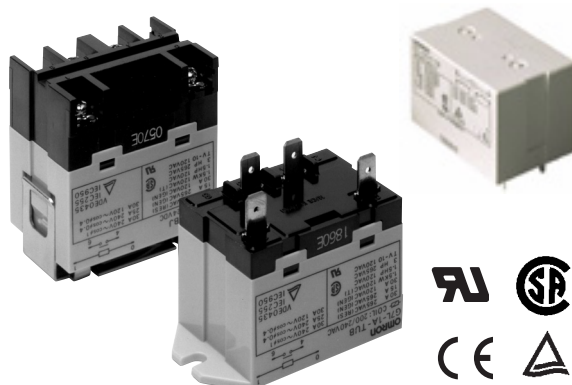


# General Purpose Relay

## G7L

- Ideally suited for high-inrush fluid pump controls: pool/spa, water processing, emergency, chemical industry, etc.
- High-capacity, high-withstand voltage relay with no contact chattering for momentary voltage drops up to 50% of rated voltage.
- UL Class B construction standard.
- Wide-range AC-activated coil that handles 100 to 120 VAC at either 50 or 60 Hz.
- Miniature hinge for maximum switching capacity, particularly for inductive loads.
- Flame resistant materials (UL94V-0-qualifying) used for all insulation material.
- Quick-connect, screw, and PCB terminals available.
- Standard models are UL, CSA, and TUV approved; VDE/IEC 950 versions are now available. Meet pollution degree 3, Material Group II & III.



## Ordering Information

To Order: Select the part number and add the desired coil voltage rating (e.g., G7L-1A-T-CB-AC100/120).

| Type                                         | Contact form | Model                  |                |              |
|----------------------------------------------|--------------|------------------------|----------------|--------------|
|                                              |              | Quick-connect terminal | Screw terminal | PCB terminal |
| E bracket (see note 1)                       | SPST-NO      | G7L-1A-T-CB            | G7L-1A-B-CB    | —            |
|                                              | DPST-NO      | G7L-2A-T-CB            | G7L-2A-B-CB    | —            |
| E bracket (see note 1)<br>(with test button) | SPST-NO      | G7L-1A-TJ-CB           | G7L-1A-BJ-CB   | —            |
|                                              | DPST-NO      | G7L-2A-TJ-CB           | G7L-2A-BJ-CB   | —            |
| Upper bracket                                | SPST-NO      | G7L-1A-TUB-CB          | G7L-1A-BUB-CB  | —            |
|                                              | DPST-NO      | G7L-2A-TUB-CB          | G7L-2A-BUB-CB  | —            |
| Upper bracket<br>(with test button)          | SPST-NO      | G7L-1A-TUBJ-CB         | G7L-1A-BUBJ-CB | —            |
|                                              | DPST-NO      | G7L-2A-TUBJ-CB         | G7L-2A-BUBJ-CB | —            |
| PCB mounting                                 | SPST-NO      | —                      | —              | G7L-1A-P-CB  |
|                                              | DPST-NO      | —                      | —              | G7L-2A-P-CB  |

- Note:**
1. E bracket or socket must be used for mounting (part number R99-07G5D). Refer to "Accessories" section for options and part numbers.
  2. For VDE approved versions, please consult OMRON.
  3. CE marking is provided only on non-PCB terminal versions.

## Model Number Legend

G7L-□□-□□□□  
1 2 3 4 5 6

### 1. Contact form

1A:SPST-NO  
2A:DPST-NO

### 2. Terminal shape

T:Quick-connect terminals  
P:PCB terminals  
B:Screw terminals

### 3. Mounting construction

No symbol:E bracket type  
UB:Upper bracket type

### 4. Special functions

No symbol:Without test button  
J:With test button

### 5. 80: VDE approved version

(includes UL, CSA and TÜV)

### 6. CB: Class B insulation

### 7. Rated coil voltage

## Accessories

### Quick-connect Terminals

| Description             | Model        |           |          |           | Model     |
|-------------------------|--------------|-----------|----------|-----------|-----------|
|                         | Contact form |           |          |           |           |
|                         | SPST-NO      |           | DPST-NO  |           |           |
| E-brackets              | G7L-1A-T     | G7L-1A-TJ | G7L-2A-T | G7L-2A-TJ | R99-07G5D |
| Track mounting adaptor  |              |           |          |           | P7LF-D    |
| Front connecting socket |              |           |          |           | P7LF-06   |

**Note:** A socket terminal cover is supplied with the P7LF-06 socket and does not attach directly to the G7L relays. It cannot be purchased separately.

### Screw Terminals

| Description            | Model        |           |          |           | Model     |
|------------------------|--------------|-----------|----------|-----------|-----------|
|                        | Contact form |           |          |           |           |
|                        | SPST-NO      |           | DPST-NO  |           |           |
| E-brackets             | G7L-1A-B     | G7L-1A-BJ | G7L-2A-B | G7L-2A-BJ | R99-07G5D |
| Track mounting adaptor |              |           |          |           | P7LF-D    |
| Terminal Cover         |              |           |          |           | P7LF-C    |

**Note:** The P7LF-C terminal cover attaches directly to the G7L-B style relays. It is sold separately.

## Specifications

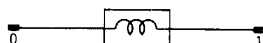
### Contact Data

| Load                    | G7L-1A-T, G7L-1A-B                                      |                                | G7L-2A-T, G7L-2A-B           |                                | G7L-1A-P, G7L-2A-P           |                                |
|-------------------------|---------------------------------------------------------|--------------------------------|------------------------------|--------------------------------|------------------------------|--------------------------------|
|                         | Resistive load<br>(cosφ = 1)                            | Inductive load<br>(cosφ = 0.4) | Resistive load<br>(cosφ = 1) | Inductive load<br>(cosφ = 0.4) | Resistive load<br>(cosφ = 1) | Inductive load<br>(cosφ = 0.4) |
| Rated load              | 30 A, 220 VAC                                           | 25 A, 220 VAC                  |                              |                                | 20 A, 220 VAC                |                                |
| Contact material        | AgSnIn                                                  |                                |                              |                                |                              |                                |
| Carry current           | 30 A                                                    |                                | 25 A                         |                                | 20 A                         |                                |
| Max. operating voltage  | 250 VAC                                                 |                                |                              |                                |                              |                                |
| Max. operating current  | 30 A                                                    |                                | 25 A                         |                                | 20 A                         |                                |
| Max. switching capacity | 6,600 VA                                                | 5,500 VA                       |                              |                                | 4,400 VA                     |                                |
| Min. permissible load   | 100 mA, 5 VDC (please inquire for lower minimum rating) |                                |                              |                                |                              |                                |

**Note:** P level:  $\lambda_{60} = 0.1 \times 10^{-6}$  operation.

### Coil Internal Circuit

#### DC operating coil



#### AC operating coil

