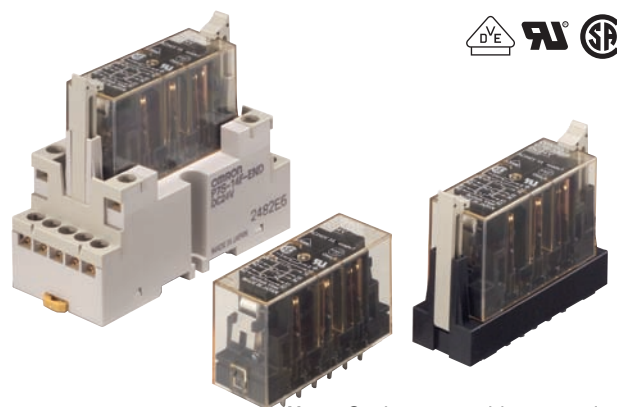


Relays with Forcibly Guided Contacts and High Switching Capacity of 10 A

- Relays with forcibly guided contacts (EN61810-3, certified by VDE).
- Supports the CE marking of machinery (Machinery Directive).
- Helps avoid hazardous machine status when used as part of an interlocking circuit.
- Track-mounting and Back-mounting Sockets are available.

 Be sure to read the "Safety Precautions" on page 5 and the "Precautions for All Relays with Forcibly Guided Contacts".



Note: Sockets are sold separately.

For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Model Number Structure

Model Number Legend

G7S-□A□B-E
1 2

1. NO Contact Poles

- 4: 4PST-NO
- 3: 3PST-NO

2. NC Contact Poles

- 2: DPST-NC
- 3: 3PST-NC

Ordering Information

Main unit

Relays with Forcibly Guided Contacts

Type	Poles	Contact configuration	Rated voltage	Model
Standard	6 poles	4PST-NO, DPST-NC	24 VDC	G7S-4A2B-E
		3PST-NO, 3PST-NC		G7S-3A3B-E

Options (order separately)

Sockets

Type	Rated voltage	Model
Track-mounting	Common for track mounting and screw mounting	24 VDC
Back-mounting	PCB terminals	---

Specifications

Ratings

Safety Relay Unit

Coil

Rated voltage	Item	Rated current (mA)	Coil resistance (Ω)	Max. voltage (V)	Power consumption (W)
24 VDC		30	800	110%	Approx. 0.8

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of ±15%.

2. The maximum voltage is based on an ambient operating temperature of 23°C maximum.

Certified Standards

Safety Relay Unit

EN Standards, VDE Certified

Models	Ratings	Standard number	Certification No.	Operating coil	Contact ratings
G7S-3A3B-E G7S-4A2B-E	24 VDC	EN61810-1 Electromagnetic relay EN61810-3 Relays with forcibly guided contacts	40011951	24 VDC	NO Contact: 10 A 250 VAC (Resistive) 10 A 30 VDC (Resistive) NC Contact: 6 A 250 VAC (Resistive) 6 A 30 VDC (Resistive)

UL Standards Certification (File No. E41515) Industrial Control Devices

Models	Standard number	Category	Listed/Recognized	Contact ratings	Operating Coil ratings
G7S-3A3B-E G7S-4A2B-E	UL508	NRNT2	Recognized	NO Contact: 10 A per pole, 20 A total, 277 VAC (Resistive) NC Contact: 6 A per pole, 20 A total, 277 VAC (Resistive)	24 VDC

CSA standard CSA C22.2 No.14 Industrial Control Devices

Models	Class number	File No.	Contact ratings	Operating Coil ratings
G7S-3A3B-E G7S-4A2B-E	3211-07	LR35535	NO Contact: 10 A per pole, 20 A total, 277 VAC (Resistive) NC Contact: 6A per pole, 20 A total, 277 VAC (Resistive)	24 VDC

Sockets

CE Marking Compliance

Models	EMC Directive	Low Voltage Directive	Machinery Directive	Safety Category
P7S-14F-END P7S-14P-E	Not applicable	○	Not applicable	1

The CE compliance declaration was made in combination with the Safety Relay.

Note: 1. The Safety Category refers to the maximum applicable category selected when constructing control system safety components. The category does not apply to individual components.

2. Details and other information on conformity levels are issued as part of the "EU Declaration of Conformity". Please contact your OMRON representative for more information.

EN Standards, VDE Certified

Models	Standard number	Certification No.
P7S-14F-END P7S-14P-E	EN61984	40007595

UL Standards Certification (File No. E87929) Industrial Control Devices

Models	Standard number	Category	Listed/Recognized
P7S-14F-END P7S-14P-E	UL508	SWIV2	Recognized

CSA standard CSA C22.2 No.14 and CSA C22.2 No. 158 Industrial Control Devices

Models	Class number	File No.
P7S-14F-END P7S-14P-E	3211 07	LR35535

Forcibly Guided Contacts (from EN61810-3)

If an NO contact becomes welded, all NC contacts will maintain a minimum distance of 0.5 mm when the coil is not energized. Likewise if an NC contact becomes welded, all NO contacts will maintain a minimum distance of 0.5 mm when the coil is energized.

Safety Precautions

Be sure to read the precautions for “*Precautions for All Relays with Forcibly Guided Contacts*” in the website at:<http://www.ia.omron.com/>.

Indication and Meaning for Safe Use

 CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.
Precautions for Safe Use	Supplementary comments on what to do or avoid doing, to use the product safely.

CAUTION

Do not pass currents of 6 A or more when using this product in combination with the P7S-14F/14P/14A Socket. Doing so may result in fire. Use this product in combination with the P7S-14F-END/14P-E.



Precautions for Correct Use

Wiring

- Use one of the following wires to connect to the P7S-14F-END.
Stranded wire: 0.75 to 1.5 mm²
Solid wire: 1.0 to 1.5 mm²
- Tighten each screw of the P7S-14F-END to a torque of 0.78 to 0.98 N·m.
- Wire the terminals correctly with no mistakes in coil polarity, otherwise the G7S will not operate.
- If you use the P7S-14F-END, the release time of the G7S will be longer because the P7S-14F-END has a built-in diode to absorb coil surge. Confirm operation under actual conditions before you use the P7S-14F-END.

Cleaning

The G7S is not of enclosed construction. Therefore, do not wash the G7S with water or detergent.

Mounting

The G7SA can be installed in any direction.