

Services and documentation



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SINAMICS G110, SINAMICS G120, SINAMICS G120D

Services and documentation

Training

Overview

Faster and more applicable know-how: Hands-on training from the manufacturer

SITRAIN – Siemens Training for Automation and Industrial Solutions – provides you with comprehensive support in solving your tasks.

Training by the market leader in automation and plant engineering enables you to make your decisions with certainty and full command. Especially where the optimum and efficient use of products and plants are concerned. You can eliminate deficiencies in existing plants and exclude expensive faulty planning right from the beginning.



First-class know-how which pays off directly: In shorter commissioning times, high-quality end products, faster troubleshooting and reduced downtimes. In other words, higher profits and lower costs.

Achieve more with SITRAIN

- Shorter times for commissioning, maintenance and service
- Optimized production operations
- Reliable engineering and commissioning
- Minimizing plant downtimes
- Flexible plant adaptation to market requirements
- Compliance with quality standards in production
- Increased employee satisfaction and motivation
- Shorter familiarization times following changes in technology and staff

Visit our Internet site under:

<http://www.siemens.com/sitrain>

or let us advise you personally. You can request our latest training catalog from:

SITRAIN Customer Support Germany:

Phone.: +49 (0)1805 – 23 56 11
(0.14 €/min from German landlines)
Fax: +49 (0)1805 – 23 56 12

SITRAIN highlights

Top trainers

Our trainers know their topics in practice and possess comprehensive didactic experience. Course developers have a direct wire to product development, and directly pass on their knowledge to the trainers.

Practical experience

The practical experience of our trainers enables them to pass on theoretical matter in a plausible manner. But since it has been known that all theory is drab, we attach great importance to practical exercises which can comprise up to half of the course time. You can therefore immediately implement your new knowledge in practice. We train you on state-of-the-art methodically/didactically designed training equipment. You feel absolutely certain when trained in this manner.

Wide variety

With a total of approx. 300 local attendance courses, we train the complete range of A&D products as well as interaction of the products in systems. Telecourses, teach-yourself software and seminars presented on the Web supplement our classical range of courses.

Customized training

We are only a short distance away. You can find us at more than 50 locations in Germany, and worldwide in 62 countries. You wish to have individual training instead of one of our 300 courses? Our solution: we will provide a program tailored exactly to your personal requirements. Training can be carried out in our Training Centers or at your company.

The right mixture: Blended learning

Blended learning is understood to be the combination of various training media and sequences. For example, a local attendance course in a Training Center can be optimally supplemented by a teach-yourself program as preparation or follow-up. Additional effect: Lower travel costs and downtimes.



SINAMICS G110, SINAMICS G120

Services and documentation

Training

Overview (continued)

Training package for SINAMICS G110/G120

The courses are modular in design and are intended for a variety of target groups as well as individual customer requirements. An overview course enables decision-makers and sales personnel to get to know the SINAMICS drive family as well as its positioning in the existing Siemens drives environment.

SITRAIN offers a compact course to users of SINAMICS G110. Due to the uniform parameterization and commissioning of MICROMASTER 4 and SINAMICS G110, both technologies can be combined in one course.

A training course on the subject of service and commissioning provides the necessary depth of technical knowledge for SINAMICS G120 and SINAMICS G120D.

SINAMICS G120 is also covered by various courses which deal more generally with the SINAMICS drive system.

All modules contain as many practical exercises as possible in order to enable intensive and direct training on the drive system and with the tools in small groups.

More information on course contents, dates and prices is available on the Internet at:

<http://www.siemens.com/sitrain>



Title	Target group					Duration	Course code
	Decision-makers, sales personnel	Project managers, project assistants	Programmers	Commissioning engineers, configurators, service personnel	Maintenance personnel		
SINAMICS system overview	✓					2 days	DR-SN-UEB
MICROMASTER MM4/SINAMICS G110 compact course		✓		✓	✓	1 day	SD-WSMM4
SINAMICS G120 commissioning and service	✓			✓	✓	2 days	DR-G120-EXP
SINAMICS communication			✓	✓		5 days	DR-SN-COM

SINAMICS G110/SINAMICS G120

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SINAMICS G110 training case

Overview



The modular SIDEMO case system for micro-systems also includes a training case for SINAMICS G110 which is designed for mobile use for sales and servicing.

The training case is equipped with an analog version of a SINAMICS G110 inverter.

The training case can be operated on its own or together with training systems such as LOGO!, SIMATIC S7-200, and SITOP DC-USV.

For this reason, a conversion guide is enclosed with the training case that enables the user to replace the inverter with a USS version (not included in the scope of supply).

The training systems are fitted in dark blue transport cases (400 x 300 x 210 mm; gross weight: 12 kg). The transport cases can be stacked.

Further information is available on the Internet at <http://www.siemens.com/sidemo>

Selection and Ordering Data

	Order No.
SINAMICS G110 training case (incl. BOP operator panel)	6AG1064-1AA03-0AA0
Line adapter 110 V/230 V	6AG1064-1AA02-0AA0

SINAMICS G120 training case

Application



A training case is available for on-site training and demonstration of the SINAMICS G120 system. It can demonstrate and increase understanding of a wide range of SINAMICS G120 functions. The case uses the CU240S DP-F or CU240S PN-F as a Control Unit with which the PROFIBUS or PROFINET interface and safety functions can be demonstrated.

Design

- CU240S DP-F Control Unit or CU240S PN-F Control Unit
- PM240 Power Module frame size FSA, 0.37 kW (0.5 hp)
- Basic Operator Panel (BOP)
- Asynchronous motor 1LA
- Encoder
- Load equipment
- Simulator panel
- Power cable
- Storage and carrying case

Technical specifications

	SINAMICS G120 training case
Input voltage	230 V 1 AC
Degree of protection to DIN VDE 0470 Part 1, EN 60529, IEC 529	IP00
Ambient temperature, perm.	
• Storage and transport	-20 ... +60 °C
• Operation	5 ... 40 °C
Dimensions	
• Width	540 mm
• Height	500 mm
• Depth	400 mm
Weight, approx.	10 kg

Selection and Ordering Data

	Order No.
SINAMICS G120 training case	
• with CU 240S DP-F and Tanos box	6ZB2480-0CD00
• with CU 240S DP-F and Peli box	6ZB2480-0CE00
• with CU 240S PN-F and Tanos box	6ZB2480-0CF00
Line adapter 110 V/230 V	6AG1064-1AA02-0AA0

SINAMICS G110, SINAMICS G120

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Documentation SINAMICS G110

Overview

The following manuals are available for the inverter chassis units SINAMICS G110:

	Manuals		
	Operating instructions	Parameter list	Getting started guide
Controlled Power Modules			
CPM110	de, en, fr, it, es	de, en, fr, it, es	multilingual

Manuals are available in the following form:

Paper documentation

The scope of supply for each Controlled Power Module comprises a Getting started guide in hard copy form. Additionally, the Operating instructions and the Parameter list can be ordered in hard copy form.

Online version on the Internet as download

The documentation is also available on the Internet under <http://www.siemens.com/sinamics-g110>

Selection and Ordering Data

Type of documentation	Language	Order No.
SINAMICS G110 Operating instructions (Paper version)	German	6SL3298-0AA11-0AP0
	English	6SL3298-0AA11-0BP0
	French	6SL3298-0AA11-0DP0
	Italian	6SL3298-0AA11-0CP0
	Spanish	6SL3298-0AA11-0EP0
SINAMICS G110 Parameter list (Paper version)	German	6SL3298-0BA11-0AP0
	English	6SL3298-0BA11-0BP0
	French	6SL3298-0BA11-0DP0
	Italian	6SL3298-0BA11-0CP0
	Spanish	6SL3298-0BA11-0EP0

Documentation SINAMICS G120

Overview

SINAMICS G120 is a modular inverter system that comprises different function units – these are primarily the Control Unit and the Power Module. The documentation is also organized in a modular structure. The following manuals are available:

	Manuals			
	Installation guide	Operating instructions	List manual	Getting started
Control Units				
CU240S	–	de, en	de, en ¹⁾	de, en, fr, it, es
CU240E	–	de, en	de, en ¹⁾	de, en, fr, it, es
Power Modules				
PM240	de, en	–	– ²⁾	multilingual
PM250	de, en	–	– ²⁾	multilingual
PM260	de, en	–	– ²⁾	multilingual

Manuals are available in the following form:

Multi-language package on CD-ROM

A multi-language package on CD-ROM is supplied with every Control Unit which comprises all manuals in the available language for SINAMICS G120.

Paper documentation

The scope of supply for each Power Module and Control Unit comprises a Getting started guide in hard copy form.

Online version on Internet as download

The documentation is also available on the Internet under <http://www.siemens.com/sinamics-g120>

¹⁾ A joint List manual is available for the CU240S and CU240E Control Units.

²⁾ The parameter settings for the Power Modules are included in the List manual for the Control Units.

SINAMICS G110, SINAMICS G120, SINAMICS G120D

Services and documentation

Documentation SINAMICS G120D

Overview

SINAMICS G120D is a modular, distributed inverter system that comprises different function units – these are primarily the Control Unit and the Power Module. The documentation is also organized in a modular structure. The following manuals are available:

Manuals				
	Installation guide	Operating instructions	List manuals	Getting started
Control Units				
CU240D	–	de, en	de, en	de, en, fr, it, es ¹⁾
Power Modules				
PM250D	– ²⁾	–	– ³⁾	de, en, fr, it, es ¹⁾

Manuals are available in the following form:

Multi-language package on CD-ROM

A multi-language package on CD-ROM is supplied with every Control Unit which comprises all manuals in the available languages for SINAMICS G120D.

Paper documentation

The scope of supply for each Power Module and each Control Unit comprises a Getting Started guide in hard copy form.

Online version on Internet as download

The documentation is also available on the Internet under

<http://www.siemens.com/sinamics-g120d>

More information

Language	Manual in language
de	German
en	English
fr	French
it	Italian
es	Spanish
multilingual	de, en, fr, it, es

Installation manual

The Installation manual describes the actions that have to be carried out once with or on the product in order to use the product in the desired place in the desired way. The Installation manual contains all relevant information for setting up, assembling and wiring as well as the required dimension drawings and circuit diagrams.

Usage phases: Installation and commissioning phase

Operating instructions

Operating instructions are a comprehensive collection of all information necessary for the normal and safe operation of products, process cells and complete plants (EN 62079).

Usage phases: Planning and configuration phase, implementation phase, setup and commissioning phase, application phase, maintenance and service phase.

List manual/Parameter list

The List manual or Parameter list describes all parameters, function charts and faults/warning for the product/system as well as their meanings and setting options. It contains parameter data and fault/warning descriptions with functional correlations.

Usage phases: Commissioning of components that have already been connected, configuration of system functions and fault cause/diagnostics.

Getting started/Getting started guide

The Getting started or Getting started guide provides information about getting started for the first-time user as well as references to additional information. It contains information about basic steps to be taken during commissioning. Descriptions of more advanced procedures can be found in the other documentation.

Usage phases: Commissioning of components that have already been connected.

¹⁾ A joint Getting started for the CU240D Control Units and PM250D Power Modules is available.

²⁾ The installation instructions for the PM250D Power Module are included in the Getting started guide.

³⁾ The parameter settings for the Power Modules are included in the List manual for the Control Units.

Overview

The Power Module fans are designed for extra long service life. Replacement fans can be ordered for special applications.

Selection and Ordering Data

Rated output		SINAMICS G120 Power Module PM240		Replacement fan
kW	hp	Type 6SL3224-...	Frame size and number of fans	Order No.
380 ... 480 V 3 AC				
0.37	0.50	0BE13-7UA0	FSA, 1 fan	6SL3200-0SF01-0AA0 (includes 1 replacement fan)
0.55	0.75	0BE15-5UA0		
0.75	1.0	0BE17-5UA0		
1.1	1.5	0BE21-1UA0		
1.5	2	0BE21-5UA0		
2.2	3	0BE22-2 . A0	FSB, 2 fans ¹⁾	
3.0	4	0BE23-0 . A0		6SL3200-0SF03-0AA0 (includes 1 replacement fan)
4.0	5	0BE24-0 . A0		
7.5	10	0BE25-5 . A0	FSC, 2 fans ¹⁾	
11.0	15	0BE27-5 . A0		6SL3200-0SF04-0AA0 (includes 2 replacement fans)
15.0	20	0BE31-1 . A0		
18.5	25	0BE31-5 . A0	FSD, 2 fans	6SL3200-0SF05-0AA0 (includes 2 replacement fans)
22	30	0BE31-8 . A0		
30	40	0BE32-2 . A0		6SL3200-0SF04-0AA0 (includes 2 replacement fans)
37	50	0BE33-0 . A0	FSE, 2 fans	
45	60	0BE33-7 . A0		6SL3200-0SF05-0AA0 (includes 2 replacement fans)
55	75	0BE34-5 . A0	FSF, 2 fans	
75	100	0BE35-5 . A0		6SL3200-0SF06-0AA0 (includes 2 replacement fans)
90	125	0BE37-5 . A0		
110	150	0BE38-8UA0		6SL3200-0SF07-0AA0 (includes 2 replacement fans)
132	200	0BE41-1UA0		
				6SL3200-0SF08-0AA0 (includes 2 replacement fans)

¹⁾ Recommendation: Even if only one fan on the Power Module is defective, it is advisable to replace both. In this case, the order quantity must be doubled.

SINAMICS G120, SINAMICS G120D

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Replacement fans for SINAMICS G120

Selection and Ordering Data (continued)

Rated output		SINAMICS G120 Power Module PM250		Replacement fan
kW	hp	Type 6SL3225-...	Frame size and number of fans	Order No.
380 ... 480 V 3 AC				
7.5	10	0BE25-5AA0	FSC, 2 fans ¹⁾	6SL3200-0SF03-0AA0 (includes 1 replacement fan)
11.0	15	0BE27-5AA0		
15.0	20	0BE31-1AA0		
18.5	25	0BE31-5AA0	FSD, 2 fans	6SL3200-0SF04-0AA0 (includes 2 replacement fans)
22	30	0BE31-8AA0		
30	40	0BE32-2AA0		6SL3200-0SF05-0AA0 (includes 2 replacement fans)
37	50	0BE33-0AA0	FSE, 2 fans	6SL3200-0SF04-0AA0 (includes 2 replacement fans)
45	60	0BE33-7AA0		6SL3200-0SF05-0AA0 (includes 2 replacement fans)
55	75	0BE34-5AA0	FSF, 2 fans	6SL3200-0SF06-0AA0 (includes 2 replacement fans)
75	100	0BE35-5AA0		
90	125	0BE37-5AA0		6SL3200-0SF08-0AA0 (includes 2 replacement fans)

Rated output		SINAMICS G120 Power Module PM260		Replacement fan
kW	hp	Type 6SL3225-...	Frame size and number of fans	Order No.
660 ... 690 V 3 AC				
11.0	15	0BH27-5 . A0	FSD, 2 fans	6SL3200-0SF05-0AA0 (includes 2 replacement fans)
15.0	20	0BH31-1 . A0		
18.5	25	0BH31-5 . A0		
30	40	0BH32-2 . A0	FSF, 2 fans	6SL3200-0SF07-0AA0 (includes 2 replacement fans)
37	50	0BH33-0 . A0		
55	75	0BH33-7 . A0		

Replacement fans for SINAMICS G120D

Selection and Ordering Data

Rated output		SINAMICS G120D Power Module PM250D		Replacement fan
kW	hp	Type 6SL3525-...	Frame size	Order No.
380 ... 480 V 3 AC				
4.0	5.0	0PE24-0AA0	FSC	6SL3500-0SF01-0AA0 (preinstalled unit with hood, fan and bolts)
5.5	7.5	0PE25-5AA0		
7.5	10	0PE27-5AA0		

¹⁾ Recommendation: Even if only one fan on the Power Module is defective, it is advisable to replace both. In this case, the order quantity must be doubled.

SINAMICS G110, SINAMICS G120, SINAMICS G120D

Services and documentation

Service & Support

Overview



In the face of harsh competition you need optimum conditions to keep ahead all the time: A strong starting position. A sophisticated strategy and team for the necessary support – in every phase. Service & Support from Siemens provides this support with a complete range of different services for automation and drives.

In every phase: from planning and startup to maintenance and upgrading.

Our specialists know when and where to act to keep the productivity and cost-effectiveness of your system running in top form.

Online Support



The comprehensive information system available round the clock via Internet ranging from Product Support and Service & Support services to Support Tools in the Shop.

<http://www.siemens.com/automation/service&support>

Technical Support

Competent consulting in technical questions covering a wide range of customer-oriented services for all our products and systems.

Tel.: +49 (0)180 50 50 222

Fax: +49 (0)180 50 50 223

(0.14 €/min from the German fixed network)

<http://www.siemens.com/automation/support-request>

E-Mail: adsupport@siemens.com

In the United States, call toll-free:

Phone: +1 800 333 7421

Fax: +1 423 262 2200

E-Mail: solutions.support@sea.siemens.com

In Canada, call:

Phone: +1 888 303 3353

E-Mail: cic@siemens.ca

In Asia:

Phone: +86 10 6475 7575

Fax: +86 10 6474 7474

E-Mail: adsupport.asia@siemens.com

Technical Consulting



Support in the planning and designing of your project from detailed actual-state analysis, target definition and consulting on product and system questions right to the creation of the automation solution.¹⁾

Configuration and Software Engineering



Support in configuring and developing with customer-oriented services from actual configuration to implementation of the automation project.¹⁾

Service On Site



With Service On Site we offer services for startup and maintenance, essential for ensuring system availability.

In Germany

0180 50 50 444¹⁾

(0.14 €/min from the German fixed network)

Repairs and Spare Parts



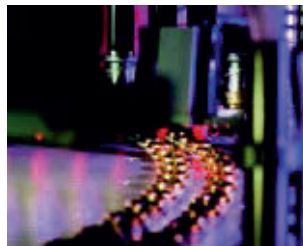
In the operating phase of a machine or automation system we provide a comprehensive repair and spare parts service ensuring the highest degree of operating safety and reliability.

In Germany

0180 50 50 446¹⁾

(0.14 €/min from the German fixed network)

Optimization and Upgrading



To enhance productivity and save costs in your project we offer high-quality services in optimization and upgrading.¹⁾

SPARESonWeb – online spare parts catalog



SPARESonWeb is a web-based tool for selecting the spare parts available for the SINAMICS system. After you have registered and entered the serial number and order number, the spare parts available for the relevant unit are displayed.

The delivery state for specific orders can be displayed for all shipped SINAMICS products.

<http://workplace.automation.siemens.com/sparesonweb>

¹⁾ For country-specific telephone numbers go to our Internet site at: <http://www.siemens.com/automation/service&support>

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Notes