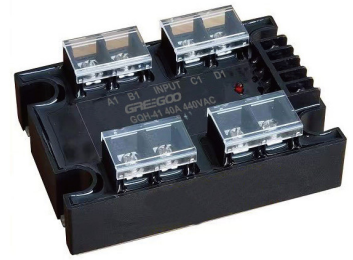
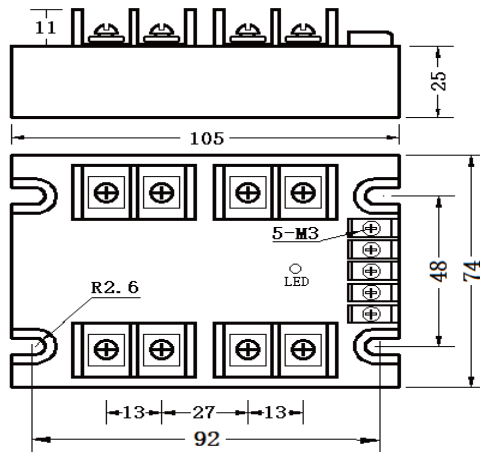


GZ042KB / GZ042KBL

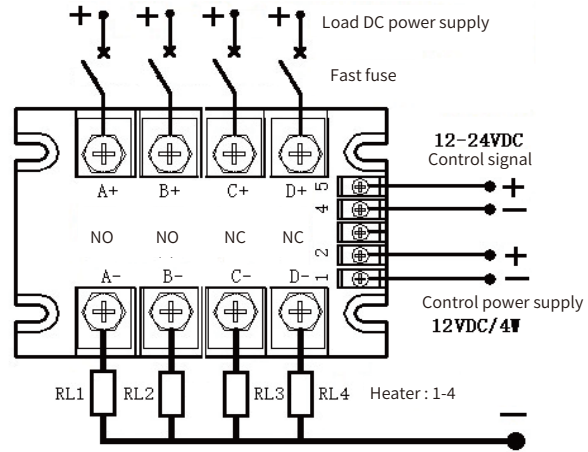
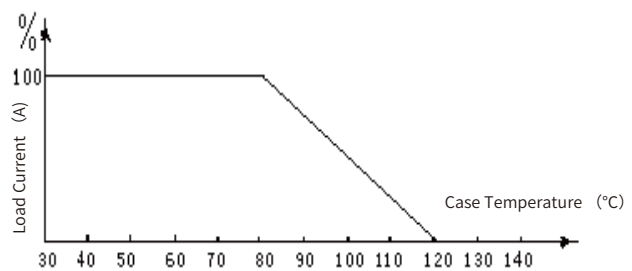
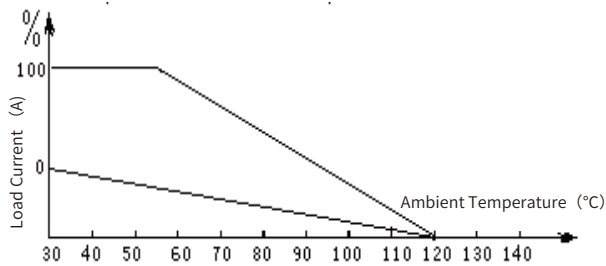


- Optical and magnetic coupling isolation between input and output circuits.
- Control signals compatible with PLC and TTL logic interfaces.
- LED indicator for operational status.
- Built-in over-voltage absorption and over-current/short-circuit protection.
- Two normally open and two normally closed non-contact outputs; switching is spark-free and without arcing.
- Encapsulated in epoxy resin, providing corrosion and shock resistance, ensuring stable and reliable switch operation.
- The product is mainly used for multi-channel control of DC power supply equipment such as DC heaters, solenoid valves, electric motors, and new energy charging / discharging equipment.

Parameter \ Model		GZ042KB	GZ042KBL
Input Parameters	Control Voltage	12-15VDC; 18-36 VDC/4W	
	Control Current	110-220mA; 80-210mA	
	Under-voltage Protection	<10 VDC or <16 VDC self-lock	
	Operating Indicator	LED	
Output Parameters	Maximum Voltage	100, 200, 600, 1200 VDC	
	Maximum Current	30, 60, 80, 100, 120 A	
	On-State Voltage Drop	0.8 - 4.5 V	
	Off-State Voltage	100V 200V 600V 1200V	
	Transient Voltage Protection	80V 180V 480V 1000V	
	Overcurrent Protection	/	L: Output Current 50%; Z: Output Current 100%
	Switching Time	≤ 0.15 ms	
	Switching Characteristics	MOS or IGBT - Solid-state contactless switch characteristic	
Performance Parameters	Isolation Voltage	≥ 1800 - 2500 V	
	Insulation Voltage	≥ 2000 - 2500 V	
	Operating Temperature	-30 to 75 °C	
	Heat Dissipation Condition	Heat sink with additional fan cooling	
	Load Current Safety Factor	Resistive Load: 2.5-3 times; Inductive Load: 3-6 times	
	Dimensions (Code)	104 x 74 x 41 mm ³ (J-3-S)	

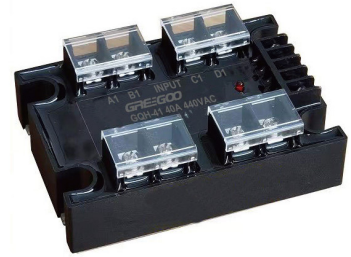
Outline and Dimension: Installation wiring diagram (unit :mm)


J-3-S


Temperature Curve Diagram

Product Safety Usage Notes:

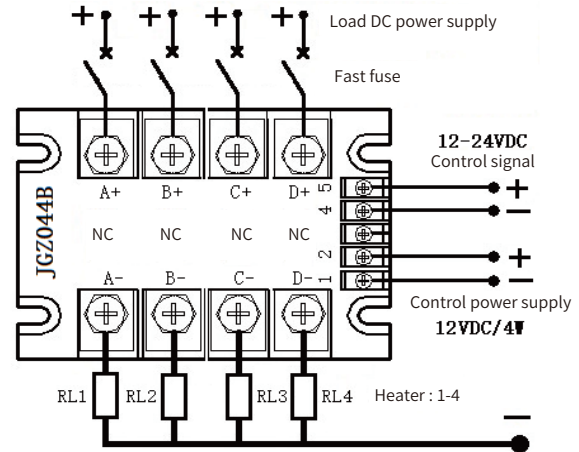
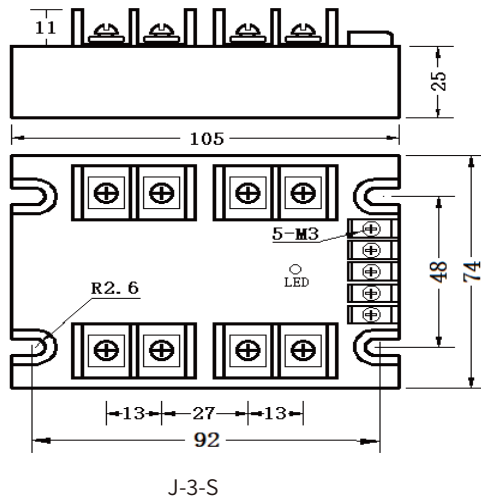
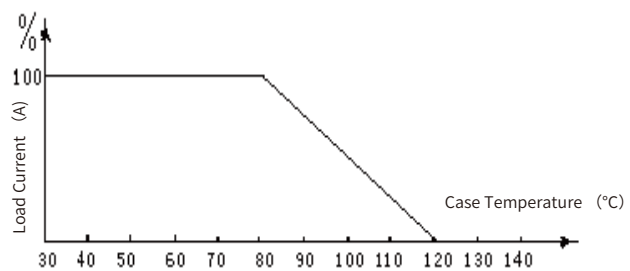
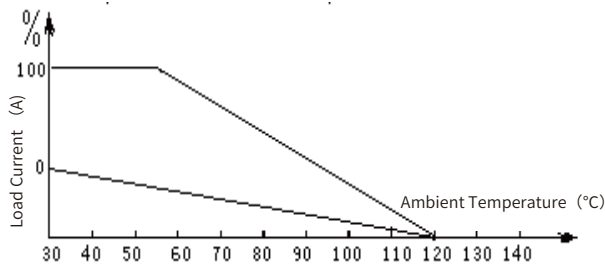
- A safety margin should be left in the current rating selection based on the nature of the load. For resistive loads, the current is selected according to 2~4 times the load current. For inductive or capacitive loads, the current is selected according to 3~5 times the load current.
- According to the relationship between load current and ambient temperature, when the ambient temperature is high or heat dissipation conditions are not good, the current capacity of the solid state relay should be increased accordingly.
- In order to prevent the load from short-circuiting during use, it is necessary to connect a fast circuit breaker in series with the product in the load circuit. Alternatively, use the GZ042KBL model Solid State Relay with overcurrent protection. Note that the GZ042KB series does not have overcurrent protection.
- For inductive loads, a freewheeling diode must be connected to both ends of the load, and a varistor must be connected to the output end to prevent the high voltage generated during switching from damaging the solid-state switch.
- During installation, it is required that the contact surface between the heatsink and the product must be flat and clean. A layer of thermally conductive silicone grease should be applied to this surface. Finally, the screws set with flat washers and spring washers must be tightened symmetrically to secure the assembly.
- For proper operation, the main and control power supplies must be energized first. The ON/OFF state of the control signal then determines the switching of the main load current.

GZ044B / GZ044BL



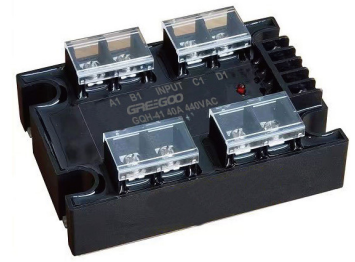
- Optical and magnetic coupling isolation between input and output circuits.
- Control signals compatible with PLC and TTL logic interfaces.
- LED indicator for operational status.
- Built-in over-voltage absorption and over-current/short-circuit protection.
- Four channel normally closed non-contact outputs; switching is spark-free and without arcing.
- Encapsulated in epoxy resin, providing corrosion and shock resistance, ensuring stable and reliable switch operation.
- The product is mainly used for multi-channel control of DC power supply equipment such as DC heaters, solenoid valves, electric motors, and new energy charging / discharging equipment.

Parameter \ Model		GZ044B	GZ044BL
Input Parameters	Control Voltage	12-15VDC; 18-36 VDC/4W	
	Control Power Supply	12-24 VDC	
	Control Current	8-20 mA	
	Operating Indicator	LED	
Output Parameters	Maximum Voltage	100, 200, 600, 1200 VDC	
	Maximum Current	30, 60, 80, 100, 120 A	
	On-State Voltage Drop	0.8 - 4.5 V	
	Off-State Voltage	100V 200V 600V 1200V	
	Transient Voltage Protection	80V 180V 480V 1000V	
	Overcurrent Protection	/	L: Output Current 50%; Z: Output Current 100%
	Switching Time	≤ 0.18 ms	
	Switching Characteristics	MOS or IGBT - Solid-state contactless switch characteristic	
Performance Parameters	Isolation Voltage	≥ 1500 - 2000 V	
	Insulation Voltage	≥ 2000 - 2500 V	
	Operating Temperature	-30 to 75 °C	
	Heat Dissipation Condition	Heat sink for ≥10A, additional fan cooling for ≥50A	
	Load Current Safety Factor	Resistive Load: 2.5-3 times; Inductive Load: 3-6 times	
	Dimensions (Code)	105 x 74 x 36 mm ³ (J-3-S)	

Outline and Dimension: Installation wiring diagram (unit :mm)

Temperature Curve Diagram

Product Safety Usage Notes:

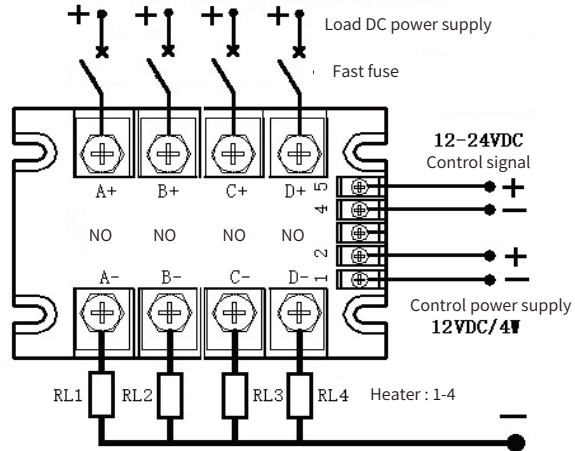
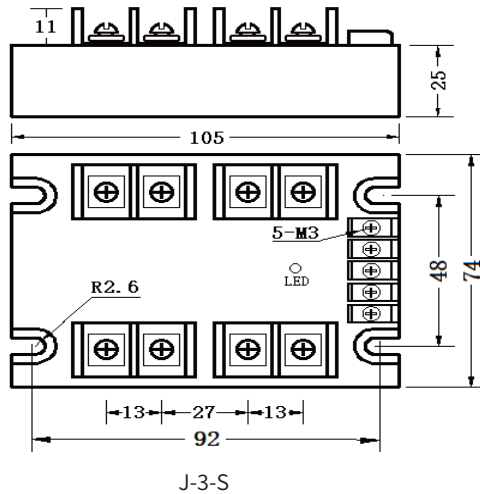
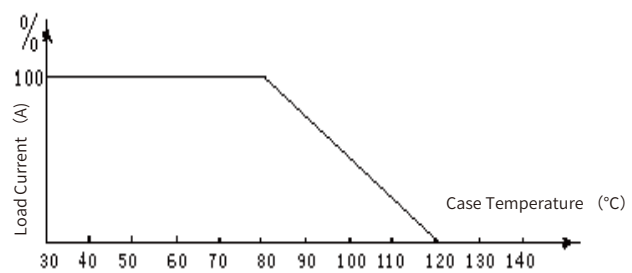
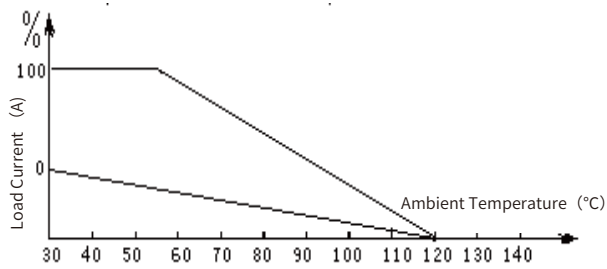
- A safety margin should be left in the current rating selection based on the nature of the load. For resistive loads, the current is selected according to 2~4 times the load current. For inductive or capacitive loads, the current is selected according to 3~5 times the load current.
- According to the relationship between load current and ambient temperature, when the ambient temperature is high or heat dissipation conditions are not good, the current capacity of the solid state relay should be increased accordingly.
- In order to prevent the load from short-circuiting during use, it is necessary to connect a fast circuit breaker in series with the product in the load circuit. Alternatively, use the GD044BL model Solid State Relay with overcurrent protection. Note that the GD044B series does not have overcurrent protection.
- For inductive loads, a freewheeling diode must be connected to both ends of the load, and a varistor must be connected to the output end to prevent the high voltage generated during switching from damaging the solid-state switch.
- During installation, it is required that the contact surface between the heatsink and the product must be flat and clean. A layer of thermally conductive silicone grease should be applied to this surface. Finally, the screws set with flat washers and spring washers must be tightened symmetrically to secure the assembly.
- For proper operation, the main and control power supplies must be energized first. The ON/OFF state of the control signal then determines the switching of the main load current.

GZ044K / GZ044KL



- Optical and magnetic coupling isolation between input and output circuits.
- Control signals compatible with PLC and TTL logic interfaces.
- LED indicator for operational status.
- Built-in over-voltage absorption and over-current/short-circuit protection.
- Four channel normally open non-contact outputs; switching is spark-free and without arcing.
- Encapsulated in epoxy resin, providing corrosion and shock resistance, ensuring stable and reliable switch operation.
- The product is mainly used for multi-channel control of DC power supply equipment such as DC heaters, solenoid valves, electric motors, and new energy charging / discharging equipment.

Parameter \ Model		GZ044K	GZ044KL
Input Parameters	Control Voltage	12-15VDC; 18-36 VDC/4W	
	Control Current	110-220mA; 80-210mA	
	Under-voltage Protection	<10 VDC or <16 VDC self-lock	
	Operating Indicator	LED	
Output Parameters	Maximum Voltage	100, 200, 600, 1200 VDC	
	Maximum Current	30, 60, 80, 100, 120 A	
	On-State Voltage Drop	0.8 - 4.5 V	
	Off-State Voltage	100V 200V 600V 1200V	
	Transient Voltage Protection	80V 180V 480V 1000V	
	Overcurrent Protection	/	L: Output Current 50%; Z: Output Current 100%
	Switching Time	≤ 0.15 ms	
	Switching Characteristics	MOS or IGBT - Solid-state contactless switch characteristic	
Performance Parameters	Isolation Voltage	≥ 1800 - 2500 V	
	Insulation Voltage	≥ 2000 - 2500 V	
	Operating Temperature	-30 to 75 °C	
	Heat Dissipation Condition	Heat sink with additional fan cooling	
	Load Current Safety Factor	Resistive Load: 2.5-3 times; Inductive Load: 3-6 times	
	Dimensions (Code)	104 x 74 x 41 mm ³ (J-3-S)	

Outline and Dimension: Installation wiring diagram (unit :mm)

Temperature Curve Diagram

Product Safety Usage Notes:

- A safety margin should be left in the current rating selection based on the nature of the load. For resistive loads, the current is selected according to 2~4 times the load current. For inductive or capacitive loads, the current is selected according to 3~5 times the load current.
- According to the relationship between load current and ambient temperature, when the ambient temperature is high or heat dissipation conditions are not good, the current capacity of the solid state relay should be increased accordingly.
- In order to prevent the load from short-circuiting during use, it is necessary to connect a fast circuit breaker in series with the product in the load circuit. Alternatively, use the GZ044KL model Solid State Relay with overcurrent protection. Note that the GZ044K series does not have overcurrent protection.
- For inductive loads, a freewheeling diode must be connected to both ends of the load, and a varistor must be connected to the output end to prevent the high voltage generated during switching from damaging the solid-state switch.
- During installation, it is required that the contact surface between the heatsink and the product must be flat and clean. A layer of thermally conductive silicone grease should be applied to this surface. Finally, the screws set with flat washers and spring washers must be tightened symmetrically to secure the assembly.
- For proper operation, the main and control power supplies must be energized first. The ON/OFF state of the control signal then determines the switching of the main load current.