Coil data			
	Single Coil (Latching)	Dual Coil (Latching)	
Coil consumption	1.5W	3.0W	
Pulse Duration	Min.100ms (200mS Recommended)		
Nominal coil voltage	Min Operating voltage	Coil resistance (Ω ± 10%) @ 23°C	
		Single Coil (Latching)	Dual Coil (Latching)
5Vdc	3.5Vdc	16.7 Ω	2 x 8.3 Ω
6Vdc	4.5Vdc	24 Ω	2 x 12 Ω
9Vdc	6.3Vdc	54 Ω	2 x 27 Ω
12Vdc	8.4Vdc	96 Ω	2 x 48 Ω
24Vdc	16.8Vdc	384 Ω	2 x 192 Ω
48Vdc	36.6Vdc	1536 Ω	2 x 768 Ω

Ordering Information

Relay Series	K112	A	- 12	H	L	T	R	- 555
Terminal Type:	A: Coil Type 1 with manual switch B: Coil Type 2 with manual switch C: Coil Type 3 with manual switch D: Coil Type 1 without switch E: Coil Type 2 without switch F: Coil Type 3 without switch							
Coil Voltage	5, 6, 9, 12, 24, 48 VDC							
Contact Form:	H: Form 1A							
Coil Sensitivity	L: Sensitive Leave blank for standard coil sensitivity							
Contact Material	T; AgSnO ₂							
Coil Polarity	R: Negative Coil Polarity Leave blank for standard polarity							
Special	555: RoHS Compliant (Cadmium Free)							

DIMENSIONAL DRAWINGS

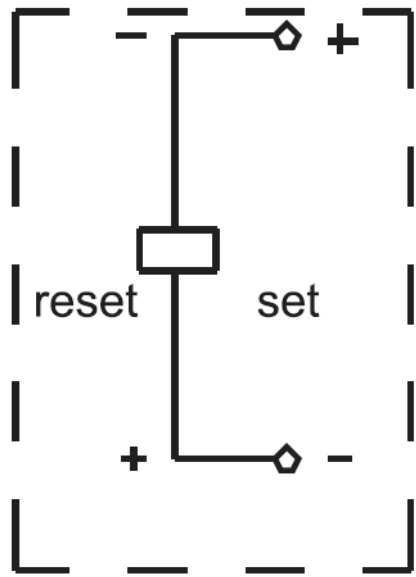
K112A with manual switch	K112A without manual switch

PCB Layout Details

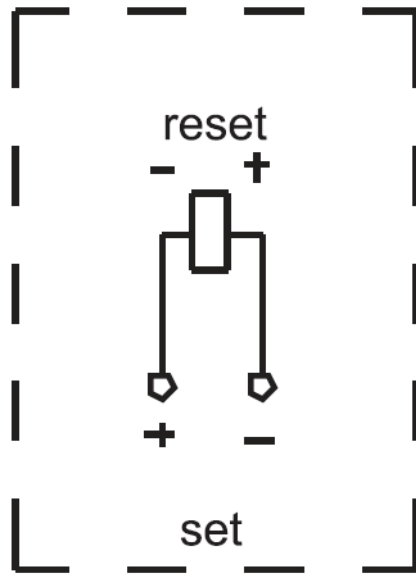
Single Coil: Type 1	Single Coil: Type 2	Dual Coil

Application Notes

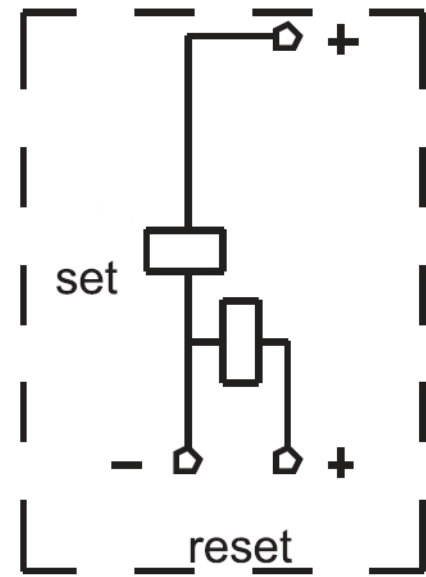
Single Coil: Type 1



Single Coil: Type 2



Dual Coil: Type 3



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.