

APTER POWER PRODUCT MANUAL

6ES7416-2FN05-0AB0

SIMATIC S7-400 CPU 416F-2

The Siemens 6ES7416-2FN05-0AB0 is a fail-safe SIMATIC S7-400 CPU 416F-2 with 5.6 MB work memory, divided into 2.8 MB code and 2.8 MB data, plus an MPI/DP interface and a second PROFIBUS DP interface.

It executes standard and safety-related control logic and exchanges process and safety data with configured PROFIBUS devices when engineered with the specified Siemens Distributed Safety software. Siemens has cancelled this article and lists 6ES7416-2FP07-0AB0 as its substitute.

Manufacturer	Siemens
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

A safety CPU replacement is a validation project,
not a part swap.

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SCAN FOR PRODUCT & QUOTE
6ES7416-2FN05-0AB0

1. Product Overview and Identity

The Siemens 6ES7416-2FN05-0AB0 is a fail-safe SIMATIC S7-400 CPU 416F-2 with 5.6 MB work memory, divided into 2.8 MB code and 2.8 MB data, plus an MPI/DP interface and a second PROFIBUS DP interface.

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Model Configuration

Field	Verified information
Complete model	6ES7416-2FN05-0AB0
Manufacturer	Siemens
Product description	SIMATIC S7-400 CPU 416F-2

Key Features

- Exact Siemens MLFB 6ES7416-2FN05-0AB0
- SIMATIC S7-400 CPU 416F-2
- 5.6 MB: 2.8 MB code and 2.8 MB data
- MPI/PROFIBUS DP, 12 Mbit/s; PROFIBUS DP
- Model-specific lifecycle and installation guidance

2. Technical Specifications

Only manufacturer-confirmed information is stated. Values absent from the named Siemens source are marked for nameplate or document verification.

Parameter	Verified value
Product type	CPU 416F-2
Work memory	5.6 MB: 2.8 MB code and 2.8 MB data
First interface	MPI/PROFIBUS DP, 12 Mbit/s
Second interface	PROFIBUS DP
Safety engineering	Distributed Safety V5.2 SP2 or later as documented for this CPU
Siemens substitute	6ES7416-2FP07-0AB0
Siemens net weight	0.881 kg
Siemens packaging dimensions	23.30 × 30.10 × 3.80 cm
Country of origin	Germany
Lifecycle	Product cancellation since 1 December 2016; spare-part status

Verification Note

Use the complete 6ES7416-2FN05-0AB0 identifier. Siemens records product cancellation for 6ES7416-2FN05-0AB0 from 1 December 2016 and lists 6ES7416-2FP07-0AB0 as substitute. Values not published in the cited Siemens source are intentionally not inferred.

3. Functions, Applications and Components

Core Functions

- It executes standard and safety-related control logic and exchanges process and safety data with configured PROFIBUS devices when engineered with the specified Siemens Distributed Safety software. Siemens has cancelled this article and lists 6ES7416-2FP07-0AB0 as its substitute.
- Maintains the documented SIMATIC S7-400 fail-safe controller with PROFIBUS DP role for this complete Siemens article number.
- Provides a verified reference for configuration, commissioning, diagnostics, and lifecycle planning.

Application Areas

Application	System role
Fail-safe machine control	Executes validated safety and standard automation programs
PROFIBUS safety systems	Coordinates configured F-I/O and process devices on DP networks
Burner and process protection	Supports approved safety functions within the engineered architecture
Safety-system migration	Provides the exact baseline for evaluating Siemens 6ES7416-2FP07-0AB0

Compatible Components

- Approved S7-400 and distributed F-I/O modules in the validated safety project
- Siemens Distributed Safety engineering version specified for the installed application
- PROFIBUS DP devices with verified F-addresses, monitoring times, and GSD data
- Siemens substitute 6ES7416-2FP07-0AB0 only after formal migration and safety validation

Lifecycle Status

Siemens records product cancellation for 6ES7416-2FN05-0AB0 from 1 December 2016 and lists 6ES7416-2FP07-0AB0 as substitute.

4. Installation Precautions

- Safety project: Preserve the validated F-program, safety signature, hardware versions, and acceptance record
- Software: Confirm the approved STEP 7 and Distributed Safety versions before opening or downloading
- PROFIBUS: Verify F-addresses, monitoring times, baud rates, termination, and device versions
- Substitution: Treat 6ES7416-2FP07-0AB0 as a migration, not an automatic drop-in replacement
- Acceptance: Perform the required proof test and document every safety-function result

STOP - Verify before installation

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Use the physical nameplate and current Siemens documents as the controlling records.

5. Official Source and Use Notice

Official source

Siemens Industry Mall product data and Siemens Safety Engineering system manual for complete article number 6ES7416-2FN05-0AB0: https://support.industry.siemens.com/cs/attachments/12490443/s7_safety_engineering_system_manual_en-US_en-US.pdf

Apter Power product page

<https://www.apterpower.com/Siemens/6es7416-2fn05-0ab0>

Use Notice

This is an original Apter Power product-specific reference prepared from the Siemens source named above. It is not a Siemens publication and does not replace the original data sheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and quotation details, visit www.apterpower.com or contact sales13@apterpower.com.