

Better. By Design.

# GENERAL PURPOSE RELAYS



### **GENERAL PURPOSE SLIM RELAYS**

#### **GS SERIES**



- ◆ Compact size (6 mm)
- ◆ 1 Form C contact
- Secure relay/socket retention with easy ejection
- High capacity 6 Amp rated
- ◆ Finger safe protection
- LED indication
- 10,000,000 mechanical operations
- ◆ RoHS compliant
- ◆ UL/cUL, CE approval





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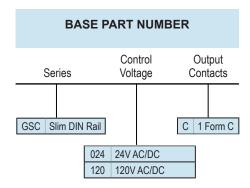
Macromatic GS Series General Purpose Relays are designed for high density applications while still providing reliability and durability.

These slim relays (6 mm wide installed on socket) have contacts rated at 6 Amp 250V AC/ 30V DC. They are rated for 10,000,000 mechanical operations.

The GS Series relays carry UL/cUL Safety Approvals and are RoHS compliant.

Relay and socket installation provides finger protection, indication of power status and 1 Form C contact and is available in common control voltages.

#### TYPICAL MODEL CODE



OUTPUT CONTACTS	CONTACT RATING	CONTROL VOLTAGE	CATALOG NUMBER	WIRING/SOCKET
1 FORM C	6 Amp	24V AC/DC	GSC024C ■	Socket SS024 Socket SS120 Socket Scote Socket Scote Socket Scote Socke
	6 Amp	120V AC/DC	GSC120C ■	

 GSC024C is comprised of GS024C relay and SS024 socket. GSC120C is comprised of GS060C relay and SS120 socket. These relays and sockets are assembled as one unit and must be used together.

### **GENERAL PURPOSE SLIM RELAYS**

**GS SERIES** 

#### **APPLICATION DATA**

Load (Burden): Maximum 250 mW

Voltage Tolerance: ±10% nominal coil voltage

**Output Contacts:** 

Arrangement 1C: 6A 250V AC/30V DC, 1500 VA/180 W

Wire Size: (1) 16-20 AWG, solid or stranded

Terminal Tightening: Recommended torque, 4.43 in-lb

Life:

10,000,000 mechanical operations 30,000 electrical operations

Temperature:

24V AC/DC: -40° C to 70° C (-40° F to 158° F) 120V AC/DC: -40° C to 55° C (-40° F to 131° F)

Unit Weight: Approximately 0.07 lb (32 g) relay + socket

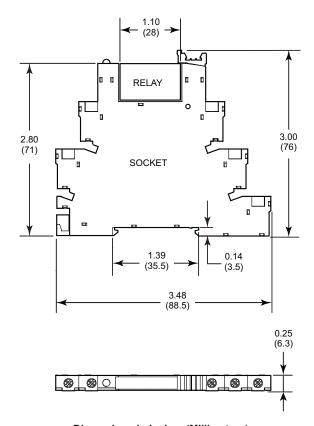
Approvals: UL/cUL, CE, RoHS compliant





GSC120C units (comprised of GS060C relays and SS120 sockets) mounted on DIN-rail

#### **DIMENSIONS**



Dimensions in Inches (Millimeters)

### **GENERAL PURPOSE BLADE RELAYS**

#### GR SERIES





- ♦ High capacity 12 Amp rated
- ◆ LED indication
- Push-to-test button
- ◆ Transparent dust cover
- 2-pole, 3-pole and 4-pole configurations
- ◆ RoHS compliant
- ◆ UL/cUL, CE approval







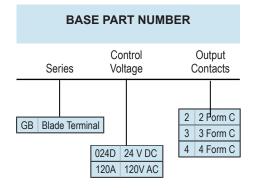
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WWW.MACROMATIC.COM Sales@Macromatic.com Macromatic GB Series General Purpose Relays provide high reliability and durability for applications requiring an economical solution.

These "ice cube" style relays are configured with Blade style terminals. They are rated for 20,000,000 mechanical operations. Even though compact in size, these relays provide up to 12 Amp contacts at various AC and DC coil voltage ratings.

Sockets for GB Series relays can be either DIN-rail or screw-mounted.

#### TYPICAL MODEL CODE -



OUTPUT CONTACTS	CONTACT RATING	CONTROL VOLTAGE	CATALOG NUMBER	WIRING/SOCKET
2 FORM C	12 Amp	24V DC	GB024D2	8-Blade Socket <b>SB2ZC5</b> 10 40 40 66 40 6
	12 Amp	120V AC	GB120A2	Bottom View DIAGRAM 818
3 FORM C	10 Amp	24V DC	GB024D3	11-Blade Socket  SB3ZC5  10
	10 Amp	120V AC	GB120A3	Bottom View DIAGRAM 819
4 FORM C	6 Amp	24V DC	GB024D4	14-Blade Socket  SB4ZC5  18-20-30-40-10-12-12-12-12-12-12-12-12-12-12-12-12-12-
	6 Amp	120V AC	GB120A4	Bottom View DIAGRAM 822

See page 8 for additional socket information.

### **GENERAL PURPOSE BLADE RELAYS**

**GB SFRIFS** 

#### **APPLICATION DATA**

#### Load (Burden):

DC: Approximately 1.1 W; AC: Approximately 1.5 VA

Voltage Maximum: 250V

#### **Output Contacts:**

2C: 12A 250V AC/30V DC 3000 VA/360 W 3C: 10A 250V AC/30V DC 2500 VA/300 W 4C: 6A 250V AC/30V DC 1500 VA/180 W

#### Wire Size:

(1) 12-20 AWG, solid or stranded (2) 16-20 AWG, solid or stranded

#### Life:

20,000,000 mechanical operations 100,000 electrical operations

Temperature: -40° C to 70° C (-40° to 158° F)
Unit Weight: Approximately 0.08 lb (36 g)
Approvals: UL/cUL, CE, RoHS compliant

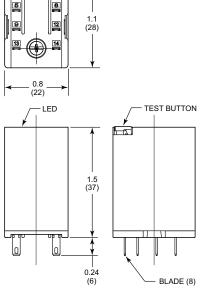




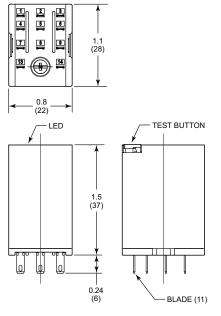


GB024D2 Relay on SB2ZC5 Socket, left, GB120A3 Relay on SB3ZC5 Socket, right, and GB120A4 Relay on SB4ZC5 Socket, front (Sockets ordered separately)

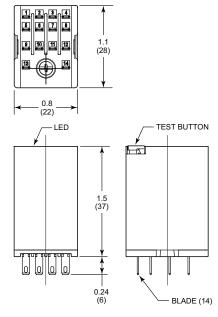
#### **DIMENSIONS**



2 Form C (2 Pole)



3 Form C (3 Pole)



4 Form C (4 Pole)

**Dimensions in Inches (Millimeters)** 

### **GENERAL PURPOSE ROUND RELAYS**

#### **GR SERIES**





- ♦ High Capacity 10 Amp rated
- ◆ LED indication
- Push-to-test button
- Transparent dust cover
- ◆ 2- or 3-pole configurations
- ◆ RoHS compliant
- ◆ UL/cUL, CE approval







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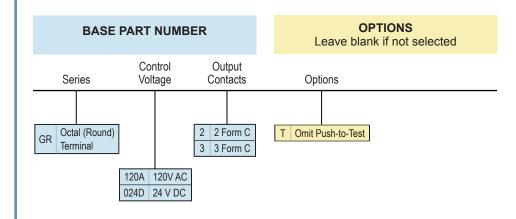
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Macromatic GR Series General Purpose Relays provide high reliability and durability for applications requiring an economical solution.

These "cube style" relays are configured with Octal (Round) Style terminals and are rated for 10,000,000 mechanical operations. Even though compact in size, these relays provide up to 10 Amp contacts at various AC and DC coil voltage ratings.

Sockets for GR Series relays can be DIN-rail or screw-mounted.

#### TYPICAL MODEL CODE •



OUTPUT CONTACTS	CONTACT RATING	CONTROL VOLTAGE	CATALOG NUMBER	WIRING/SOCKET
2 FORM C	10 Amp	24V DC	GR024D2 GR024D2T	8-Pin Octal Socket SR2ZC3  44 55 A2 A
	10 Amp	120V AC	GR120A2 GR120A2T	
3 FORM C	10 Amp	24V DC	GR024D3 GR024D3T	11-Pin Octal Socket SR3ZC3  S
	10 Amp	120V AC	GR120A3 GR120A3T	

See page 9 for additional socket Information

### **GENERAL PURPOSE ROUND RELAYS**

**GR SERIES** 

#### **APPLICATION DATA**

Load (Burden):

DC: approximately 1.4 W; AC: approximately 3.0 VA

Voltage Maximum: 250V

**Output Contacts:** 

10A 250V AC/30V DC 2500 VA/300 W

Horsepower Rating, 1/3 HP 120V AC 1/3 HP 240V AC 1/2 HP 277V AC



(1) 12-20 AWG, solid or stranded

(2) 16-20 AWG, solid or stranded

Life:

10,000,000 mechanical operations 100,000 electrical operations

**Temperature:**  $-40^{\circ}$  C to  $55^{\circ}$  C ( $-40^{\circ}$  F to  $131^{\circ}$  F) **Unit Weight:**Approximately 0.20 lb (90 g)

Approvals: UL/cUL, CE, RoHS compliant



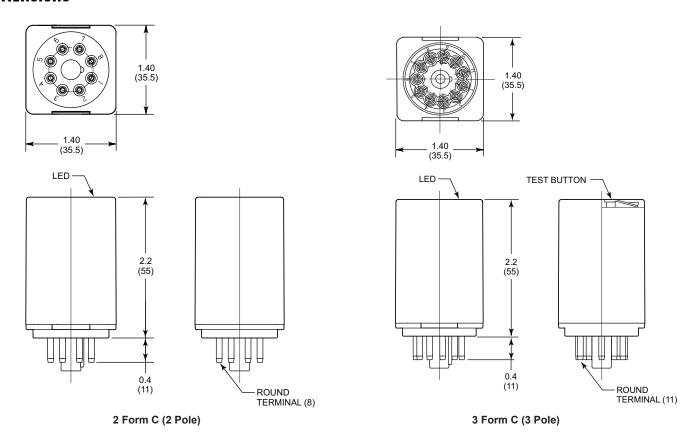






GR120A2 Relay on SR2C3 Socket, left, and GR024D3 Relay on SR3ZC3 Socket, right (Sockets ordered separately)

#### **DIMENSIONS**



**Dimensions in Inches (Millimeters)** 

### SB2ZC5 8 Blade Terminal Sockets DIN-Rail or Screw Mounting

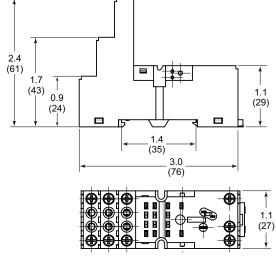


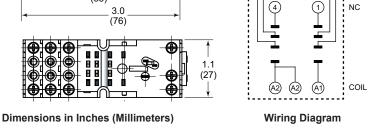
- Optional retainer (See page 10)
- Tighten terminal screws to recommended torque of 5.31 in-lb
- ◆ Approximate weight: 0.14 lb (64g)

Approvals: UL/cUL, CE, RoHS compliant









12

9

СОМ

NO

### **SB3ZC5 11 Blade Terminal Sockets DIN-Rail or Screw Mounting**

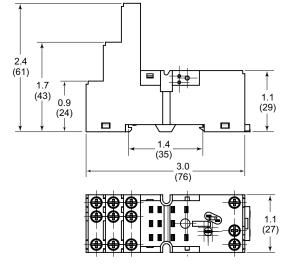


- ◆ Optional retainer (See page 10)
- Tighten terminal screws to recommended torque of 5.31 in-lb
- ◆ Approximate weight: 0.16 lb (71 g)

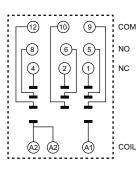
Approvals: UL/cUL, CE, RoHS compliant







**Dimensions in Inches (Millimeters)** 



**Wiring Diagram** 

#### SB4ZC5 14 Blade Terminal Sockets DIN-Rail or Screw Mounting

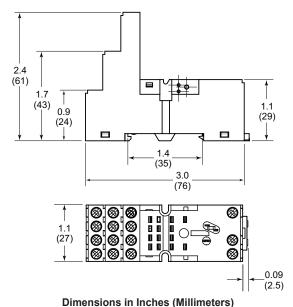


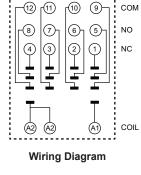
- Optional retainer (See page 10)
- Tighten terminal screws to recommended torque of 5.31 in-lb
- ◆ Approximate weight: 0.16 lb (71 g)

Approvals: UL/cUL, CE, RoHS compliant









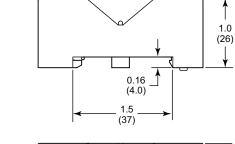
### SR2ZC3 Octal (Round) 8 Pin Sockets DIN-Rail or Screw Mounting

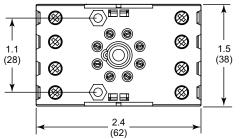


- Tighten terminal screws to recommended torque of 5.31 in-lb
- ◆ Approximate weight: 0.11 lb (49 g)

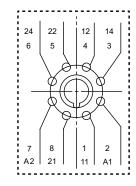








Dimensions in Inches (Millimeters)



Wiring Diagram

### SR3ZC3 Octal (Round) 11 Pin Sockets DIN-Rail or Screw Mounting

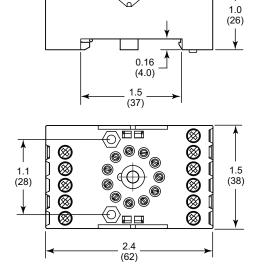


- Tighten terminal screws to recommended torque of 5.31 in-lb
- ◆ Approximate weight: 0.12 lb (56 g)

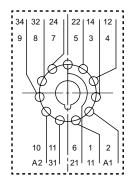
Approvals: UL/cUL, CE, RoHS compliant









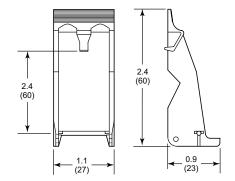


Wiring Diagram

### GB-PR Retainer (Plastic) For use with GB Series Blade Relay/Sockets



GB-PR Retainer (Ordered Separately)

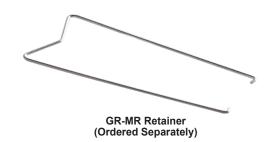


**Dimensions in Inches (Millimeters)** 



Retainer on GB120A4 Relay and SB4ZC5 Socket

### GR-MR Retainer (Metal) For use with GR Series Octal Relay/Sockets





Retainer on GR120A2w Relay and SR2ZC3 Socket

### 10F-2Z-C1 Octal (Round) 8 Pin Sockets DIN-Rail or Screw Mounting



Electrical Ratings: 10A @ 250V

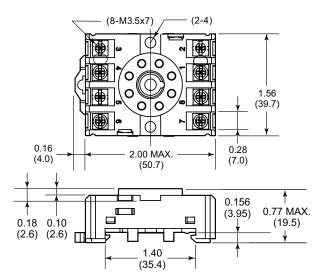
Wiring: 1 or 2, solid or stranded, 16-30 AWG

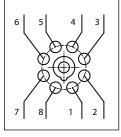
**Termination:** Plus-minus screw (M3.5x7) with pressure plate. Tighten to recommended torque of 5.2 in-lb (maximum 6.9 in-lb)

#### Temperature:

Operating, -25° C to 85° C (-13° F to 185° F); Storage, -40° C to 85° C (-40° F to 185° F)

Approximate Weight: 0.08 lb (36 g)





**Dimensions in Inches (Millimeters)** 

Wiring Diagram 367

Approvals:





### 10F-3Z-C1 Octal (Round) 11 Pin Sockets DIN-Rail or Screw Mounting



Electrical Ratings: 10A @ 250V

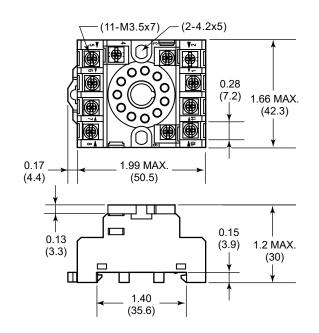
Wiring: 1 or 2, solid or stranded, 16-30 AWG

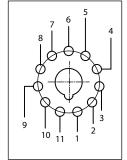
**Termination:** Plus-minus screw (M3.5-7) with pressure plate. Tighten to recommended torque of 5.2 in-lb (maximum 6.9 in-lb)

#### Temperature:

Operating, -25° C to 85° C (-13° F to 185° F); Storage, -40° C to 85° C (-40° F to 185° F)

Approximate Weight: 0.11 lb (50 g)





**Dimensions in Inches (Millimeters)** 

Wiring Diagram 368





### 18F-2Z-C1 8 Blade Terminal Sockets DIN-Rail or Screw Mounting



Electrical Ratings: 10A @ 250V

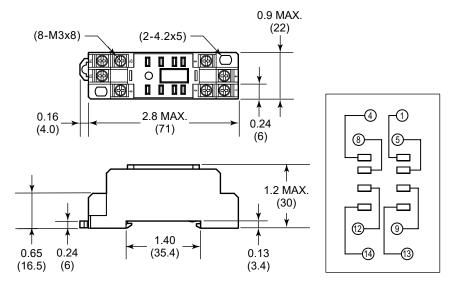
Wiring: 1 or 2, solid or stranded, 16-30 AWG

**Termination:** Plus-minus screw (M3x8) with pressure plate. Tighten to recommended torque of 5.2 in-lb (maximum 6.9 in-lb)

#### Temperature:

Operating, -25° C to 85° C (-13° F to 185° F); Storage, -40° C to 85° C (-40° F to 185° F)

Approximate Weight: 0.07 lb (32 g)



**Dimensions in Inches (Millimeters)** 

Wiring Diagram 369

If using retainer clips, only one is recommended opposite the Push-to-Test button.

Approvals:





### 18F-3Z-C1 11 Blade Terminal Sockets DIN-Rail or Screw Mounting



Electrical Ratings: 10A @ 250V

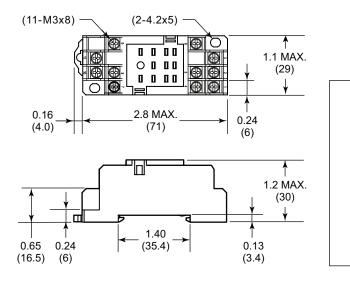
Wiring: 1 or 2, solid or stranded, 16-30 AWG

**Termination:** Plus-minus screw (M3x8) with pressure plate. Tighten to recommended torque of 5.2 in-lb (maximum 6.9 in-lb)

#### Temperature:

Operating, -25° C to 85° C (-13° F to 185° F); Storage, -40° C to 85° C (-40° F to 185° F)

Approximate Weight: 0.10 lb (45 g)



**Dimensions in Inches (Millimeters)** 

Wiring Diagram 370

If using retainer clips, only one is recommended opposite the Push-to-Test button.





### 18F-4Z-C1 14 Blade Terminal Sockets DIN-Rail or Screw Mounting



Electrical Ratings: 10A @ 250V

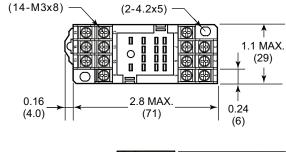
Wiring: 1 or 2, solid or stranded, 16-30 AWG

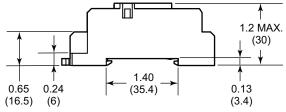
**Termination:** Plus-minus screw (M3x8) with pressure plate. Tighten to recommended torque of 5.2 in-lb (maximum 6.9 in-lb)

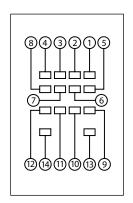
#### Temperature:

Operating, -25° C to 85° C (-13° F to 185° F); Storage, -40° C to 85° C (-40° F to 185° F)

Approximate weight: 0.11 lb (50 g)







**Dimensions in Inches (Millimeters)** 

Wiring Diagram 371

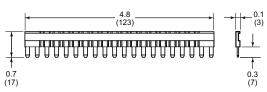
If using retainer clips, only one is recommended opposite the Push-to-Test button.





41F-J1B Jumper For use with GSC Series Slim Relay/Socket







Dimensions in Inches (Millimeters)

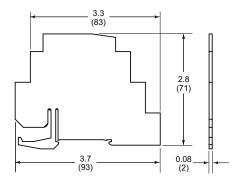
Jumper inserted on relay stack

41F-S Separator
For use with GSC Series Slim Relay/Socket

41F-J1B Jumper



41F-S Separator



**Dimensions in Inches (Millimeters)** 



Separator inserted on relay stack

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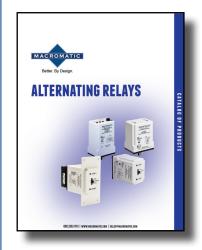
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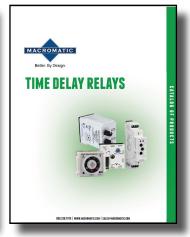


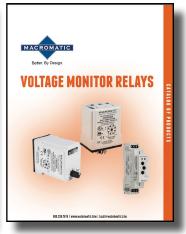


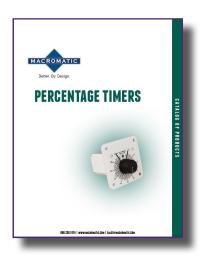






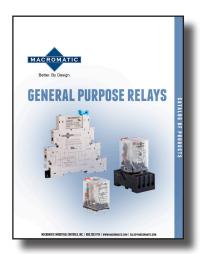








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