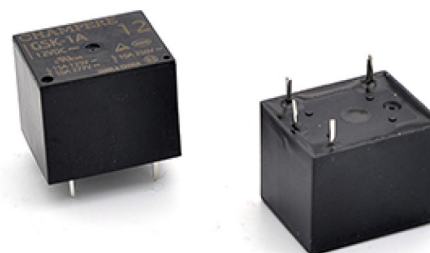




GSK. MININATURE POWER RELAY

FEATURES

- ▶ 19.0 X 15.2 X 15.4(H) MM.
- ▶ WIDELY USED T73 SUGAR CUBE RELAY.
- ▶ 16A MAX SWITCHING CAPACITY.
- ▶ ECONOMICAL SELECTION.
- ▶ UL CLASS F INSULATION AVAILABLE.



 File Number: E513402
 File Number: R50463327

CONTACT RATINGS

Contact Form	1A, 1B, 1C		
Contact Resistance	≤100mΩ (1A 6VDC)		
Contact Material	Ag Alloy (AgSnO ₂ , AgSnO ₂ In ₂ O ₃ , AgNi, AgCdO)		
Rated Load (Resistive)	1A	1C	
		NO	NC
	16A 250VAC (H Type) 15A 125VAC 12A 250VAC / 30VDC	16A 250VAC (H Type) 15A 125VAC 12A 250VAC / 30VDC	10A 250VAC (H Type) 7A 125VAC 5A 250VAC / 30VDC
Max. Switching Current	16A		10A
Max. Switching Power	4,000VA / 360W		2,500VA / 150W
Max. Switching Voltage	250VAC / 30VDC		
Min. Permissible Load	100mA at 5VDC		

CHARACTERISTICS

Operate Time	≤ 10ms		
Release Time	≤ 5ms		
Insulation Resistance	100MΩ (500VDC)		
Dielectric Strength	I / O	O / O	
	1,500VAC 1min	750VAC 1 min	
Impulse Withstand Voltage	4.5 kV (1.2 x 50μs)		
Shock Resistance	Non-energized	Destruction	Malfunction
	100 m/s ² (10G)	1,000 m/s ² (100G)	100 m/s ² (10G)
Vibration Resistance	Destruction		Malfunction
	10 to 55 Hz, (1.5mm double amplitude)		10 to 55 Hz, (1.5mm double amplitude)
Ambient Temperature	Operating: -40°C to 105°C with no icing or condensation		
Ambient Humidity	Operating: 5% to 85%		
Pin Type	PCB Pins		
Weight	Approx. 9.8g		

NOTE: The data shown above are initial values.

COIL DATA

Standard	Approx. 360mW				
Rated Voltage (VDC)	Operate Voltage (VDC)	Release Voltage (VDC)	Max. Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) ±10%
3	≤2.25	≥0.3	4.98	120	25
5	≤3.75	≥0.5	8.3	72	69.4
6	≤4.5	≥0.6	9.96	60	100
9	≤6.75	≥0.9	14.94	40	225
12	≤9	≥1.2	19.92	30	400
18	≤13.5	≥1.8	29.88	20	900
24	≤18	≥2.4	39.84	15	1,600
48	≤36	≥4.8	79.68	7.5	6,400
High Power	Approx. 480mW				
Rated Voltage (VDC)	Operate Voltage (VDC)	Release Voltage (VDC)	Max. Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) ±10%
5	≤3.75	≥0.5	8.3	96	52.08
9	≤6.75	≥0.9	14.94	53.3	168.75
12	≤9	≥1.2	19.92	40	300
24	≤18	≥2.4	29.88	20	1,200
48	≤36	≥4.8	79.68	10	4,800

LIFE EXPECTANCY DATA

Mechanical Life Expectancy	10,000,000 Operations	
Electrical Life Expectancy	FROM A	FORM C
	100,000 Operations (10A 277VAC Resistive Load, 1s ON / 9s OFF)	20,000 Operations (NO: 10A / NC: 3A 277VAC Resistive Load, 1s ON / 9s OFF)
	50,000 Operations (10A 30VDC Resistive Load, 1s ON / 9s OFF)	5,000 Operations (NO: 5A / NC: 3A 30VDC Resistive Load, 1s ON / 9s OFF)
	1,000 Operations (1/2HP 125VAC Resistive Load, 1s ON / 9s OFF)	

NOTE: The electrical life data items shown are possible at 23°C.

SAFETY APPROVALS

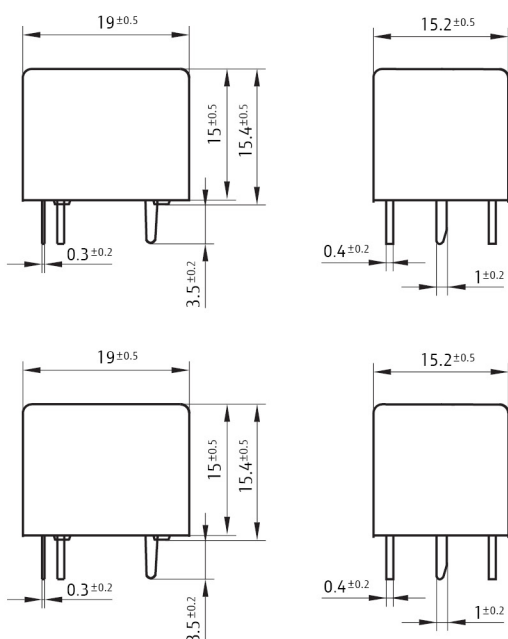
ULus / cUL	Coil Rating 3 to 48VDC	Contact Rating	
		NO 15A 125VAC 85°C 50,000 cycles 10A 250VAC 85°C 50,000 cycles 10A 277VAC 85°C 50,000 cycles 7A 250VAC / 28VDC 85°C 50,000 cycles	NC 15A 125VAC 85°C 50,000 cycles 10A 250VAC 85°C 50,000 cycles 10A 277VAC 85°C 50,000 cycles 7A 250VAC / 28VDC 85°C 50,000 cycles
TUV	Coil Rating 3 to 48VDC	Contact Rating	
		NO 16A 250VAC 105°C 40,000 cycles 7A 250VAC / 28VDC 85°C 100,000 cycles	NC 7A 250VAC / 28VDC 85°C 100,000 cycles

ORDERING INFORMATION

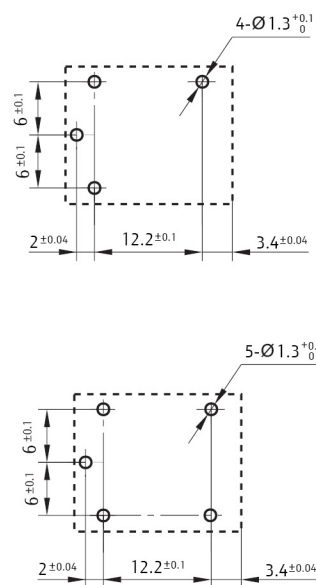
Type	Contact / Seal Key	Variation Key	Coil Key
GSK	S 1 A D H	K R F	24 VDC
Seal Type	Nil: Flux Proof (RTII); S: Fully Sealed (RTIII)		X / XX (3 ~ 48): Coil DC Voltage Value Coil Voltage
NO of Pole	1: Single Pole		Nil: Standard Insulation; F: Class F Insulation Insulation Class
Contact Form	A: Form A / Normally Open; B: Form B / Normally Close; C: Form C / Change Over		Nil: 1,500VAC I/O; R: Enhanced 2,500VAC I/O Dielectric Strength Class
Contact Material	Nil: Silver Alloy (ROHS Complaint); D: Silver Alloy: (Others)		Nil: Standard Coil: 0.36W; L: Sensitive Coil: 0.25W; K: High Power Coil: 0.45W; Y: High Power Coil: 0.6W; Z: Extreme High Power Coil: 0.8W Power Consumption
			Nil: Standard Switching Capacity (up to 15A); H: High Switching Capacity (above 15A) Contact Capacity

DIMENSIONS (UNIT: MM)

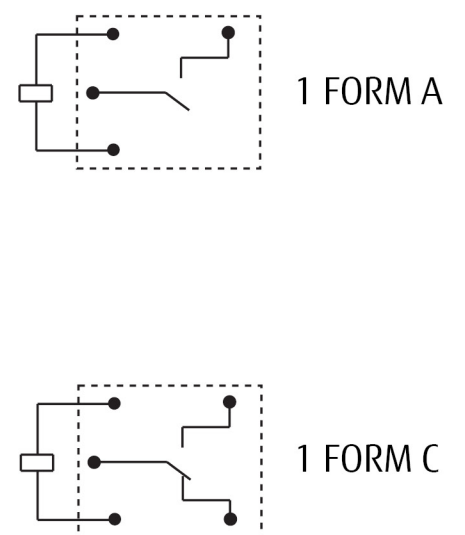
Outline Dimensions



PCB Layout (Bottom View)

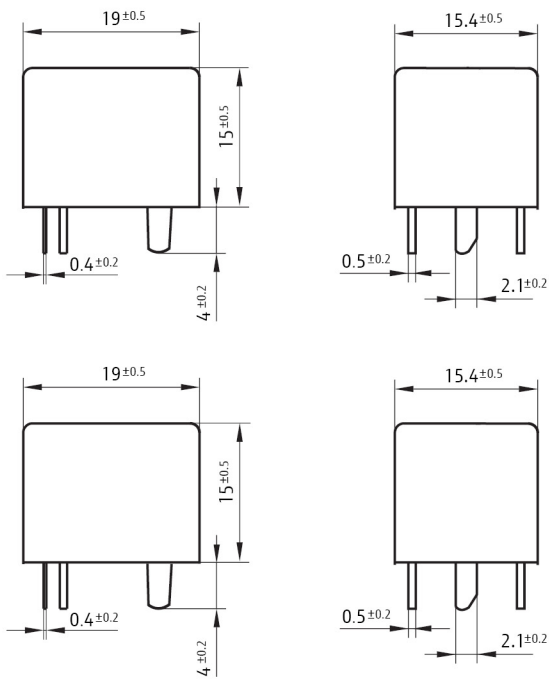


Wiring Diagram

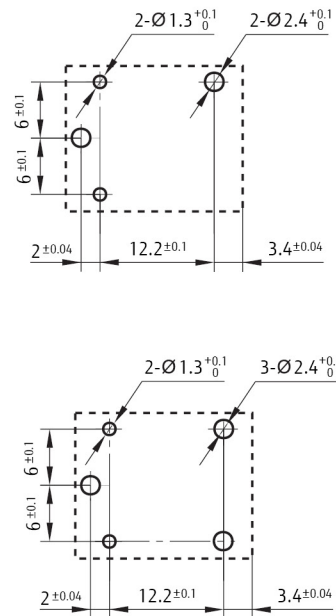


DIMENSIONS (CONT.)

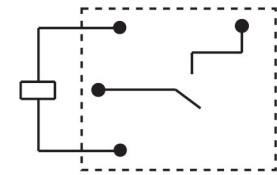
Outline Dimensions



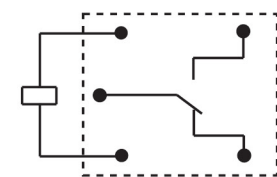
PCB Layout (Bottom View)



Wiring Diagram



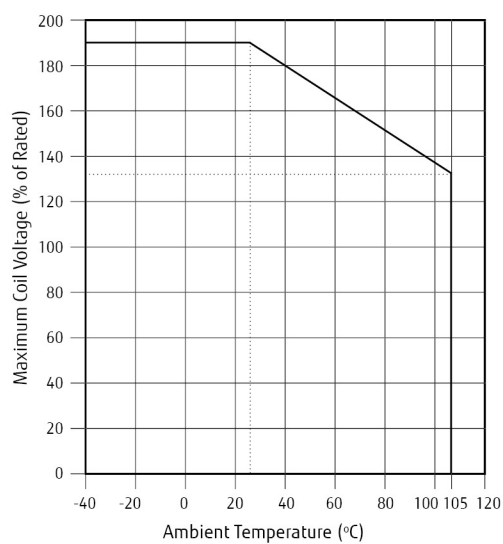
1 FORM A
H Type 16A



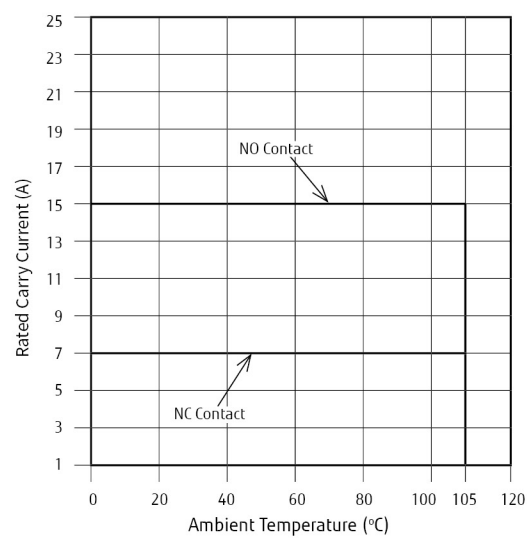
1 FORM C
H Type 16A

ENGINEERING DATA

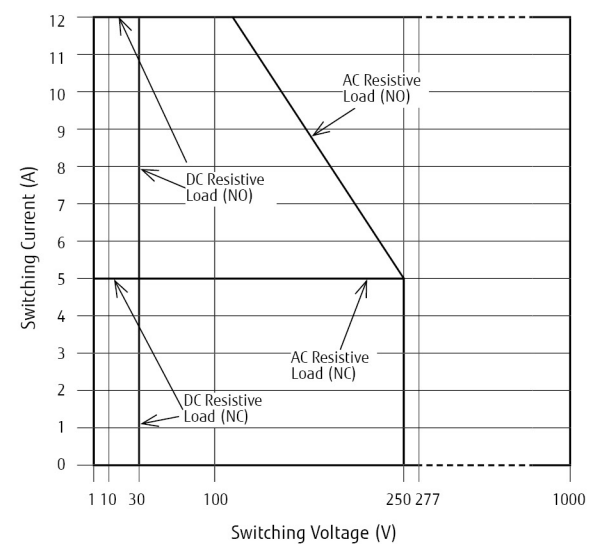
Ambient Temperature VS. Maximum Voltage



Ambient Temperature VS. Rated Carry Current

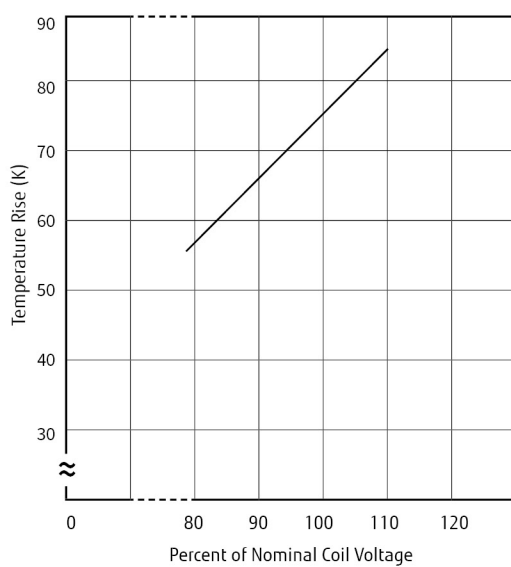


Maximum Switching Capacity (Standard Type)



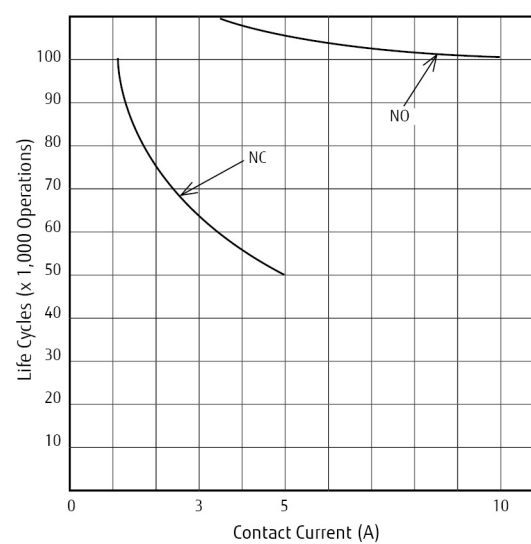
Coil Temperature Rise

70°C 10A; Distance: 10mm



Electrical Cycles (Standard Type)

NO: 277VAC/30VDC NC: 277VAC Resistive 1s ON / 9s OFF



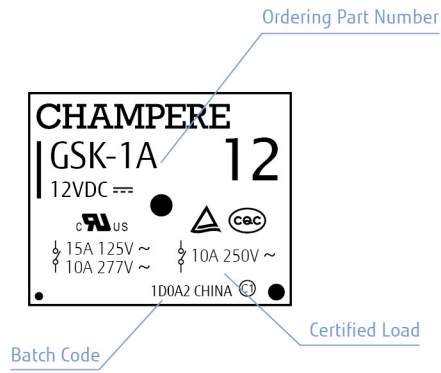
PRINT LAYOUT

Below layout is for reference only.

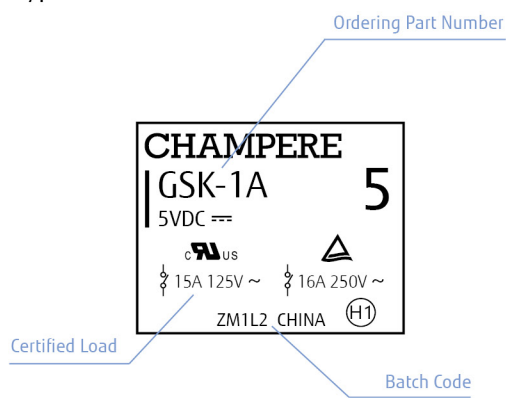
TOP PRINTING

LASER PRINTED ON BLACK CASE (WHITE CASE OPTIONAL)

Standard Type:



H Type - 16A:



PACKAGE INFORMATION

Package 1 - PVC Tube	
Inner Package Type & Quantity	25Pcs Per PVC Tube
Outer Package Type & Quantity	1,000pcs per Carton with Logo and Sticker
Outer Package Dimension & Weight G.W. / N.W.	50 x 32 x 20 cm; 11.5Kgs / 10.5Kgs
Package 2 - PVC Tray	
Inner Package Type & Quantity	50Pcs Per PVC Tray
Outer Package Type & Quantity	1,000pcs per Carton with Logo and Sticker
Outer Package Dimension & Weight G.W. / N.W.	50 x 32 x 20 cm; 10.8Kgs / 9.8Kgs