

Overview

- Relay outputs as a supplement to the integral I/O of the CPUs
- Integrated into the overall automation for the implementation of safety-related requirements
- With integrated safety functions
- Communication with fail-safe CPUs via PROFIsafe mechanisms
- For flexible adaptation of the controller to the corresponding task
- For subsequent expansion of the system with additional outputs
- Operable exclusively in the central system

3**Technical specifications**

Article number	6ES7226-6RA32-0XB0 DIGITAL OUTPUT SM 1226, F-DQ 2X RELAY
General information	
Product type designation	SM 1226 F-DQ 2 x Relay
Supply voltage	
Rated value (DC)	
• 24 V DC	Yes
Input current	
from backplane bus 5 V DC, max.	120 mA
Digital outputs	
• from load voltage L+, max.	300 mA
Power loss	
Power loss, typ.	10 W
Digital outputs	
Number of digital outputs	2
Short-circuit protection	No
Output voltage	
• Rated value (DC)	5 V DC to 30 V DC
• Rated value (AC)	5 V AC to 250 V AC
Output current	
• for signal "I" permissible range, max.	5 A maximum per circuit and 10 A maximum of all circuits per module
Relay outputs	
• Number of relay outputs	2; 2 circuits per output
Switching capacity of contacts	
- with inductive load, max.	0.1 Hz, accordance with IEC 60947-5-1, DC-13; 2 Hz, accordance with IEC 60947-5-1, AC-15
- with resistive load, max.	2 Hz
Cable length	
• shielded, max.	200 m
• unshielded, max.	200 m
Diagnostics indication LED	
• for status of the outputs	Yes

Article number	6ES7226-6RA32-0XB0 DIGITAL OUTPUT SM 1226, F-DQ 2X RELAY
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
FM approval	Yes
Highest safety class achievable in safety mode	
• SIL acc. to IEC 61508	SIL 3
Ambient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
Dimensions	
Width	70 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	300 g

SIMATIC S7-1200 Basic Controllers

I/O modules

Fail-safe digital modules

SM 1226 fail-safe relay output modules

Ordering data	Article No.	Article No.
SM 1226 fail-safe relay output signal module 2 relay outputs	6ES7226-6RA32-0XB0	STEP 7 Safety Basic V14 SP1 Task: Engineering tool for configuring fail-safe user programs for SIMATIC S7-1200 FC Requirement: STEP 7 Basic V14 SP1 and higher Floating license for 1 user; software and documentation on DVD; license key on USB flash drive Floating license for 1 user; software, documentation and license key for download ¹⁾ ; email address required for delivery
Accessories		
Terminal block (spare part) With 11 screws, tin-coated, coded; 4 units	6ES7292-1AL40-0XA0	
Front flap set (spare part) For modules with a width of 70 mm	6ES7291-1BB30-0XA0	
STEP 7 Safety Advanced V14 SP1 Task: Engineering tool for configuring and programming fail-safe user programs for SIMATIC S7-1200 FC, S7-1500F, S7-1500F Software Controller, S7-300F, S7-400F, WinAC RTX F, ET 200SP F Controller and the fail-safe ET 200SP, ET 200S, ET 200M, ET 200iSP, ET 200pro and ET 200eco I/O Requirement: STEP 7 Professional V14 SP1 Floating license for 1 user, software and documentation on DVD; license key on USB flash drive Floating license for 1 user, software, documentation and license key for download ¹⁾ ; email address required for delivery	6ES7833-1FA14-0YA5 6ES7833-1FA14-0YH5	

¹⁾ For up-to-date information and download availability, see:
<http://www.siemens.com/tia-online-software-delivery>

SIMATIC S7-1200 Basic ControllersI/O modules
SIPLUS Fail-safe**SIPLUS SM 1226 fail-safe relay output modules****Overview**

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Note

SIPLUS extreme products are based on SIMATIC standard products. The contents listed here were taken from the corresponding standard products. SIPLUS extreme-specific information was added.

Technical specifications

Article number	6AG1226-6RA32-5XB0
Based on	6ES7226-6RA32-0XB0 SIPLUS S7-1200 SM 1226 F-DQ 2xRelay
Ambient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	-25 °C; = Tmin
• max.	55 °C; = Tmax
Extended ambient conditions	
• relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)
Relative humidity	
- With condensation, tested in accordance with IEC 60068-2-38, max.	100%; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
- against biologically active substances / conformity with EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- against chemically active substances / conformity with EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
- against mechanically active substances / conformity with EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Ordering data**Article No.**

SIPLUS SM 1226 fail-safe relay output signal module 2 relay outputs	6AG1226-6RA32-5XB0
Accessories	See SIMATIC SM 1226 fail-safe relay output signal module, page 3/162