

# OMRON

# Product Discontinuation Notices

February 1, 2012

Safety Relays

No. 2012037E

# Discontinuation Notice of Safety Relay and Socket. G7S series, P7S series

**Product Discontinuation** 

X

Safety Relay G7S series Socket P7S series

# **Recommended Replacement**

Safety Relay G7S-E series Socket P7S-E series

### Discontinuation date : The end of March, 2013

| Model       | Body<br>Color | Dimen<br>sions | Wire connection | Mounting<br>Dimensions | Charact<br>eristics | Operation ratings | Operation<br>methods |
|-------------|---------------|----------------|-----------------|------------------------|---------------------|-------------------|----------------------|
| G7S-E       | **            | **             | **              | **                     | *                   | **                | -                    |
| P7S-14F-END | **            |                | **              | **                     |                     | -                 | -                    |
| P7S-14P-E   | **            |                | **              | **                     | *                   | -                 | -                    |

\*\* : Fully compatible

\* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

#### Product Discontinuation and recommended replacement

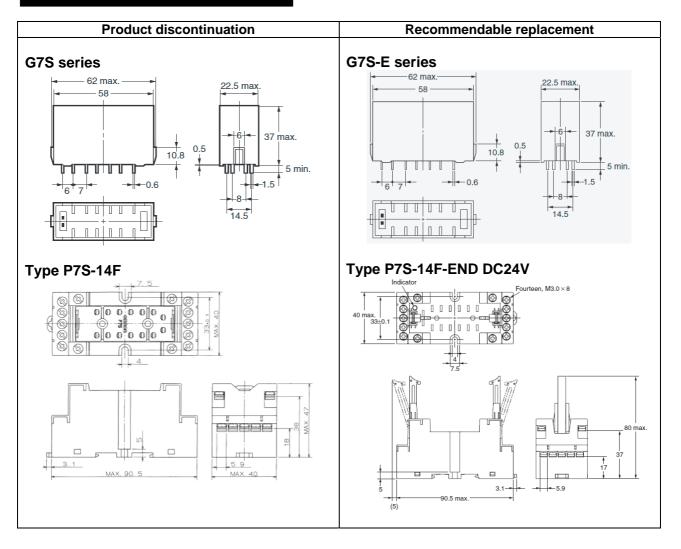
| Product discontinuation | Recommended replacement    |
|-------------------------|----------------------------|
| G7S-3A3B DC24V          | G7S-3A3B-E DC24V           |
| G7S-4A2B DC24V          | G7S-4A2B-E DC24V           |
| P7S-14F                 | P7S-14F-END DC24V          |
| P7S-14F-ND DC24V        | P7S-14F-END DC24V          |
| P7S-14P                 | P7S-14P-E                  |
| P7S-B (desorbed clasp)  | No recommended replacement |

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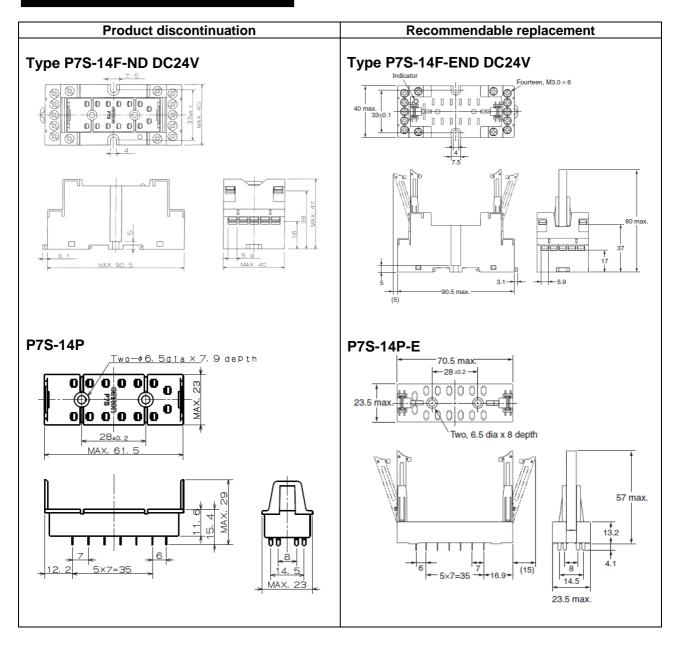
#### Body color

| Product discontinuation  | Recommendable replacement   |  |  |
|--|---|--|--|
| G7S series : Bister<br>Type P7S-14F : Ivory<br>Type P7S-14F-ND DC24V : Ivory<br>Type P7S-14P : Black<br>P7S-B : Silver | G7S-E series : Bister<br>Type P7S-14F-END DC24V : Ivory<br>Type P7S-14F-END DC24V : Ivory<br>Type P7S-14P-E : Black |  |  |

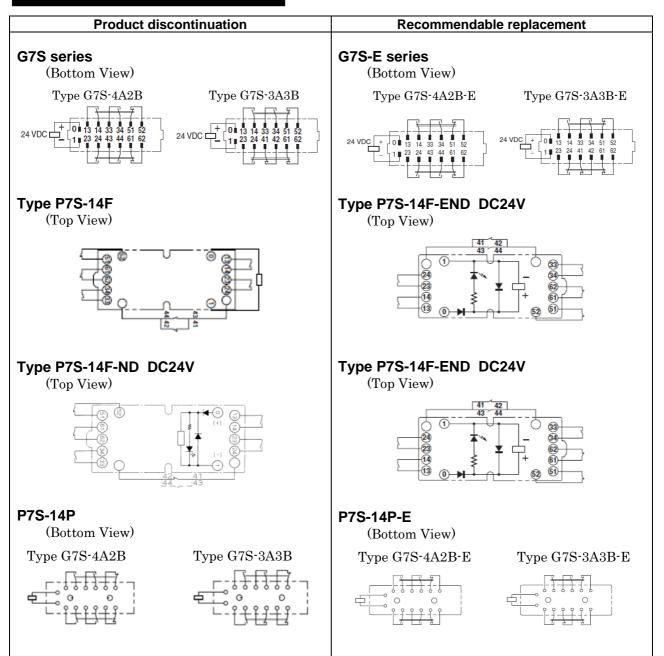
#### Dimensions



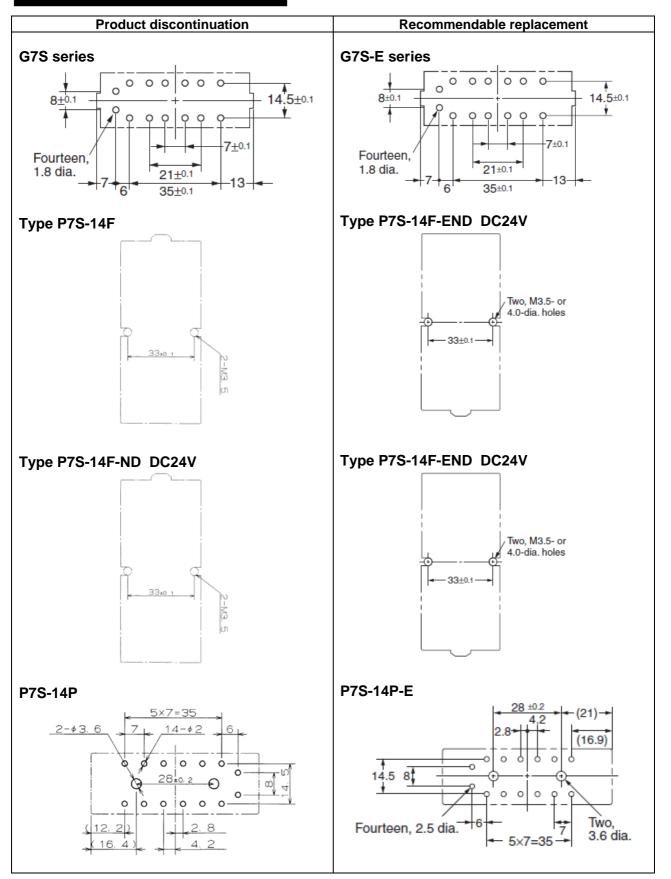
#### Dimensions



#### **Wire Connection**



#### Mounting dimensions



## Characteristics

| Product discontinuation   | Recommendable replacement  |  |  |
|---|--|--|--|
| G7S series<br>Dielectric strength<br>2,500VAC, 50/60Hz for 1min<br>(1,500 VAC between contacts of same polarity)  | <ul> <li>G7S-E series</li> <li>Dielectric strength Between coil and contacts: Between coil and pole 3 or coil and pole 4: 4,000 VAC, 50/60 Hz for 1 min Other than the above:2,500 VAC, 50/60 Hz for 1 min Between different poles: Between pole 1, 3, or 5 and pole 2, 4, or 6: 4,000 VAC, 50/60 Hz for 1 min Other than the above:2,500 VAC, 50/60 Hz for 1 min Other than the above:2,500 VAC, 50/60 Hz for 1 min Other than the above:2,500 VAC, 50/60 Hz for 1 min Other than the above:2,500 VAC, 50/60 Hz for 1 min Other than the above:2,500 VAC, 50/60 Hz for 1 min Between contacts of same polarity: 1,500 VAC, 50/60 Hz for 1 min *1. When using a P7S Socket, the dielectric strength between coil and contacts and between different poles is 2,000 VAC, 50/60 Hz for 1 min. *2. The coil refers to terminals 0-1, pole 1 refers to terminals 13-14, pole 2 refers to terminals 23-24, pole 3 refers to terminals 33-34, pole 4 refers to terminals 41-42 or 43-44, pole 5 refers to terminals 51-52, and pole 6 refers to terminals 61-62.</li></ul> |  |  |
| Contacts<br>Rated load<br>Resistive load Inductive Load (*3)<br>3A at 240VAC 3A at 240VAC<br>3A at 24VDC 1A at 24VDC<br>Rated carry current: 6A<br>Maximum switching voltage : 250VAC, 24VDC<br>Maximum switching current: 6A<br>*3. cosø =0.4, L/R=7ms | Contacts<br>Rated load<br>NO contact<br>Resistive load Inductive Load (*4)<br>10A at 250VAC AC15: 5A at 240VAC<br>10A at 30VDC DC13: 2A at 24VDC<br>NC contact<br>Resistive load Inductive Load (*3)<br>6A at 250VAC AC15: 3A at 240VAC<br>6A at 30VDC DC13: 2A at 24VDC<br>Rated carry current<br>NO contact : 10A<br>NC contact : 6A<br>Maximum switching voltage : 250VAC, 30VDC<br>Maximum switching current<br>NO contact: 10A<br>NC contact: 6A<br>*4. In the above table, cosø = 0.3 for AC-15 inductive<br>loads and L/R = 96 ms for DC-13 inductive loads.  |  |  |

## Characteristics

| Product discontinuation   | Recommendable replacement  |  |  |
|---|--|--|--|
| <ul> <li>Type P7S-14F</li></ul>   | <ul> <li>Type P7S-14F-END DC24V</li></ul>  |  |  |
| Ratings   | Ratings  |  |  |
| Rated carry current : 6A  | Rated carry current : 10A  |  |  |
| Characteristics (Initial value)   | Characteristics(Initial value)   |  |  |
| Contact resistance: 30 m ohm MAX. <li>* Measured by the voltage drop method with DC5V</li>  | Contact resistance: 50 m ohm MAX. <li>* Measured by the voltage drop method with DC5V</li>   |  |  |
| 10mA applied. <li>Dielectric strength</li>  | 10mA applied. <li>Dielectric strength</li>   |  |  |
| Between coil and contact terminal : 2000VAC   | Between coil and contact terminal : 2000VAC  |  |  |
| Between contact terminals of different polarity : 2000AC  | Between contact terminals of different polarity : 2000AC   |  |  |
| Between contact terminals of same polarity : 2000VAC <li>* Leakage current 2mA 50/60Hz for 1 minute.</li> <li>Operating conditions</li>   | Between contact terminals of same polarity : 1500VAC <li>* Leakage current 10mA 50/60Hz for 1 minute.</li> <li>Operating conditions</li>   |  |  |
| Humidity : 5 to 85 %RH  | Humidity : 35 to 85 %RH  |  |  |
| Type P7S-14F-ND DC24V         Ratings         Rated carry current : 6A         Characteristics (Initial value)         Contact resistance: 30 m ohm MAX.         * Measured by the voltage drop method with DC5V         10mA applied.         Dielectric strength         Between coil and contact terminal : 2000VAC         Between contact terminals of different polarity : 2000AC         Between contact terminals of same polarity : 2000VAC         * Leakage current 10mA 50/60Hz for 1 minute.         Operating conditions         Humidity : 5 to 85 %RH | Type P7S-14F-END DC24VRatingsRated carry current : 10ACharacteristics(Initial value)Contact resistance: 50 m ohm MAX.* Measured by the voltage drop method with DC5V10mA applied.Dielectric strengthBetween coil and contact terminal : 2000VACBetween contact terminals of different polarity : 2000ACBetween contact terminals of same polarity : 1500VAC* Leakage current 10mA 50/60Hz for 1 minute.Operating conditionsHumidity : 35 to 85 %RH |  |  |
| <ul> <li>P7S-14P</li></ul>  | <ul> <li>P7S-14P-E</li></ul>   |  |  |
| Ratings   | Ratings  |  |  |
| Rated carry current : 6A  | Rated carry current : 10A  |  |  |
| Characteristics (Initial value)   | Characteristics(Initial value)   |  |  |
| Contact resistance: 10 m ohm MAX. <li>* Measured by the voltage drop method with DC5V</li>  | Contact resistance: 50 m ohm MAX. <li>* Measured by the voltage drop method with DC5V</li>   |  |  |
| 10mA applied. <li>Dielectric strength</li>  | 10mA applied. <li>Dielectric strength</li>   |  |  |
| Between coil and contact terminal : 2000VAC   | Between coil and contact terminal : 2000VAC  |  |  |
| Between contact terminals of different polarity : 2000AC  | Between contact terminals of different polarity : 2000AC   |  |  |
| Between contact terminals of same polarity : 1500VAC <li>* Leakage current 2mA 50/60Hz for 1 minute.</li>   | Between contact terminals of same polarity : 1500VAC <li>* Leakage current 1mA 50/60Hz for 1 minute.</li>  |  |  |

## **Operation ratings**

| Product discontinuation  | Recommendable replacement   |  |  |
|--|---|--|--|
| G7S series   | G7S-E series  |  |  |
| Rated voltage : 24VDC  | Rated voltage : 24VDC   |  |  |
| Rated current (mA) : 30  | Rated current (mA) : 30   |  |  |
| Coil resistance $(\Omega)$ : 800   | Coil resistance ( $\Omega$ ) : 800  |  |  |
| Must operate voltage (V) : 80% max.  | Must operate voltage (V) : 80% max.   |  |  |
| Must release voltage (V) : 10% min   | Must release voltage (V) : 10% min  |  |  |
| Max voltage(V) : $110\%$   | Max voltage (V) : 110%  |  |  |
| Power consumption (W) : Approx 0.8   | Power consumption (W) : Approx 0.8  |  |  |
| <ul> <li>*5. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of ±15%.</li> <li>*6. Performance characteristics are based on a coil temperature of 23°C.</li> <li>*7. The maximum voltage is based on an ambient operating temperature of 23°C maximum.</li> </ul> | <ul> <li>*8. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of ±15%.</li> <li>*9. Performance characteristics are based on a coil temperature of 23°C.</li> <li>*10. The maximum voltage is based on an ambient operating temperature of 23°C maximum.</li> </ul> |  |  |