

Safety Relay Unit

G9SA

CSM_G9SA_DS_E_10_2

The G9SA Series Offers a Complete Line-up of Compact Units.



- Four kinds of 45-mm wide Units are available:
A 3-pole model, a 5-pole model, and models with 3 poles and 2 OFF-delay poles, as well as a Two-hand Controller. Also available are 17.5-mm wide Expansion Units with 3 poles and 3 OFF-delay poles.
- Simple expansion connection.
- OFF-delay models have 15-step OFF-delay settings.
- Conforms to EN ISO13849-1 (PL_e/Safety Category 4).
- Both DIN track mounting and screw mounting are possible.



Be sure to read the "Safety Precautions" on page 16

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

G9SA- -

1 2 3 4 5 6

1. Function

None: Emergency stop
EX: Expansion Unit
TH: Two-hand Controller

2. Contact Configuration (Safety Output)

0: None
3: 3PST-NO
5: 5PST-NO

3. Contact Configuration (OFF-delay Output)

0: None
2: DPST-NO
3: 3PST-NO

4. Contact Configuration (Auxiliary Output)

0: None
1: SPST-NC

5. Input Configuration

None: 1-channel or 2-channel input possible

6. OFF-delay Time (Max. setting time)

None: No OFF-delay
T075: 7.5 seconds
T15: 15 seconds
T30: 30 seconds

Note: 1. Please see "Ordering Information" on page 2 for the actual models that can be ordered.
2. Specify the power supply voltage when ordering.

Ordering Information

Specify the power supply voltage when ordering.

Emergency-stop Units

Main contacts	Auxiliary contact	Number of input channels	Rated voltage	Model
3PST-NO	SPST-NC	1 channel or 2 channels possible	24 VAC/VDC	G9SA-301
			100 to 240 VAC	
5PST-NO			24 VAC/VDC	G9SA-501
			100 to 240 VAC	

Emergency-stop OFF-delay Units

Main contacts	OFF-delay contacts	Auxiliary contact	Number of input channels	OFF-delay time	Rated voltage	Model
3PST-NO	DPST-NO	SPST-NC	1 channel or 2 channels possible	7.5 s	24 VAC/VDC	G9SA-321-T075
					100 to 240 VAC	
				15 s	24 VAC/VDC	G9SA-321-T15
					100 to 240 VAC	
				30 s	24 VAC/VDC	G9SA-321-T30
					100 to 240 VAC	

Note: Set to maximum values in the factory.

* The following 15-step OFF-delay time settings are available:

T075: 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, and 7.5 s

T15: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15 s

T30: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, and 30 s

Two-hand Controller

Main contacts	Auxiliary contact	Number of input channels	Rated voltage	Model
3PST-NO	SPST-NC	2 channels	24 VAC/VDC	G9SA-TH301
			100 to 240 VAC	

Expansion Unit

The Expansion Unit connects to a G9SA-301, G9SA-501, G9SA-321, or G9SA-TH301.

Main contacts	Auxiliary contact	Model
3PST-NO	SPST-NC	G9SA-EX301

Expansion Units with OFF-delay Outputs

The Expansion Unit connects to a G9SA-301, G9SA-501 or G9SA-321.

Main contact form	Auxiliary contact	OFF-delay time	Model
3PST-NO	SPST-NC	7.5 s	G9SA-EX031-T075
		15 s	G9SA-EX031-T15
		30 s	G9SA-EX031-T30

Note: Set to maximum values in the factory.

* The following 15-step OFF-delay time settings are available:

T075: 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, and 7.5 s

T15: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15 s

T30: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, and 30 s