

6ES7322-1HH01-0AA0

SIMATIC S7-300 SM 322 16-Relay Digital Output Module

Siemens 6ES7322-1HH01-0AA0 is a SIMATIC S7-300 SM 322 digital output module with 16 isolated relay-contact outputs. It uses a 20-pole front connector and switches documented AC or DC field

PRODUCT SNAPSHOT

BRAND
Siemens

FAMILY
SIMATIC S7-300

PART
6ES7322-1HH01-0AA0

DOCUMENT STATUS
Controlled engineering copy

APTER POWER

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PRODUCT OVERVIEW

Siemens 6ES7322-1HH01-0AA0 provides switching sixteen isolated relay-contact field loads from a documented S7-300 station in a documented SIMATIC S7-300 installation.



Sixteen relay-contact outputs



Two isolated groups of eight



24-120 V DC or 24-230 V AC loads



20-pole front connector

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1 Siemens 6SL3351-1AE37-5BA1	2 Siemens 6SL3350-6TK00-0BA0	3 Siemens 6RA8075-6DS22-0AA0
4 Siemens 6SE7041-8GK85-0HA0	5 Siemens 6SE7041-8EK85-0HA0	6 Siemens 6SE7041-8EK85-1HA0
7 Siemens 6SL3200-0SP01-0AA0	8 Siemens 6SE7041-8HK85-1HA0	9 Siemens A5E36717811

SYSTEM COMPONENTS

DOCUMENTED COMPONENT	ROLE IN SYSTEM
SM 322 relay-output module	Documented S7-300 rack and slot
20-pole front connector	Two isolated field-load groups

ENGINEERING CONTEXT

The component remains matched to its documented cabinet position, power source, interfaces and approved engineering configuration. Commissioning restores that architecture and verifies the affected control or communication function under controlled conditions.

TECHNICAL DATA

PARAMETER	VALUE	PARAMETER	VALUE
Product designation	SM 322 digital output module	Relay-coil supply	24 V DC
Host system	SIMATIC S7-300	Switching frequency, resistive load	1 Hz maximum
Digital outputs	16 relay contacts	Switching frequency, inductive load	0.5 Hz maximum
Isolation groups	2 groups of 8 outputs	Switching frequency, lamp load	1 Hz maximum
Front connector	1 x 20-pole	Mechanical switching frequency	10 Hz maximum
Load voltage DC	24 to 120 V DC	Backplane current	100 mA maximum at 5 V DC
Load voltage AC	24 to 230 V AC	24 V supply current	250 mA maximum
Nominal output current	2 A	Power loss	4.5 W typical
Minimum load current	10 mA	Lifecycle status	Product phase-out since 1 October 2023

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TECHNICAL NOTE

Install 6ES7322-1HH01-0AA0 only in the documented SIMATIC S7-300 position and preserve its exact wiring, interfaces and configuration. After controlled energization, verify diagnostics and switching sixteen isolated relay-contact field loads from a documented S7-300 station before service release.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Contactor and starter control

Switches documented AC or DC coils through the approved relay contacts.

Solenoid-valve control

Operates field solenoids within the specified load and switching limits.

Signal-lamp output

Controls documented indication circuits from an S7-300 output image.

Legacy SM 322 replacement

Restores the exact slot, connector, supply groups and output assignments.

PRODUCT PRECAUTIONS

1

Confirm the complete 6ES7322-1HH01-0AA0 marking and the documented SIMATIC S7-300 SM 322

2

Place the machine, controller and affected process in the approved maintenance state.

3

Isolate all hazardous energy and prove the safe state before disconnecting hardware.

4

Record the installed position, every terminal or port, and the active engineering configuration.

5

Verify the exact electrical, interface and environmental limits in the manufacturer evidence.

6

Restore protective earth, shielding, wiring, communications and the approved project or

7

Energize under control and review all device, rack, network and process diagnostics.

8

Complete a controlled functional test of switching sixteen isolated relay-contact field loads from a

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ENGINEER FAQ

Q1 How many relay outputs does Siemens 6ES7322-1HH01-0AA0 provide?

The SM 322 provides 16 relay-contact digital outputs.

Q2 How are the outputs of 6ES7322-1HH01-0AA0 isolated?

The 16 outputs are electrically isolated in two groups of eight.

Q3 Which field voltages can 6ES7322-1HH01-0AA0 switch?

The official module data specifies 24 to 120 V DC and 24 to 230 V AC load-voltage ranges.

Q4 What is the nominal output current of 6ES7322-1HH01-0AA0?

Each documented relay output is rated at a nominal 2 A, subject to the official load and grouping limits.

Q5 Which front connector is used by 6ES7322-1HH01-0AA0?

The module uses one 20-pole S7-300 front connector.

Q6 What relay-coil supply must be checked for 6ES7322-1HH01-0AA0?

Confirm the documented 24 V DC relay-coil supply and both output-group supply assignments before energization.

Q7 What must be recorded before replacing 6ES7322-1HH01-0AA0?

Record the rack slot, 20-pole connector, two supply groups, all 16 load assignments, protection and STEP 7 hardware configuration.

Q8 What proves 6ES7322-1HH01-0AA0 is ready for service?

Verify module diagnostics and command every assigned relay output under controlled conditions while confirming the intended field response.

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SOURCE Siemens Industry Mall exact-article record and SIMATIC S7-300 Module Data manual for 6ES7322-1HH01-0AA0 | Official manufacturer evidence verified 30 September 2026
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