

Edition 07/2025

OPERATING INSTRUCTIONS

SINAMICS

G120 Smart Access

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SINAMICS G120 Smart Access

Operating Instructions

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07/2025

A5E43332487-006

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠**DANGER**
indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠**WARNING**
indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠**CAUTION**
indicates that minor personal injury can result if proper precautions are not taken.

NOTICE
indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified persons are those who, because of their training and experience, are familiar with the installation, assembly, commissioning, operation, decommissioning and disassembly of the product and can recognize risks and avoid possible hazards.

Proper use of Siemens products

Note the following:

⚠**WARNING**
Siemens products may only be used for the application described in the catalog and the associated usage information. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens Aktiengesellschaft. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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A5E43332487-006
Ⓟ 09/2025 Subject to change

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Introduction 1

1.1 About SINAMICS

Description

SINAMICS converters are the optimum solution for all drive applications extending from low voltage through to DC. All Siemens drive components, such as converters, motors, and controls, are matched to each other and can be integrated into your existing automation systems.

More information



You can find more information via the SINAMICS YouTube playlist:

YouTube playlist
(https://www.youtube.com/playlist?list=PLw7lLwXw4H53rtHeTeifKtVMr2aXTYt0X)

1.2 About this manual

1.2.1 Content

Overview

This manual provides a summary of all of the information required to operate the SINAMICS G120 Smart Access under safe conditions.

The manual enables the target groups being addressed to safely and correctly install and connect the SINAMICS G120 Smart Access. It also includes procedures for commissioning and diagnostics of the converter using a device connected to the wireless network of the SINAMICS G120 Smart Access.

To illustrate possible application areas for our products, typical use cases are listed in this product documentation and in the online help. These are purely exemplary and do not constitute a statement on the suitability of the respective product for applications in specific individual cases. Unless explicitly contractually agreed, Siemens assumes no liability for such suitability. Suitability for a particular application in specific individual cases must be assessed by the user, taking into account all technical, legal, and other requirements on a case-by-case basis. Always observe the descriptions of the technical properties and the relevant constraints of the respective product contained in the product documentation.

1.2.2 Target group

Overview

This manual addresses the following target groups:

- Planning engineers
- Project engineers
- Technologists
- Installation personnel
- Programmers
- Commissioning engineers
- Machine operators
- Service and maintenance personnel

1.2.3 Standard scope

The functions of the system as delivered can only be found in the order documents.

Further functions may be executable in the system, which are not explained in this documentation. However, there is no entitlement to these functions in the case of a new delivery or service.

This documentation does not contain all detailed information on all types of the product. Furthermore, this documentation cannot take into consideration every conceivable type of installation, operation and service/maintenance.

The machine manufacturer must document any additions or modifications they make to the product themselves.

1.2.4 Use of third-party products in this documentation

This documentation contains recommendations relating to third-party products. Siemens accepts the fundamental suitability of these third-party products. You can use equivalent products from other manufacturers.

Siemens does not accept any warranty for the use of third-party products.

1.2.5 Websites of third-party companies

This document may contain hyperlinks to third-party websites. Siemens is not responsible for and shall not be liable for these websites and their content. Siemens has no control over the information which appears on these websites and is not responsible for the content and information provided there. The user bears the risk for their use.

1.3 Product documentation

Description

The product documentation for the SINAMICS G120 Smart Access can be found on the Internet:

SiePortal SINAMICS G120 Smart Access (https://sieportal.siemens.com/su/blPt7)

You can display documents or download them in PDF and HTML5 formats.

The product documentation for the SINAMICS G120 Smart Access comprises the following documents:

Table 1- 1 Product documentation

Information	Document	Content
Information about the device	Operating Instructions for SINAMICS G120 Smart Access	• Installing and connecting the SINAMICS G120 Smart Access • Commissioning and performing diagnostics of the converter using the SINAMICS G120 Smart Access
	Product Information for SINAMICS G120 Smart Access	Basic information about SINAMICS G120 Smart Access
Information about the converter	Operating Instructions for SINAMICS G120X converter	Installing, commissioning and maintaining the G120X converter and advanced commissioning
	Operating Instructions for SINAMICS G120XA converter	Installing, commissioning and maintaining the G120XA converter and advanced commissioning
	Operating Instructions for SINAMICS G115D converter	Installing, commissioning and maintaining the G115D converter and advanced commissioning
	Operating Instructions for SINAMICS G120C converter	Installing, commissioning and maintaining the G120C converter and advanced commissioning
	Operating Instructions for SINAMICS G120 converter with CU230P-2/CU240E-2/CU250S-2	Installing, commissioning and maintaining the G120 converter with different Control Units and advanced commissioning
Information about Safety Integrated	"Safety Integrated" Function Manual	Commissioning and optimizing safety functions
General information	Industrial Cybersecurity Configuration Manual	Industrial Cybersecurity functions and safe operation of the SINAMICS products

1.4 Service and Support

1.4.1 ID link and Siemens Online Support

You can find additional information about the product:

- via ID link
- using the Siemens Industry Online Support
  - Website: SIOS (https://support.industry.siemens.com/cs/ww/en/)
  - App Industry Online Support (for Apple iOS and Android)

Product-specific information via ID link

The QR code on your product and on the product packaging contains the ID link.

ID link is a globally unique identifier according to IEC 61406-1.

You can use the ID link to access product data, manuals, Declarations of Conformity, certificates and other information about your product.



Figure 1-1 QR code with ID link included

The ID link is characterized by a frame with a black corner at the bottom right.

Content of Siemens Online Support

- Product support
- Global forum for information and best practice sharing between users and specialists
- Local contact persons via the contact person database (→ Contact)
- Product information
- FAQs (frequently asked questions)
- Application examples
- Manuals
- Downloads
- Compatibility tool
- Newsletter with product selection
- Catalogs/brochures
- Certificates

1.4.2 Spare parts services

The online spare part service "Spares on Web (https://www.sow.siemens.com/)" offers spare parts for the product.

1.5 Important product information

1.5.1 Intended use

Requirement

⚠WARNING

Death or serious injury if not used as intended

Not using as intended can result in hazardous states.

- Carefully observe the description of intended use

Description

The product described in this document, together with the supported converter, software, converter accessories, and other converter options, forms an electric drive to supply low-voltage, three-phase motors.

The product is a professional device for stationary indoor use in applications supported by configurable converters, and is intended for supply from the converter.

The product must be correctly transported and stored and must be installed, commissioned and maintained by professionals who have adequate knowledge to implement the safety, cybersecurity and EMC measures in accordance with the specifications described in this manual and recognized state-of-the-art engineering practice.

You may only use the product when the following requirements are complied with:

- All regulations and directives that are applicable at the place of final use, especially with regard to electrical safety, functional safety and electromagnetic compatibility (EMC).
- All instructions, notes, technical specifications, safety information, and cybersecurity information contained in this document and other supporting documentation.

The product is part of a machine or system. It must guarantee the safety of persons and material assets as well as electromagnetic compatibility by applying suitable measures when designing the system.

A risk assessment of the complete application, including third-party products and implementation of adequate safety and cybersecurity measures must be performed before you use the product.

Products without protective enclosure (IP00 or IP20) are intended for installation in control panels or control cabinets that provide the required level of protection.

Any other use that is not expressly permitted can result in malfunctions and unpredictable hazards.

1.5.2 Firmware updates and constraints

Description

Firmware updates and constraints for the SINAMICS G120 Smart Access with the current firmware are available in SIOS:

Updates and constraints, SINAMICS G120 Smart Access
(https://support.industry.siemens.com/cs/ww/en/ps/13225/dl)

1.5.3 Open-source software (OSS)

Description

The license conditions and copyright information of the open-source software components used by the device are saved on the device itself. To view this information, access the Readme file via the following links:

- https://192.168.1.1/ReadMe_OSS.html
- http://192.168.1.1/ReadMe_OSS.html

1.5.4 Compliance with the General Data Protection Regulation

Description

Siemens complies with the principles of the **General Data Protection Regulation (EU),** in particular the principle of data minimization ("privacy by design"). For this SINAMICS product, this means:

- **User management and access control (UMAC)**

  The product processes or stores the following personal data:

  – Login data for user management and access control:

    User name, group, password, role, rights.

  The data for user management and access control is stored in the converter and optionally on a memory card.

- **Support data (optional)**

  For optimal support in service cases, the end user or machine manufacturer (OEM) can optionally store contact data (header, email address, telephone number, homepage) in the converter.

  If this data is created, the author must give thought to data protection consent for this optional data. Siemens takes no responsibility for this data.

  This support contact data can be read and is freely accessible in, for example, the user interface as well as in the diagnostics report. This data is not encrypted.

This data is used for user management and access control (UMAC) and for the support function. The storage of this data is appropriate and limited to what is necessary, as it is essential to identify the authorized operators and service contact.

The personal data is also available as part of the backup system to ensure fast recovery of use cases.

The above-mentioned personal data cannot be stored anonymously or pseudonymized, as it serves the purpose of identifying the operating personnel. The anonymization or pseudonymization, e.g. of the login data, must be performed using suitable login names and contact data by the plant/machine operator.

Our product does not provide any functions for automatically deleting personal data. Individual UMAC data can be deleted manually by authorized personnel as soon as this is deemed recommended/required.

Fundamental safety instructions 2

2.1 General safety instructions

⚠WARNING

Danger to life if the safety instructions and residual risks are not observed

If the safety instructions and residual risks in the associated hardware documentation are not observed, accidents involving severe injuries or death can occur.

- Observe the safety instructions given in the hardware documentation.
- Consider the residual risks for the risk evaluation.

⚠WARNING

Malfunctions of the machine as a result of incorrect or changed parameter settings

As a result of incorrect or changed parameterization, machines can malfunction, which in turn can lead to injuries or death.

- Protect the parameterization against unauthorized access.
- Handle possible malfunctions by taking suitable measures, e.g. EMERGENCY STOP or EMERGENCY OFF.

2.2 Warranty and liability for application examples

Application examples are not binding and do not claim to be complete regarding configuration, equipment, or any eventuality which may arise. Application examples do not represent customer-specific solutions, but merely serve to provide assistance with typical tasks.

As the user you yourself are responsible for ensuring that the products described are operated correctly. Application examples do not relieve you of your responsibility for safe handling when using, installing, operating and maintaining the equipment.

2.3 Cybersecurity information

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial cybersecurity measures that may be implemented, please visit
https://www.siemens.com/cybersecurity-industry.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under
https://new.siemens.com/cert.

Further information is provided on the Internet:

Configuration Manual Industrial Cybersecurity
(https://support.industry.siemens.com/cs/ww/en/view/109975311)

⚠ WARNING

Unsafe operating states resulting from software manipulation

Software manipulations, e.g. viruses, Trojans, or worms, can cause unsafe operating states in your system that may lead to death, serious injury, and property damage.

- Keep the software up to date.
- Incorporate the automation and drive components into a state-of-the-art, integrated industrial cybersecurity concept for the installation or machine.
- Make sure that you include all installed products in the integrated industrial cybersecurity concept.
- Protect files stored on exchangeable storage media from malicious software with suitable protection measures, e.g. virus scanners.
- Carefully check all cybersecurity-related settings once commissioning has been completed.

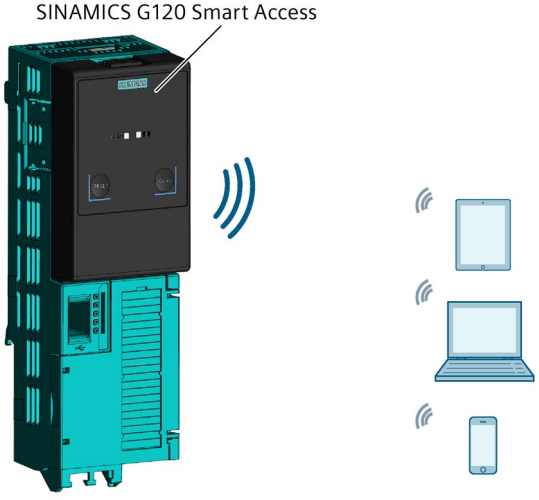
Description

3

3.1 Overview

The SINAMICS G120 Smart Access is a Wi-Fi based Web server module and an engineering tool. It has been designed for quick setup, parameterization, and diagnostics of the supported SINAMICS G120 converter or SINAMICS G115D converter.

The SINAMICS G120 Smart Access can be mounted to the supported converter, thus realizing Web-based access to the converter from a connected device (a conventional PC with a wireless network adapter installed, a tablet, a laptop, or a smart phone).



Note

SINAMICS G120 Smart Access is only for commissioning and thus cannot be used with the converter permanently.

Supported devices

The SINAMICS G120 Smart Access automatically recognizes the following devices from the SINAMICS range:

Devices	Supported converter firmware version
G120X/G120XA	FW 1.0 or later
G115D	4.7 SP13 or later
G120C	4.7 SP6 or later
G120 CU230P-2/CU240E-2/CU250S-2[1)]	

[1)] SINAMICS G120 CU250S-2 does not support quick setup with the SINAMICS G120 Smart Access.

System requirements

Device with wireless network adapter installed	Operating system	Recommended Web browser [1)]
PC	Windows 7	• Google Chrome version 67.0 or later • IE version 11.0 or later • Firefox version 68.0 or later
	Windows 10/11	• Google Chrome version 67.0 or later • IE version 11.0 or later • Firefox version 68.0 or later • Edge version 42.0 or later
	Mac OS 11.1	• Google Chrome version 90.0 or later • Safari
Smart phone/tablet	Apple iOS 14.1 or later	• Google Chrome version 73.0 or later • Firefox version 16.0 or later • Safari
	Android 10.0 or later	• Google Chrome version 78.0 or later • Firefox version 88.0 or later

1) Siemens recommends that you use the Web browsers listed above to achieve optimum Web browsing performance.

Note

Commissioning and/or diagnostic failure resulting from unsafe mobile devices

Using unsafe mobile devices to commission and/or diagnose the converter through the SINAMICS G120 Smart Access can cause system failure, for example, no response from the converter.

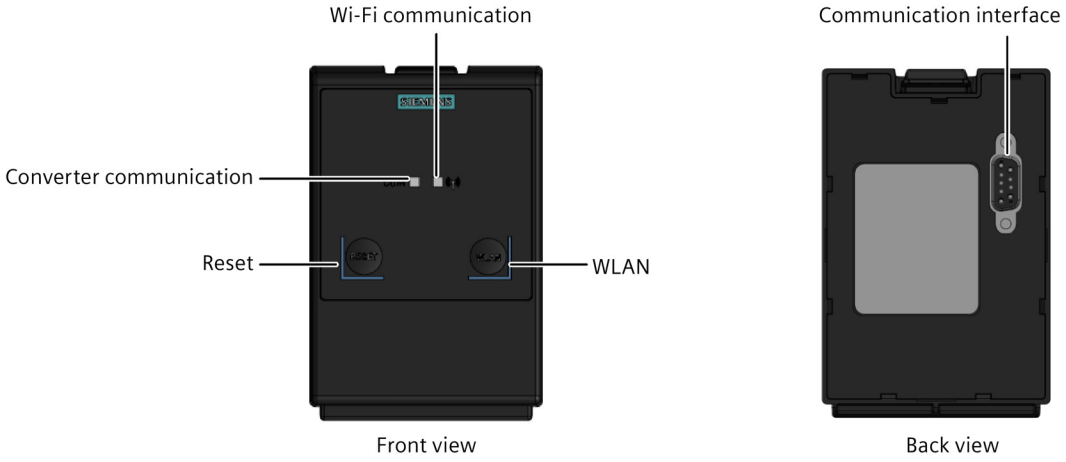
- Maintain the mobile devices for commissioning and diagnostics according to the security guidelines, for example, by deploying the patches for the operating system, activating firewalls, or using a virus scanner.

Supported minimum resolution

The SINAMICS G120 Smart Access displays the pages in a format and size compatible with the device you use to access the Web pages. It supports a minimum resolution of 360 x 640 pixels (on PCs)/dip (on smart phones/tablets).

3.2 Layout and functions

Layout



Button functions

Button	Function
Reset	• Holding down the button for more than three seconds when the SINAMICS G120 Smart Access is in power-on state resets the Wi-Fi configuration of the SINAMICS G120 Smart Access to factory defaults. • Holding down the button when the SINAMICS G120 Smart Access is in power-off state and powering on the module enters basic upgrading mode.
WLAN	Holding down the button for more than three seconds enables/disables the Wi-Fi connection of the SINAMICS G120 Smart Access.

LED status

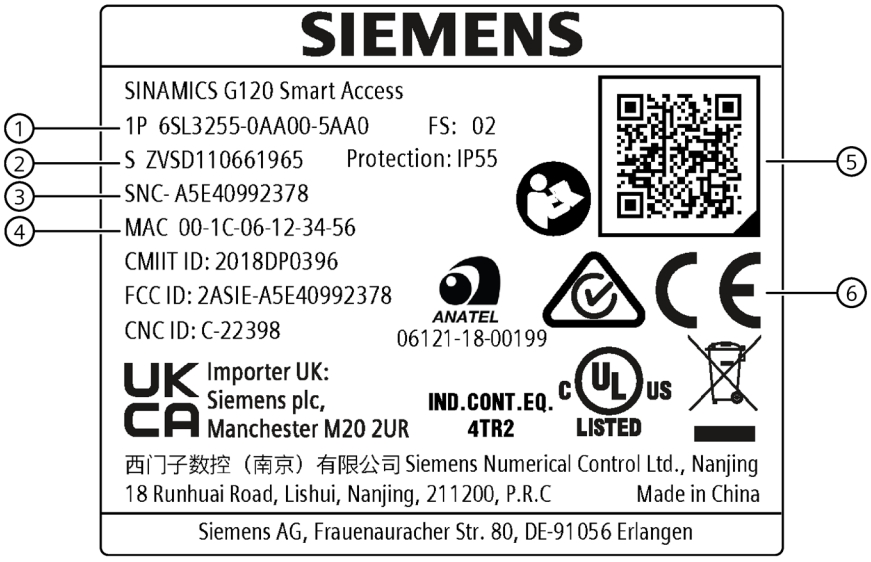
LED	Color	Description
Converter communication	Solid red	The communication between the module and the converter is not established.
	Solid green	The communication between the module and the converter is established.
Wi-Fi communication	Solid red	The network communication is initializing.
	Solid yellow	The network initialization completes but the module is not connected to a PC or mobile device.
	Solid green	The connection between the module and the PC or mobile device is set up and you can open the Web pages now.
	Flashing green	The connection between the module and the PC or mobile device is set up and the Web page is open.
	Flashing yellow	The module requires a restart because an upgrade is completed or the Wi-Fi configuration is modified.
	Alternating flashing red and yellow	The module is upgrading.

3.3 Scope of delivery

The delivery includes at least the following components:

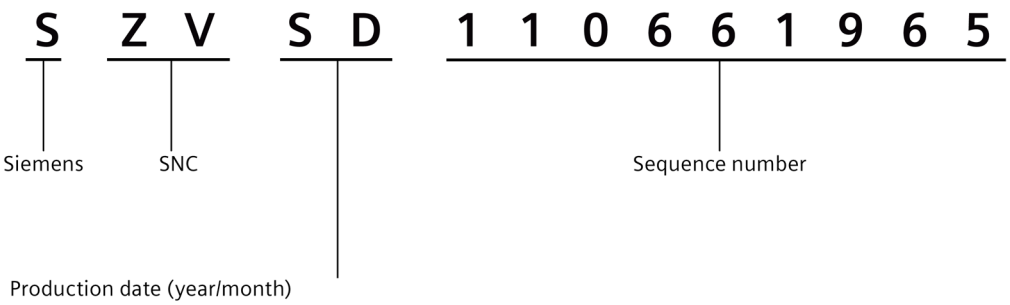
- A SINAMICS G120 Smart Access with loaded firmware (article number: 6SL3255-0AA00-5AA0)
- Product Information in Chinese and English

Rating plate example



①	Article number	④	MAC address
②	Serial number	⑤	QR code
③	Product part number	⑥	Certificates

Serial number explanation (example)



Code *	Calendar year	Code *	Month
A	2010, 2030	1	January
B	2011, 2031	2	February
C	2012, 2032	3	March
D	2013, 2033	4	April
E	2014, 2034	5	May
F	2015, 2035	6	June
H	2016, 2036	7	July
J	2017, 2037	8	August
K	2018, 2038	9	September
L	2019, 2039	0	October
M	2020, 2040	N	November
N	2021, 2041	D	December
P	2022, 2042	* In accordance with DIN EN 60062	
R	2023, 2043		
S	2024, 2044		
T	2025, 2045		
U	2026, 2046		
V	2027, 2047		
W	2028, 2048		
X	2029, 2049		

3.4 Device disposal

Recycling and disposal



For environmentally-friendly recycling and disposal of your old device, please contact a company certified for the disposal of waste electrical and electronic equipment, and dispose of the old device as prescribed in the respective country of use.

Installing

4

Note

SINAMICS G120 Smart Access power supply

The SINAMICS G120 Smart Access has no internal power supply and derives its power directly from the converter through the RS232 interface. Any configuration data stored on the SINAMICS G120 Smart Access is saved to its memory which does not require power to retain the data.

Note

To establish communication between the SINAMICS G120 Smart Access and the converter, make sure that the converter has been installed correctly and the motor is not running before fitting the module to the converter.

Note

SINAMICS G120 Smart Access is suitable for cabinet installation. To ensure good signal transmission, make sure that you leave the cabinet door open when the module is operational.

Note

SINAMICS G120 Smart Access does not support door mounting.

Note

To reduce human exposure to radio frequency electromagnetic fields, maintain a minimum distance of 2 cm between your body and the SINAMICS G120 Smart Access when it is operational.

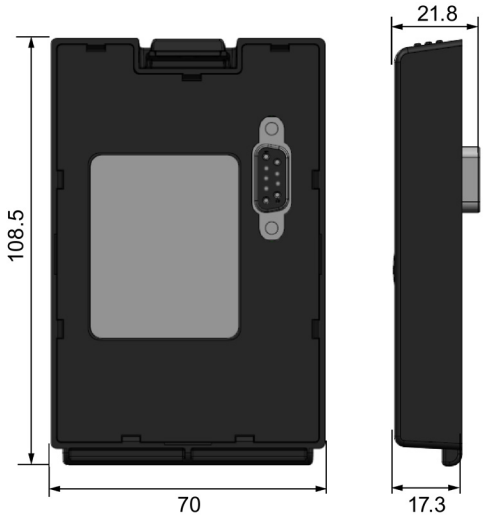
Note

To prevent unauthorized access to SINAMICS G120 Smart Access, regular control is required, for example, continuous control during operation, stored in a locked cabinet.

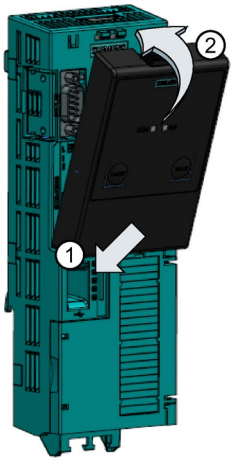
Note

Portal devices (e.g. mobile devices) used to connect with SINAMICS G120 Smart Access must be protected against unauthorized usage.

Outline dimensions (unit: mm)



Fitting the SINAMICS G120 Smart Access to the G120 converter



Fitting the SINAMICS G120 Smart Access to the G115D converter

To fit the SINAMICS G120 Smart Access to the G115D converter, you must use an optional interface kit. For more information, see Section "SAM interface kit (Page 112)".

Accessing the Web pages

5

You can access the SINAMICS G120 Web pages from a PC or a mobile device that connects to the SINAMICS G120 Smart Access.

5.1 Establishing the wireless network connection

NOTICE
Equipment malfunctions as a result of unauthorized access to the converter Hacker attack can result in unauthorized access to the converter through the SINAMICS G120 Smart Access. This can cause equipment malfunctions. • Before logging on to the SINAMICS G120 Web pages, make sure that there is no network security risk. – If the Wi-Fi communication LED lights solid green or flashes green, make sure that no unauthorized access to the converter exists. – If an unauthorized access to the converter does exist, remove the SINAMICS G120 Smart Access, and then fit it to the converter again. Then power on the SINAMICS G120 Smart Access to re-establish the wireless network connection.

SINAMICS G120 Web site

- http://192.168.1.1
- https://192.168.1.1 (requires download and installation of SSL certificates)

Establishing initial wireless network connection

1. After you have fitted the SINAMICS G120 Smart Access to the converter (Page 21), power on the converter and then hold down the WLAN button (> 3 s) to enable the Wi-Fi connection of the module.
2. Activate the Wi-Fi interface inside your PC or mobile device. If you desire to establish the wireless network connection on your PC, make sure that you have previously enabled the automatic IP settings.
3. Search the wireless network SSID of the SINAMICS G120 Smart Access: G120 smart access_xxxxxx ("xxxxxx" stands for the last six characters of the module MAC address of the SINAMICS G120 Smart Access.).
4. Enter the wireless network password to launch the connection (default password: 12345678).

5. Enter the SINAMICS G120 Web site (http://192.168.1.1 or https://192.168.1.1) in the supported browser.

Note

After the establishment of the wireless network connection for the first time, it may take some time for the Web browser to open the SINAMICS G120 Web page.

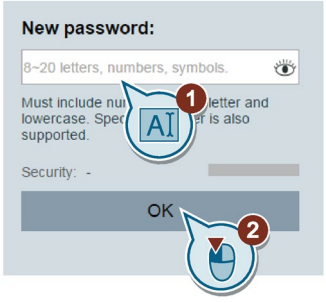
Note

When you use https:// to access the SINAMICS G120 Web page, if you see an error message prompting that your connection is not private because the security certificate is not trusted by your device's operating system, ignore it and proceed with the Web page access.

Note

After opening the SINAMICS G120 Web page with https:// in Windows 10, if you see the message “certificate error”, ignore it and proceed with the Web page access.

6. After the Web page for password change opens, enter a new password of 8 to 20 characters. The minimum requirement for the new password is 8 characters including numbers, uppercase and lowercase letters. To achieve better network access security, enter a new password of 10 to 20 characters that includes all of the following four categories of password characters: ① numbers: 0 ... 9; ② uppercase letters: A ... Z; ③ lowercase letters: a ... z; ④ special characters: _, -, ~, ! , @, #, $, %, ^, &, and *; the space character is not allowed.



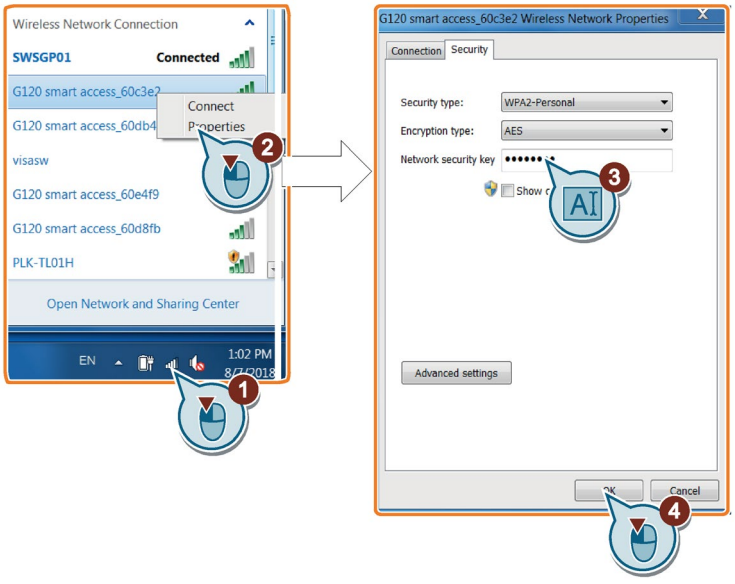
To display/hide the password, click .

Note that this password change page includes a security level indicator. The indicator uses different colors to indicate the security strength of your current password. For detailed information, see the table below:

Password security level		Description
	Low	The password includes 8 or 9 characters and is a mixture of numbers, uppercase and lowercase letters.
	Medium	The password meets one of the following two requirements: • The password includes 10 to 20 characters and is a mixture of numbers, uppercase and lowercase letters. • The password includes 8 or 9 characters and is a mixture of numbers, uppercase and lowercase letters, and special characters.
	High	The password contains 10 to 20 characters and is a mixture of numbers, uppercase letters, lowercase letters, and special characters.

After your confirmation of the new password entry, the module restarts automatically.

7. Select the wireless network SSID of the SINAMICS G120 Smart Access and then enter the new Wi-Fi password to launch the connection.



8. Enter the SINAMICS G120 Web site (http://192.168.1.1 or https://192.168.1.1) to open the home page.

Note

If you forget the Wi-Fi password, use the reset button to reset the Wi-Fi configuration to factory defaults.

Note

If your PC or mobile device that you use to access the SINAMCS G120 Web pages gets lost, you must change the wireless network password as soon as possible to prevent unauthorized access.

Installing SSL certificates (only for access with https://)

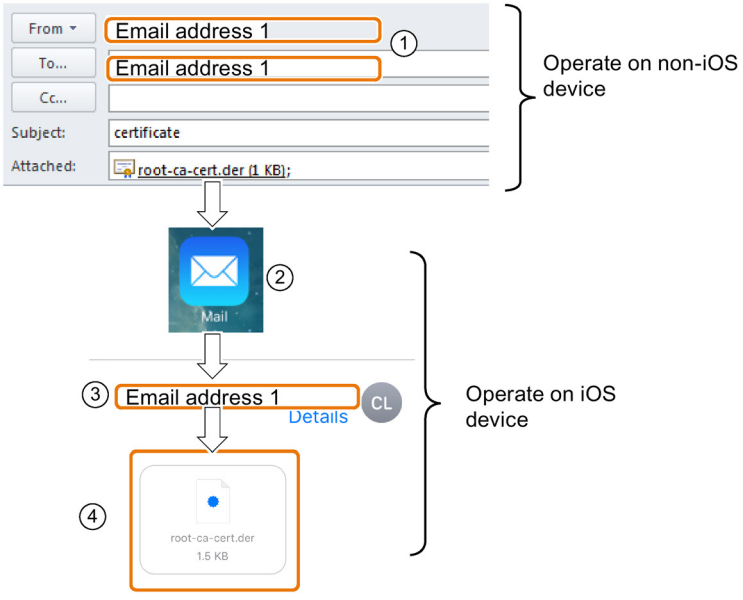
To access the SINAMICS G120 Web pages with https:// from a Windows 10-based PC or iOS-based mobile devices, you need to install SSL certificates.

Installing on Windows 10-based PCs

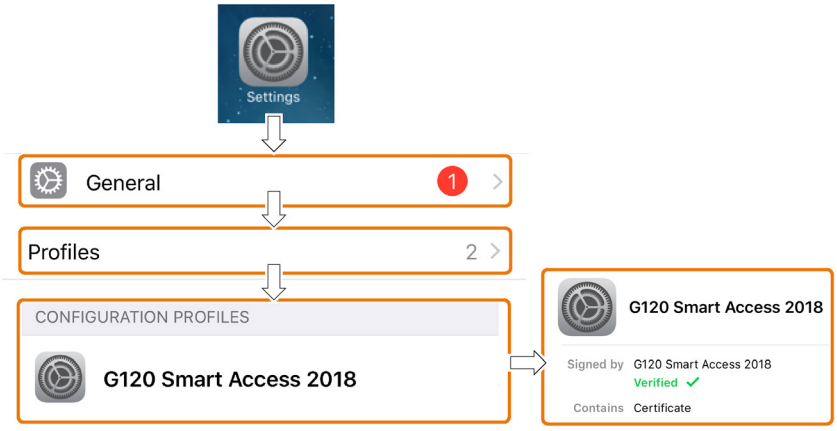
1. Enter the certificate download Web site (https://support.industry.siemens.com/cs/ww/en/ps/13225/dl) and download "G120 smart access certificates.zip". Extract the certificate file "root-ca-cert.der" to your local drive.
2. Double-click the file “root-ca-cert.der” and then select “Install certificate > Next” to open the certificate store.
3. Select “Places all certificates in the following store” and then browse to “Trusted Root Certification Authorities”.
4. Select "OK > Next > Finish" to complete the certificate installation. Now you are able to access the SINAMICS G120 Web pages via the SINAMICS G120 Smart Access.

Installing on iOS-based mobile devices

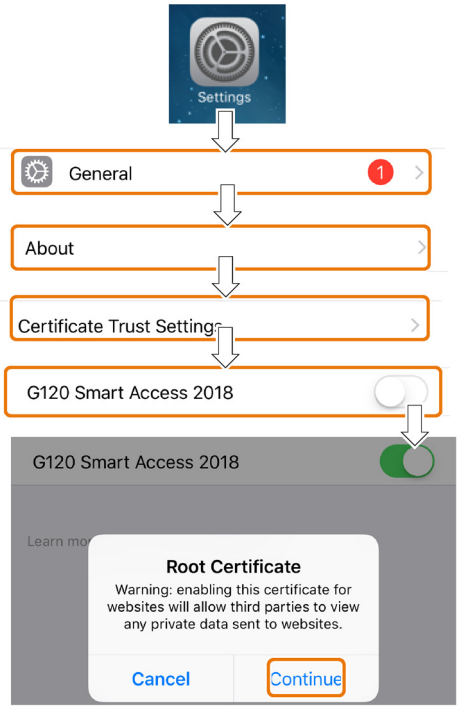
1. As iOS devices do not support directly downloading files, use a non-iOS device to enter the certificate download Web site (https://support.industry.siemens.com/cs/ww/en/ps/13225/dl) and download the file "G120 smart access certificates.zip ". Extract the certificate file "root-ca-cert.der" to your local drive of this non-iOS device.
2. Send the attached certificate file to an E-mail account of your choice ("①"). Use the built-in mail application ("②") of your iOS-based mobile device to log in to your E-mail account ("③"), receive the attachment, and tap the attachment to install the certificate ("④").



3. Select "Settings > General > Profiles" to view configuration profiles in your mobile device and make sure that the certificate has been issued to "G120 Smart Access 2018".



4. Select "Settings > General > About > Certificate Trust Settings" to enable full trust for the root certificate "G120 Smart Access 2018". Now you are able to access the SINAMICS G120 Web pages via the SINAMICS G120 Smart Access.



Wireless network connection examples

Precondition: Your mobile device must be wireless-enabled.

For Windows 7/Windows 10 (on PCs)	For Android and iOS (on tablets/smart phones)
1. Click on the taskbar on your PC. 2. Select the target network and enter the wireless password to launch the connection. 	Go to the Wi-Fi setting window on your tablet or smart phone, select the target network, and then enter the wireless password to launch the connection. 

Note

Depending on environmental conditions, the maximum wireless communication distance (without barrier) can reach 100 m.

5.2 Accessing the Web pages

If you have previously established the wireless network connection (Page 23) between your supported device (Page 15) and the converter via the SINAMICS G120 Smart Access, open a supported Web browser (Page 15) from your PC or mobile device and then enter the Web site (http://192.168.1.1 or https://192.168.1.1) to open the SINAMICS G120 Web page (home page).

Constraint

Some features of SINAMICS G120 Smart Access are restricted if you do not observe the following:

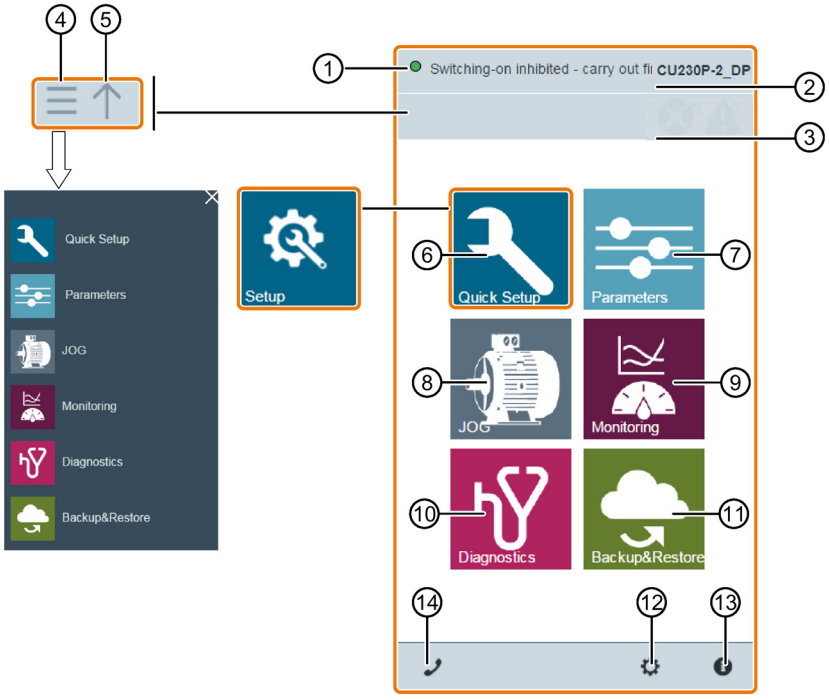
- The standard Web pages use JavaScript. If your Web browser settings have disabled JavaScript, enable them first.
- When accessing the SINAMICS G120 Web pages from a mobile device, do not use the landscape mode.

Standard Web pages

6

6.1 Home page

6.1.1 Overview of the Web pages



① Connection status indication (Page 30)
② Connected converter (Page 40)
③ Fault/alarm indication (Page 86)
④ Navigation sidebar (visible only on lower-level pages)
⑤ Advancing backward (visible only on lower-level pages)
⑥*
- Quick setup (not for G120 CU250S-2) (Page 41)
- Setup (G120X/G120XA only) (Page 47)
- Setup (G115D only) (Page 61)

⑦ Parameter settings (Page 75)
⑧ Motor test run in JOG/HAND mode (Page 82)
⑨ Converter status monitoring (Page 86)
⑩ Diagnostics (Page 86)
⑪ Backup and restore (Page 92)
⑫ Optional Web access settings (Page 31)
⑬ Converter data identification (Page 40)
⑭ Support information (Page 102)

* The menu is unavailable and the icon appears dimmed if you have connected a SINAMICS G120 CU250S-2 to the G120 Smart Access.

Note

The Web page illustrations from this chapter forward represent only the standard PC Web page appearance.

6.1.2 Viewing connection status

You can view the connection status in the upper-left corner of the Web pages.

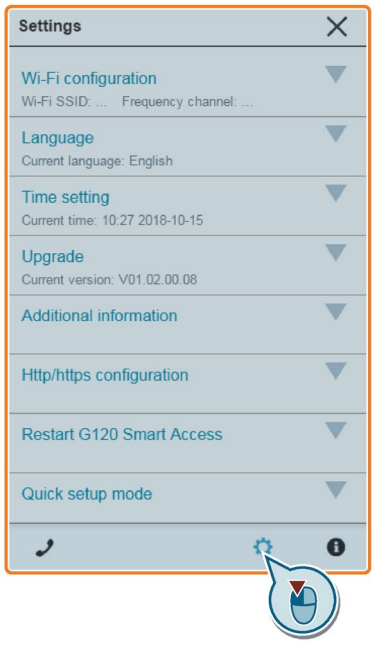
Icon	Status	Description
	Connected	Communication between the PC/mobile device and the converter is established. Note that the green status icon indicates one of the following converter states (see r0002): • Converter is in normal operation • Converter is ready for operation • Converter is ready for switching on • Converter switching-on is inhibited • Converter is initializing • Converter is waiting for booting/partial booting
	Disconnected	Communication between the PC/mobile device and the converter is not established.

6.2 Optional settings page

You can make the following optional Web access settings:

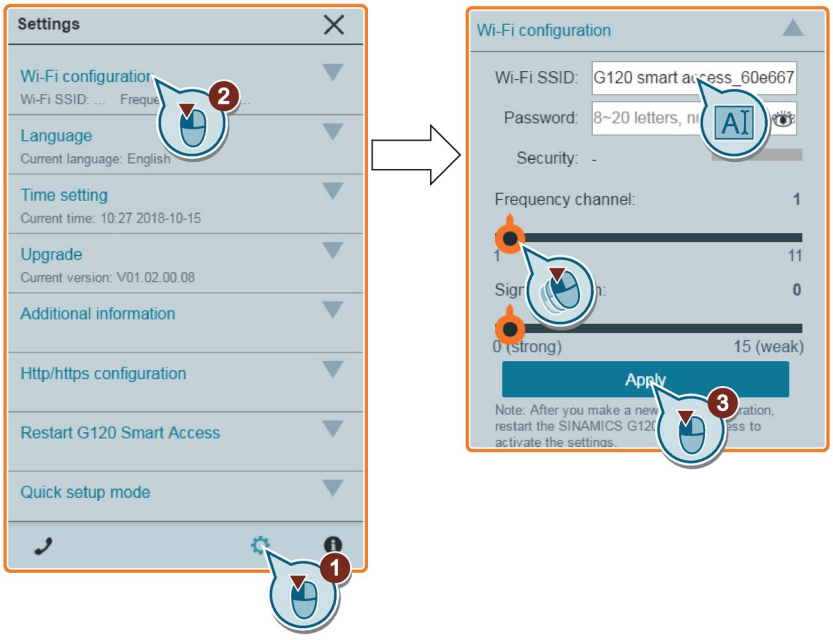
- Configuring Wi-Fi (Page 32)
- Changing the display language (Page 34)
- Synchronizing the time (Page 35)
- Upgrading the firmware version (Page 35)
- Viewing additional information (Page 36)
- Configuring communication protocol (Page 37)
- Restarting the SINAMICS G120 Smart Access (Page 38)
- Selecting quick setup mode (G120X/G120XA converters only) (Page 39) [1)]

[1)] This setting is displayed only when G120X/G120XA converter is connected.



6.2.1 Configuring Wi-Fi

If you do not want to use the factory default Wi-Fi settings, you can change Wi-Fi configuration in the following dialog box:



The new Wi-Fi configuration takes effect only after the SINAMICS G120 Smart Access is restarted.

Wi-Fi SSID (Service Set Identifier)

Default SSID: G120 smart access_xxxxxx ("xxxxxx" stands for the last six characters of the MAC address of the SINAMICS G120 Smart Access)

Example SSID: G120 smart access_60c3e2

SSID character restrictions: maximum 20 characters which are limited to A-Z, a-z, 0-9, _, -, ~, ! , @, #, $, %, ^, &, *, and space. The first and the last character must not be a space.

Wi-Fi password

Default password: 12345678

For detailed information about the password requirements, see Section "Establishing the wireless network connection (Page 23)".

Frequency channel

Default channel: channel 11.

Total channels: 11. Each channel stands for a transmitting frequency. The frequency difference between two adjacent channels is 5 MHz. You can select a desired channel with the slider. Sliding right increases the transmitting frequency.

Signal strength

Default signal strength: 0 (strong)

The wireless network signal transmission distance may vary with environmental conditions. When selecting the desired signal strength, consider both the acceptable signal transmission distance and the corresponding wireless network security. You can select a desired strength with the slider.

Resetting Wi-Fi configuration

When the SINAMICS G120 Smart Access is in power-on state, holding down the reset button for more than three seconds resets the Wi-Fi configuration of the SINAMICS G120 Smart Access to factory defaults.

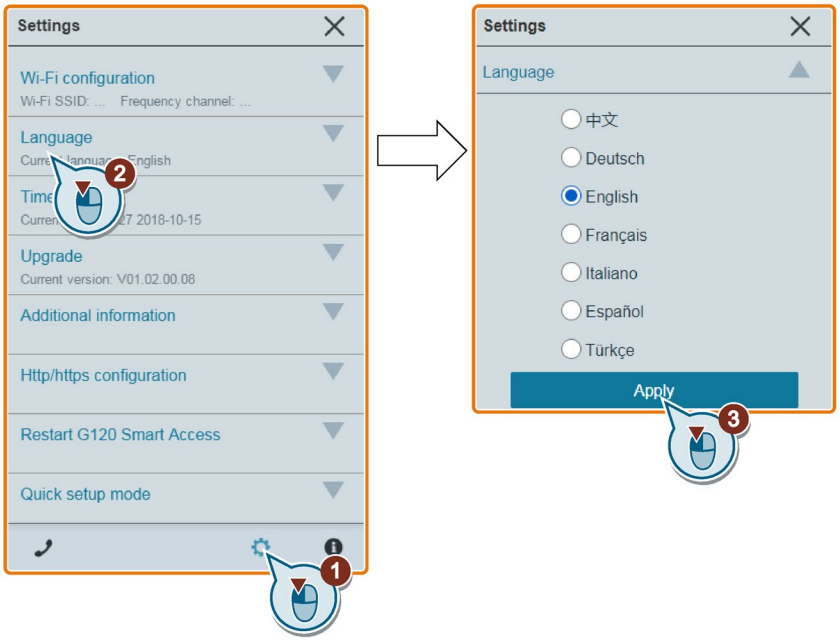
Description	Factory defaults
Wi-Fi name	G120 smart access_xxxxxx
Wi-Fi password	12345678
Wi-Fi frequency channel	11
Communication protocol	http enabled

Note

Before pressing the reset button to reset the Wi-Fi configuration, make sure that the Wi-Fi communication LED on the SINAMICS G120 Smart Access lights up solid green/solid yellow or flashes green. The Wi-Fi configuration is reset successfully when the status of the Wi-Fi communication LED flashes yellow. After resetting Wi-Fi configuration, restart SINAMICS G120 Smart Access.

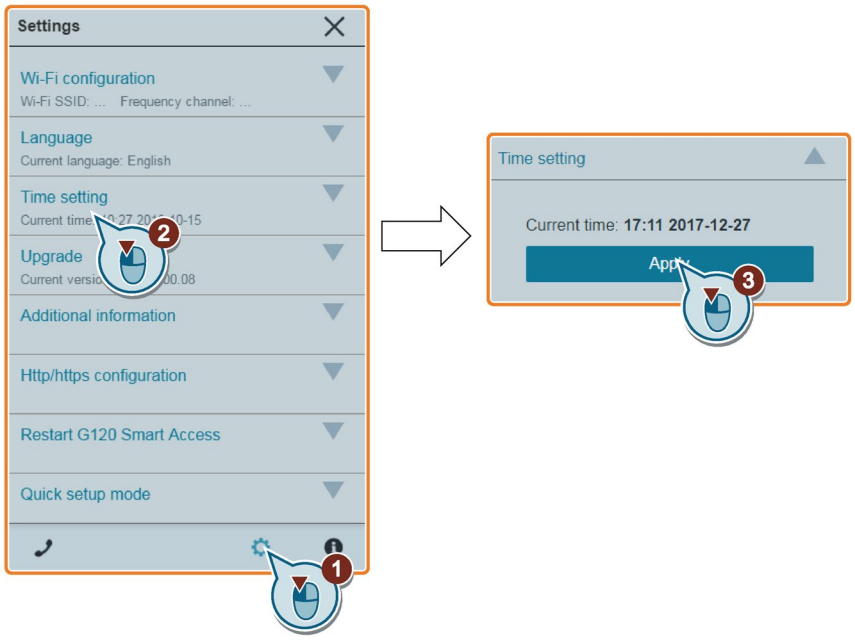
6.2.2 Changing the display language

The SINAMICS G120 Web pages support the following user interface languages: English (default), Chinese, German, Italian, Spanish, French, and Turkish. Proceed as follows to select the desired language:



6.2.3 Synchronizing the time

When the connection between the converter and the PC/mobile device is established, the Web page can display the current time and date information of the connected PC/mobile device (see below). You can enable time synchronization between the converter and the connected PC/mobile device to record the occurrence time of converter faults/alarms. After you enable synchronization, the converter receives the time of the day from the connected PC/mobile device.



Note

Only SINAMICS G120 CU230P-2, SINAMICS G120X and SINAMICS G120XA support this function.

6.2.4 Upgrading the firmware version

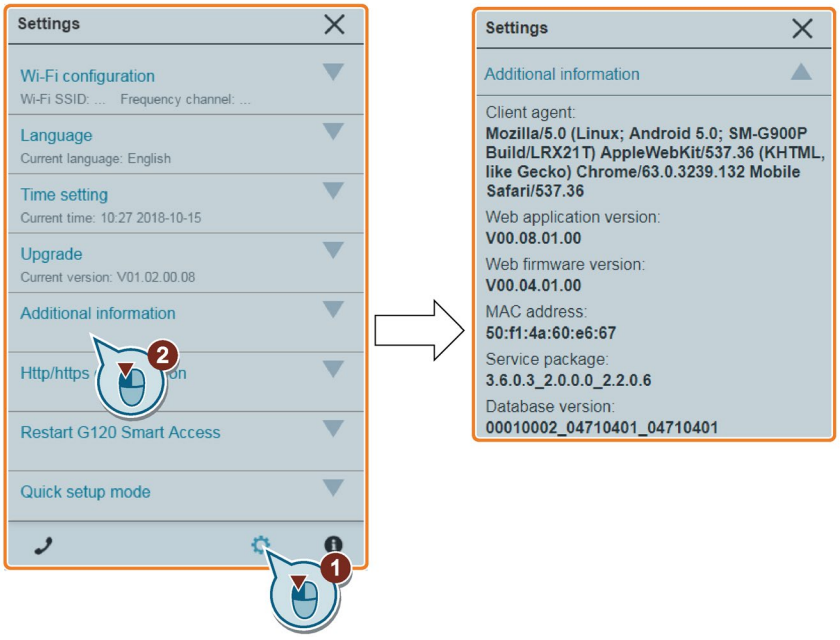
Upgrading the firmware version includes conventional upgrading and basic upgrading. For detailed information, see Section "Upgrading (Page 103)".

Note

To ensure secure connection to the Web page, always update the firmware of the SINAMICS G120 Smart Access to the latest version.

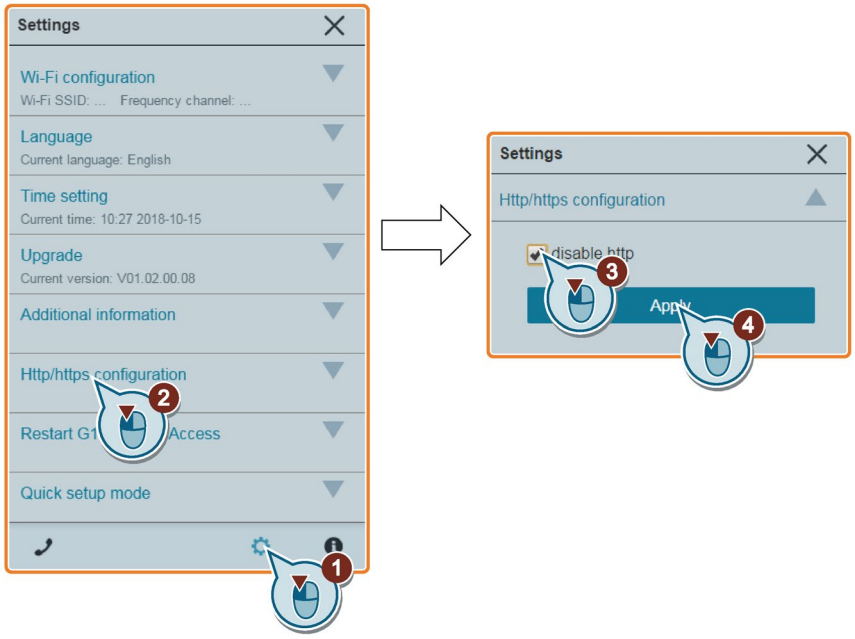
6.2.5 Viewing additional information

The following window provides additional information about the SINAMICS G120 Smart Access:



6.2.6 Configuring communication protocol

The SINAMICS G120 Web pages support two communication protocols: http (enabled by default) and https. To access the Web pages by using the "https" protocol only, proceed as follows:



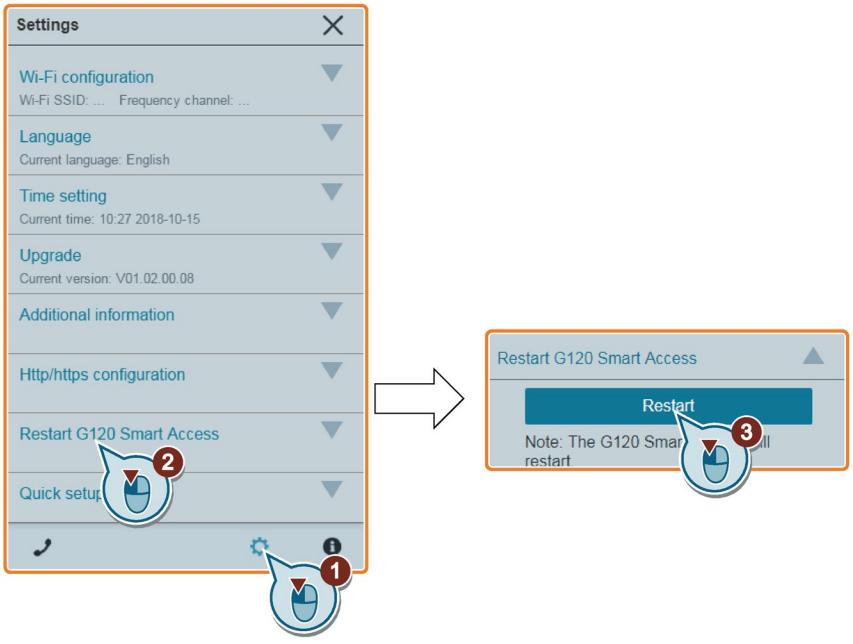
Note

Installing SSL certificates

To access the SINAMICS G120 Web pages with https:// from a Windows 10-based PC or iOS-based mobile devices, you must install SSL certificates. For more information about how to install SSL certificates, see Section "Establishing the wireless network connection (Page 23)".

6.2.7 Restarting the SINAMICS G120 Smart Access

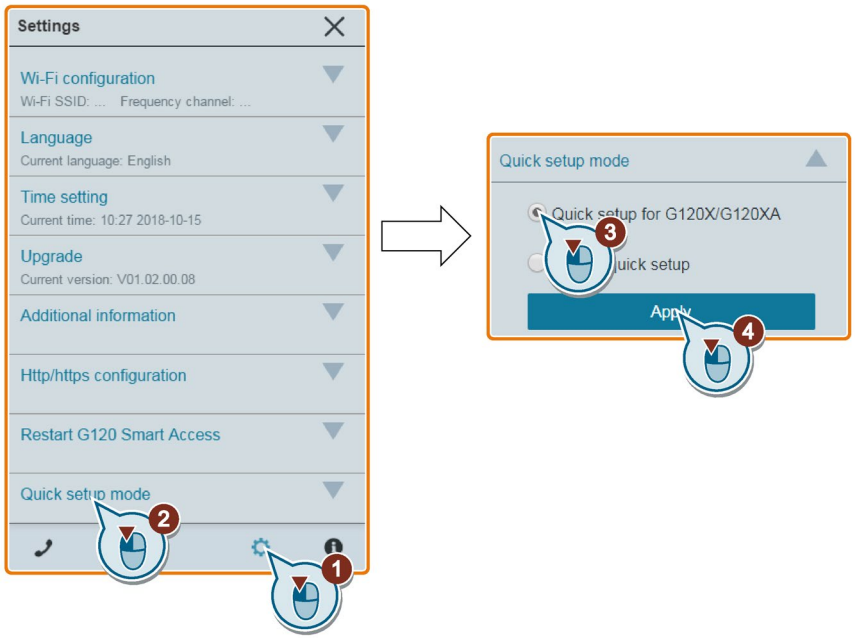
You can use this function to restart the SINAMICS G120 Smart Access. After the SINAMICS G120 Smart Access is restarted, reconnect your PC/mobile device to the module and refresh the Web application.



6.2.8 Selecting quick setup mode (G120X/G120XA converters only)

This option is visible only when your SINAMICS G120 Smart Access is connected to G120X/G120XA converter. Two quick setup modes are available for choice:

- Quick setup for G120X/G120XA (Page 47): used only for the G120X/G120XA converter
- Classic quick setup (Page 41): used for all the converters (SINAMICS G115D and SINAMICS G120 CU250S-2 converters excluded) supported by the SINAMICS G120 Smart Access but not recommended for the G120X/G120XA converter



The quick setup menu icon displayed on the home page may vary depending on the currently active quick setup mode:



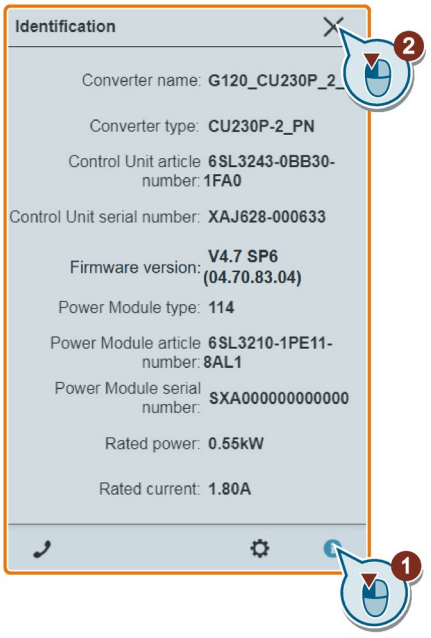
Quick setup for G120X/G120XA is active.



Classic quick setup is active.

6.3 Converter identification

The converter identification Web page displays detailed information of the currently connected converter:



Note

For G120C converters, the converter identification Web page will not display information about Power Module.

6.4 Quick setup

You can open the quick setup Web page by selecting the quick setup icon from either the home page or the navigation sidebar to do the quick commissioning of the converter. The quick setup icon may vary depending on the connected converters. For more information, see Section "Overview of the Web pages (Page 29)".

Note

The quick setup function is not supported on SINAMICS G120 converter with CU250S-2 Control Unit.

6.4.1 Classic quick setup (not for G120 CU250S-2/G115D)



The classic quick setup is applicable to all the supported converters excluding the SINAMICS G115D and the G120 CU250S-2.

Siemens does not recommend this commissioning menu choice for the SINAMICS G120X/G120XA converters; instead, use the G120X/G120XA specific setup menu to complete more desired configurations according to your particular application.

The classic quick setup Web page allows you to set the following data for the connected converter:

- Application class
- Motor data
- I/O configuration
- Important parameters
- Technological application
- Motor identification

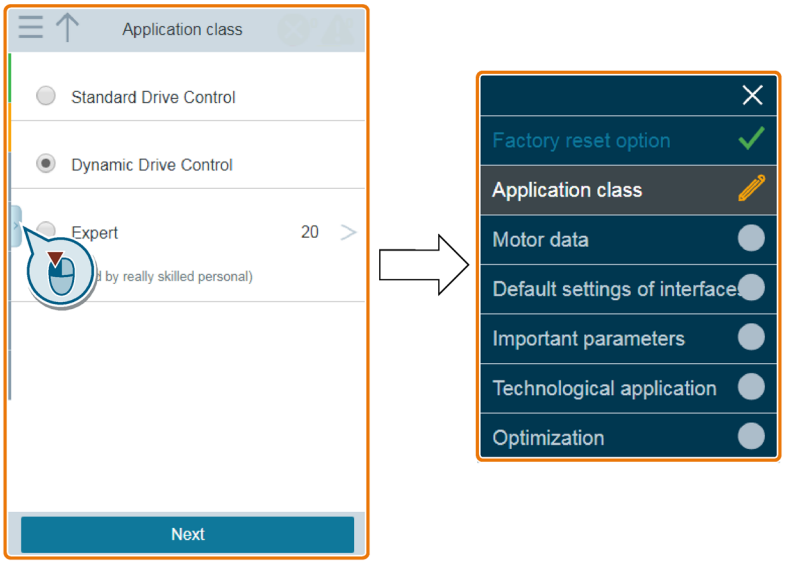
Expanded page for classic quick setup

When you see the Expand sidebar on the far left of the classic quick setup page, click the sidebar and an expanded quick setup page opens. You can do the following on this page:

- View the status of individual quick setup steps based on the symbols given below:

	Completed step
	Current step
	To-be-completed step

- Go back to a completed step. Once you open a completed step, all the changes done in subsequent steps become invalid and require new settings.



Operating sequence

1. Open the classic quick setup Web page by selecting the quick setup icon from either the home page or the navigation sidebar.

   Note

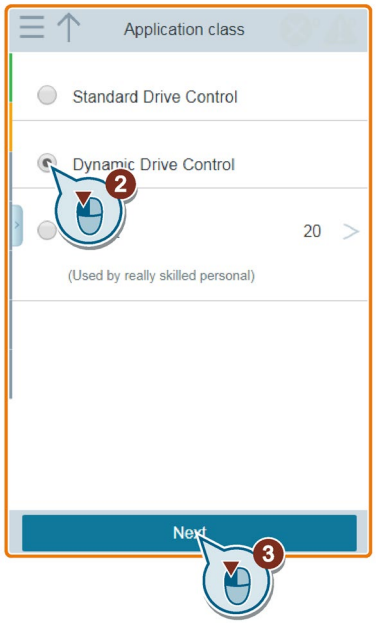
   For G120X/G120XA converters, if you want to use this quick setup mode, you must select "classic quick setup (Page 39)" first.

2. Reset to factory settings (recommended) or modify existing settings.



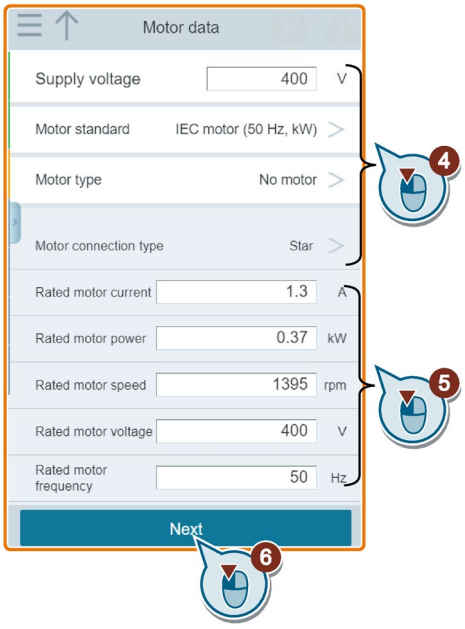
3. Select an application class according to the particular converter connected. If required, click relevant application class to expand the detailed description.

   If "Expert" is selected, you can select your control mode of the converter.

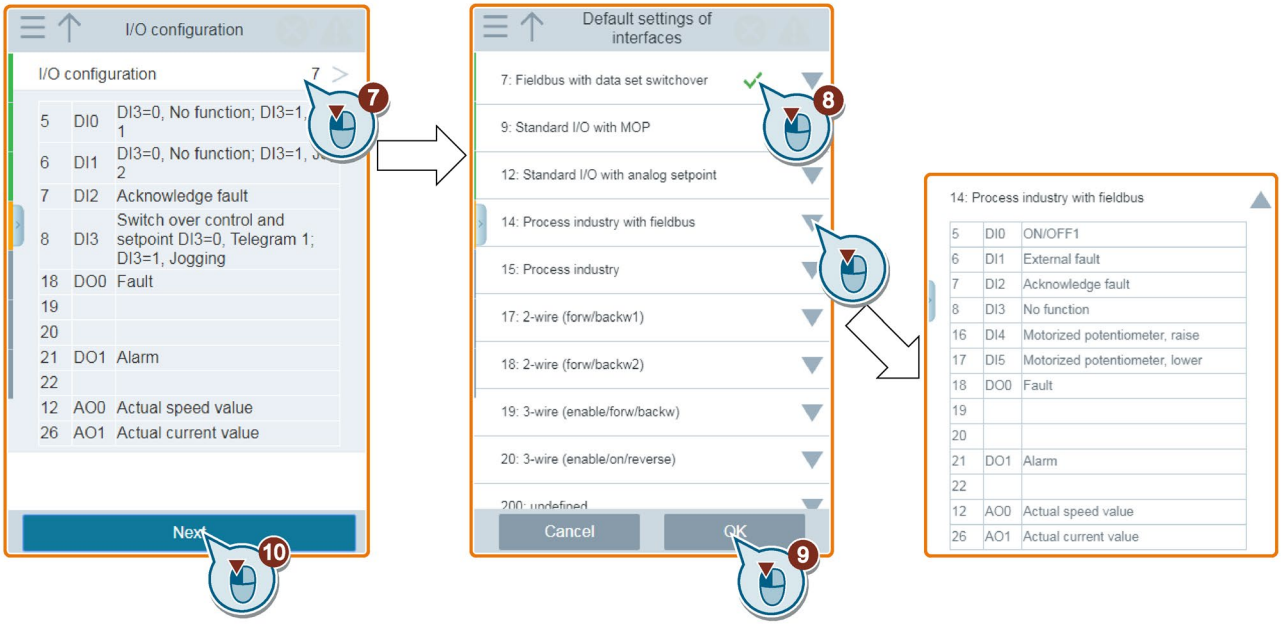


4. Set the required motor data.

   For Siemens motors, enter only the motor data as shown in ④ and the SINAMICS G120 Smart Access will automatically identify the rest of the motor data.



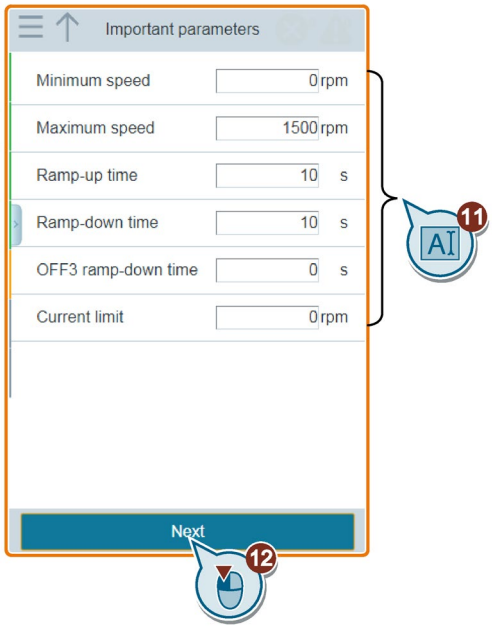
5. Select the factory interface settings for the converter based on your particular application. Note that the factory interface settings vary depending on the connected converter.



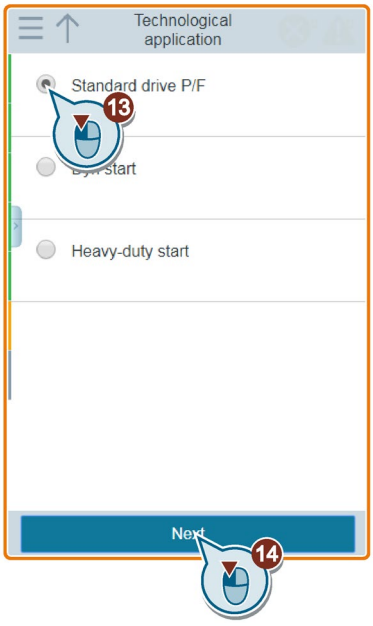
6. Set the following parameters based on your particular application.
   - Minimum speed - factory setting 0 [rpm]

     The minimum speed is the lowest speed of the motor independent of the speed setpoint.
   - Maximum speed - factory setting 1500 [rpm]

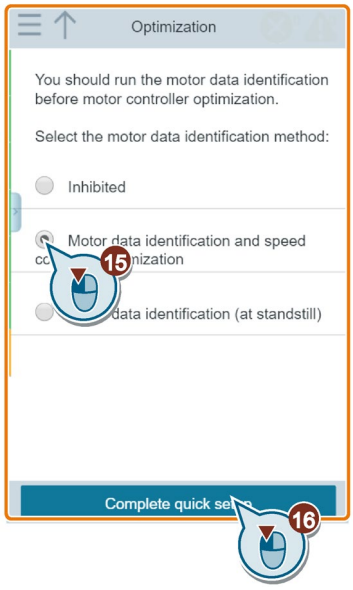
     The converter limits the motor speed to the maximum speed.
   - The ramp-up and ramp-down times define the maximum motor acceleration when the speed setpoint changes. The ramp-up and ramp-down times are derived from the time between motor standstill and the maximum speed, or between the maximum speed and motor standstill.
   - OFF3 ramp-down time sets the ramp-down time from the maximum speed down to zero speed for the OFF3 command.



7. Select the desired technological application. Depending on the selected application class, the available technological applications may vary.



8. Select the method which the converter uses to measure the data of the connected motor.



Depending on the selected application class and technological application, the available methods for motor identification may vary:

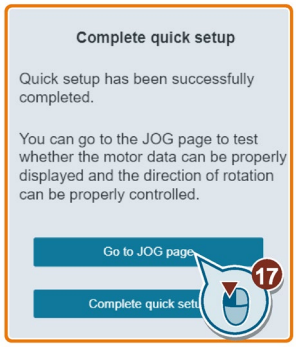
- Inhibited: P1900 = 0
- Motor data identification and speed controller optimization: P1900 = 1
- Motor identification at standstill: P1900 = 2

Note

For synchronous reluctance motors, the motor identification method automatically changes to "Motor identification (at standstill)" (P1900 = 2).

If you choose to identify the motor data, go to the JOG page after you have finished classic quick setup. For information about motor identification, see Section "JOG (Page 82)".

9. Complete quick setup. You can select to go to the JOG page immediately or later.



6.4.2 Setup (G120X/G120XA converters only)



The setup Web page allows you to configure a more comprehensive range of settings to meet the specific requirements of the G120X/G120XA converters. You can perform the following setups:

- Quick setup for G120X/G120XA (Page 47)
- Application setup (Page 55)
- Free function blocks setup (for converter FW 1.03 or later) (Page 56)

Note

If the quick setup icon on the home page shows that you are currently still in classic quick setup mode, you must first change the mode to quick setup for the G120X/G120XA (Page 39).

6.4.2.1 Quick setup

The quick setup Web page allows you to set the following data for the connected G120X/G120XA converter:

- Application
- Motor data
- I/O configuration
- Important parameters
- Motor identification

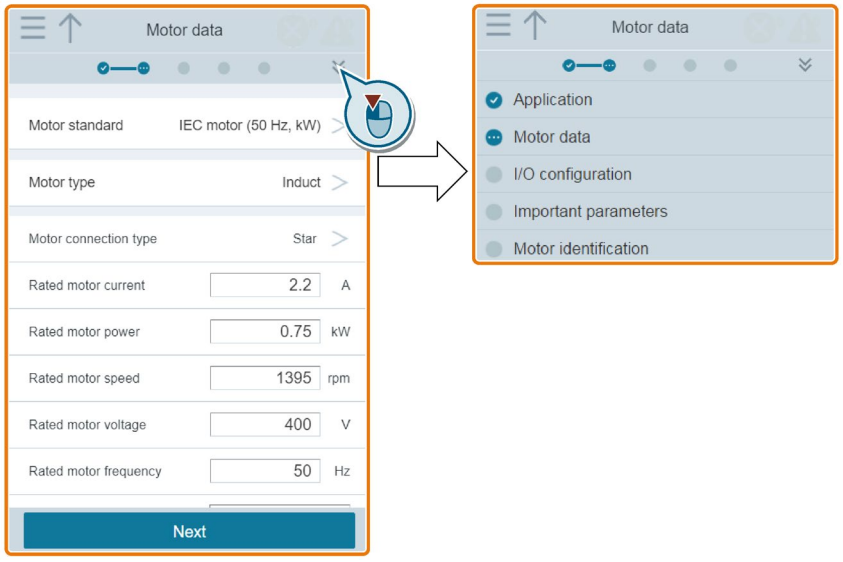
Expanded page for quick setup

When you see the Expand symbol on the top right of the quick setup page, click the symbol and an expanded quick setup page opens. You can do the following on this page:

- View the status of individual quick setup steps based on the symbols given below:

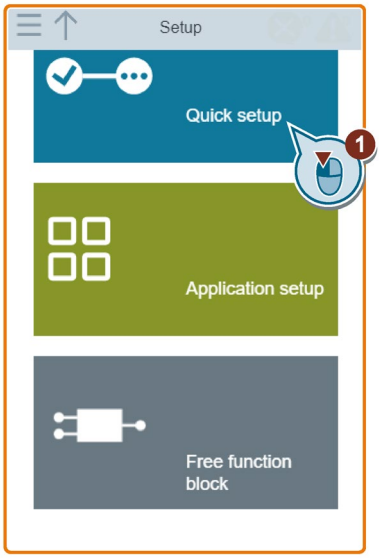
	Completed step
	Current step
	To-be-completed step

- Go back to a completed step. Once you open a completed step, all the changes done in subsequent steps become invalid and require new settings.



Operating sequence

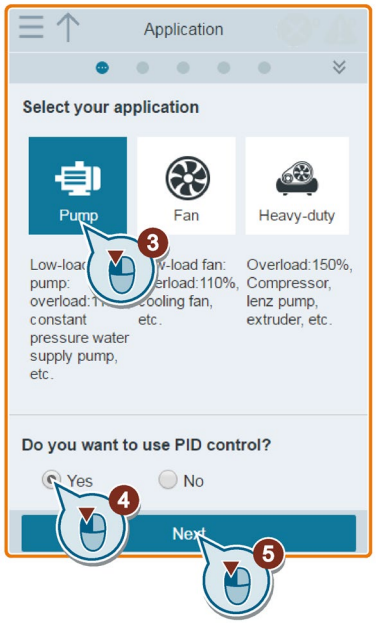
1. Open the setup Web page by selecting the setup icon from either the home page or the navigation sidebar.
2. Open the quick setup Web page by selecting the quick setup icon.



3. Start a new configuration (recommended) or modify the existing configuration.
   - If you select to start a new configuration, factory reset is performed automatically. After you confirm that the factory resetting is successfully complete, the Web page advances to the application selection subpage automatically.
   - If you select to modify the existing configuration, the Web page directly advances to the motor data subpage.



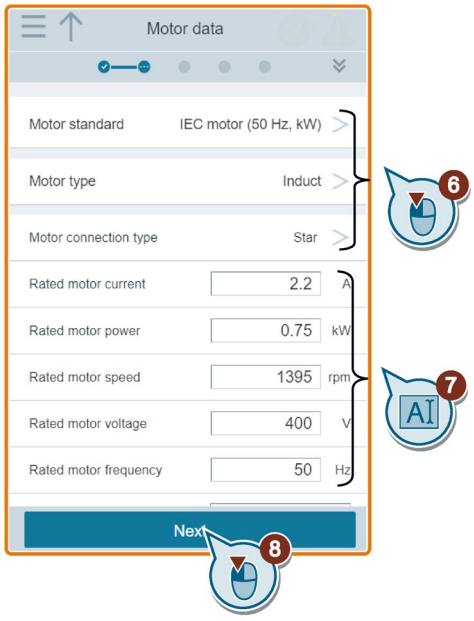
4. If you have selected to start a new configuration, select an application according to the particular converter connected.



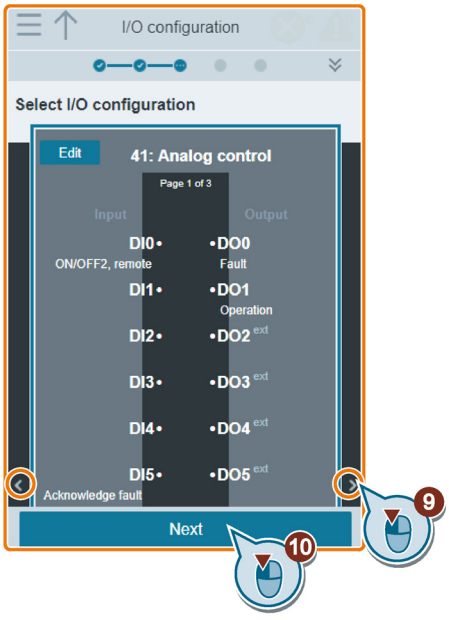
If PID control is selected, factory interface settings that are relevant to PID control will be displayed in the I/O configuration Web page.

5. Set the required motor data.

For Siemens motors, enter only the motor data as shown in ⑥ and the SINAMICS G120 Smart Access will automatically identify the rest of the motor data.



6. Select the factory interface settings for the converter based on your particular application. Note that the factory interface settings vary depending on the connected converter.

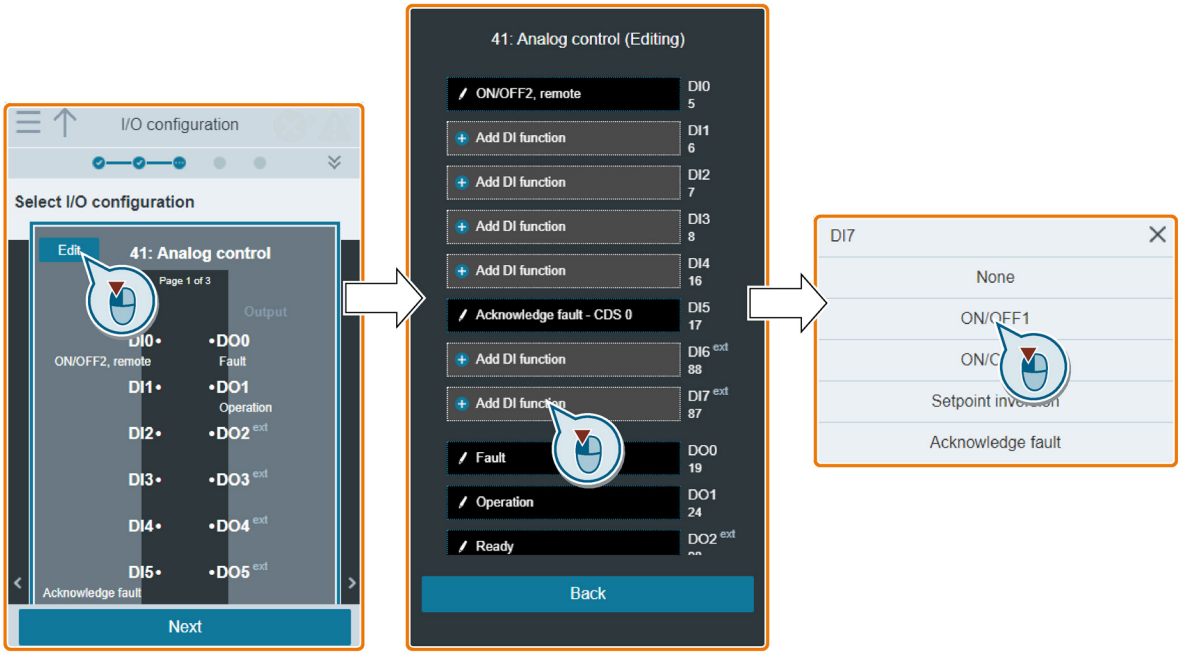


Edit the selected factory interface settings, if desired. You can do the following on the editing page:

- Add AI/DI/AO/DO function
- Edit AI/DI/AO/DO function
- Edit AI scaling
- Change fieldbus settings

Note that in the editing page, the numbers below the DI, AI, or Fieldbus refer to terminals on the Control Unit.

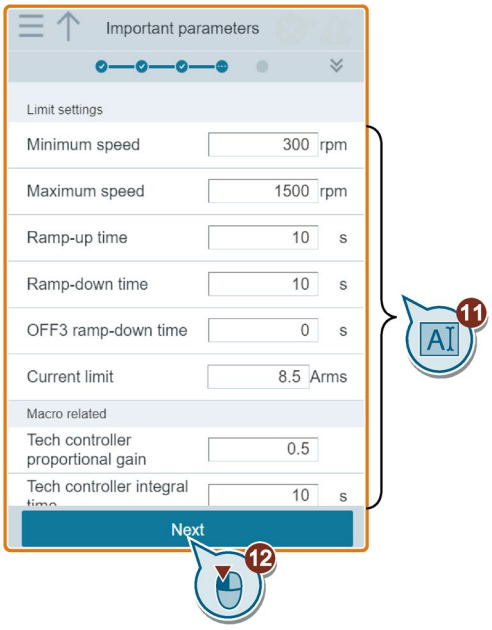
I/O terminals marked with superscript "ext" represent the terminals on the I/O Extension Module.



Note

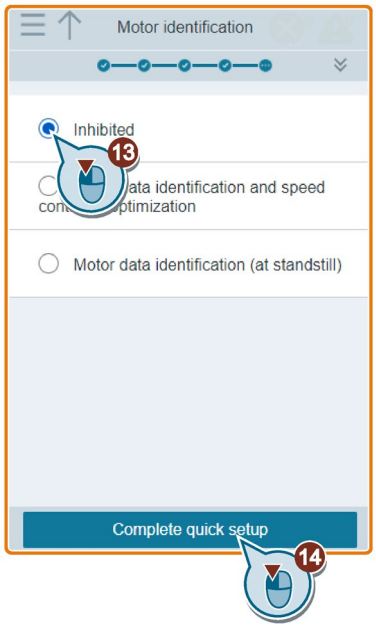
For the converter firmware version V1.04 and later, the G120X/G120XA converter has a new macro named "Blank I/O" (P0015 = 59). You can customize the input/output settings using the macro.

7. Set the following parameters based on your particular application. Note that the available parameters vary depending on the connected converter.



Limit settings			
Minimum frequency	P1080	Maximum frequency	P1082
Ramp-up time	P1120	Ramp-down time	P1121
OFF3 ramp-down time	P1135	Current limit	P0640
Macro related parameters			
Internal setpoint (0...n)	P2201...P2215	Technology controller proportional gain	P2280
Technology controller integral time	P2285		
Communication parameters			
Profibus address	P0918	Telegram	P0922
Speed setpoint selection	P1000	Fieldbus interface baud rate	P2020
Fieldbus interface address	P2021	PZD number	P2022
PKW number	P2023	Fieldbus interface time	P2024
Fieldbus interface BACnet settings/BACnet setting	P2025	Fieldbus interface BACnet COV increment	P2026
Fieldbus interface BACnet language selection	P2027	Fieldbus interface MODBUS parity	P2031
Fieldbus interface BACnet device name	P7610	PN IP address	P8921
PN Subnet Mask	P8923		

8. Select a desired motor data identification method.



Depending on the configuration type and selected application, the available methods for motor identification may vary:

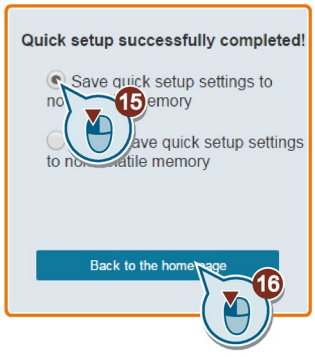
- Inhibited: P1900 = 0
- Motor data identification and speed controller optimization: P1900 = 1
- Motor identification at standstill: P1900 = 2

Note

For synchronous reluctance motors, the motor identification method automatically changes to "Motor identification (at standstill)" (P1900 = 2).

If you choose to identify the motor data, go to the JOG page after you have finished quick setup. For information about motor identification, see Section "JOG (Page 82)".

9. Complete quick setup.

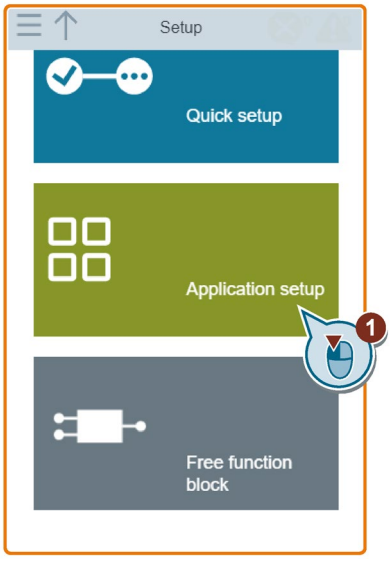


6.4.2.2 Application setup

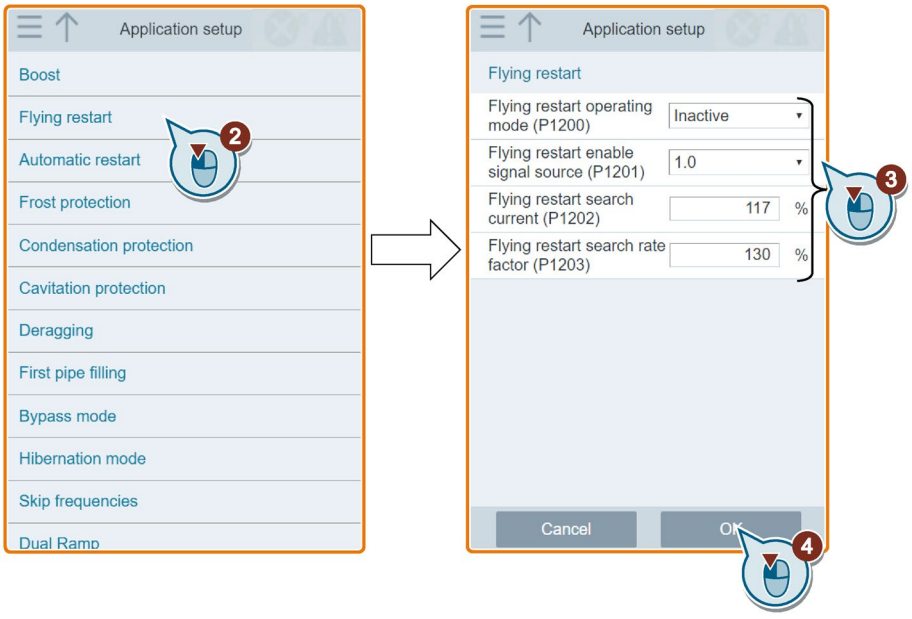
The application setup Web page allows you to set applications for the G120X/G120XA converter.

Operating sequence

1. Open the setup Web page by selecting the setup icon from either the home page or the navigation sidebar.
2. Open the application setup Web page by selecting the application setup icon.



3. Set the desired application as the example shown below. If necessary, repeat this step to set other applications.



6.4.2.3 Free function blocks (for converter FW 1.03 or later)

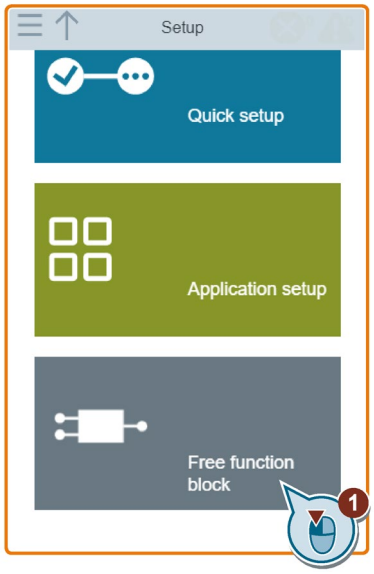
The free function block Web page allows you to configure signal processing in the converter.

Requirement

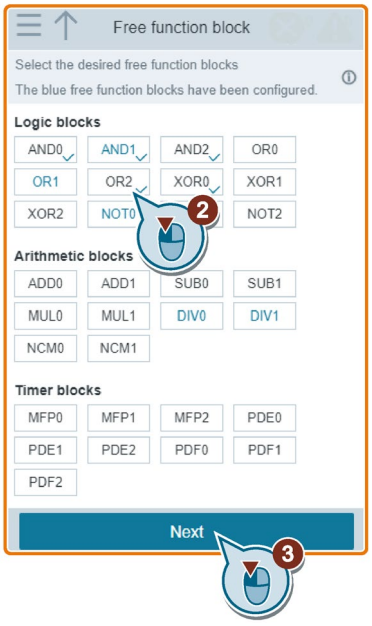
The free function blocks are available only on converters from FSA to FSG with FW version 1.03 or later.

Operating sequence

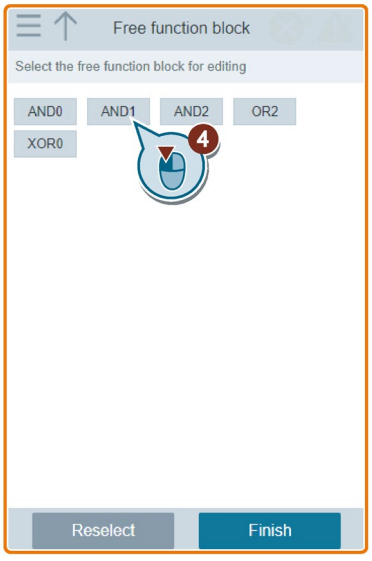
1. Open the setup Web page by selecting the setup icon from either the home page or the navigation sidebar.
2. Open the free function block Web page by selecting the free function block icon.



3. Select the required free function blocks. A tick mark then appears on the lower right of the selected free function blocks. The blue free function blocks indicate that you have previously activated the function blocks.



4. Select a target free function block to start editing. If any of the currently selected function blocks is not the required block, click the reselect button on the lower left to go back to the previous Web page for reselection of the required function blocks.



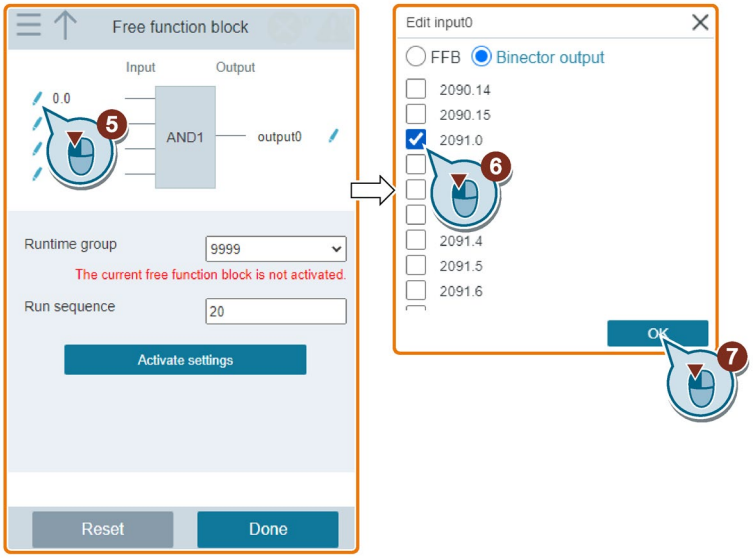
5. Edit the inputs and outputs of the free function block. Note that the number of available inputs and outputs varies among different block types.

   – Edit inputs

     Follow the illustrated steps below to edit the inputs. Note that you can interconnect an input only to one BO/CO parameter or one applicable free function block.

     To edit an input, click the pen symbol next to the input name. To edit the interconnected free function block, directly click the underscored function block name.

     To reset the free function block settings to the factory settings, click the reset button on the lower left.

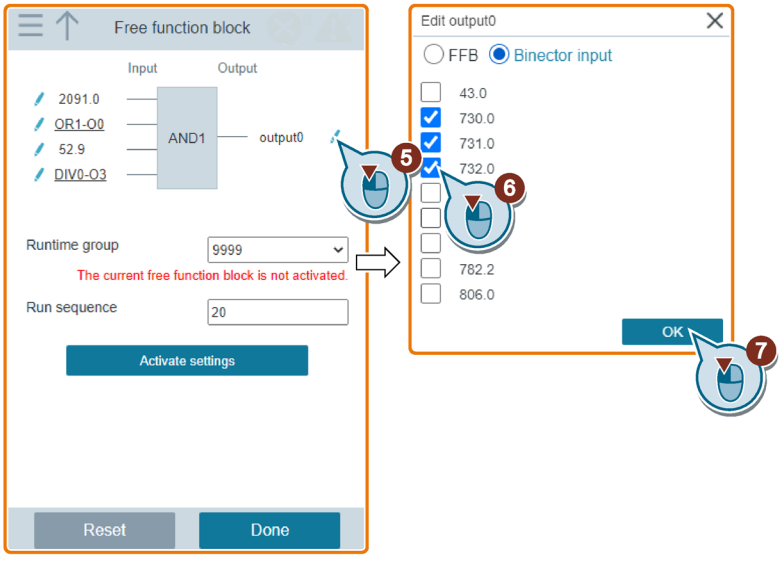


– Edit outputs

Follow the illustrated steps to edit the outputs. Note that you can interconnect an output to multiple BI/CI parameters or applicable free function blocks.

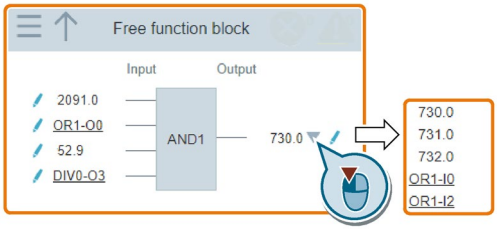
To edit an output, click the pen symbol next to the output name.

To reset the free function block settings to the factory settings, click the reset button on the lower left.



Note

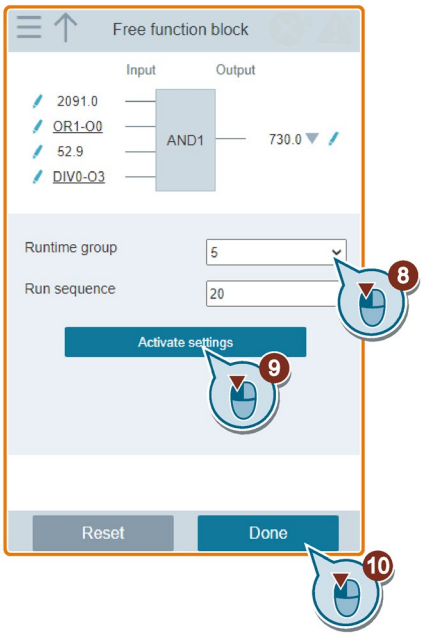
If you interconnect an output of the current function block to multiple parameters or function blocks, a drop-down arrow appears next to the output. Clicking the drop-down arrow allows you to view all the configured parameters or free function blocks (see the example below).



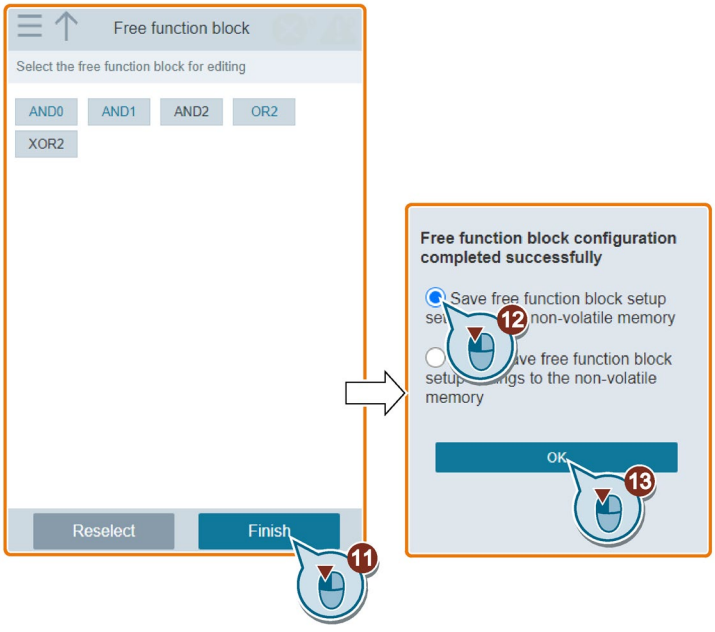
6. Assign the free function blocks to the applicable runtime groups and define a run sequence within a runtime group. Confirm the settings to activate the free function blocks. To reset the free function block settings to the factory settings, click the reset button on the lower left.

Note

None of the free function blocks in the converter are active in the factory settings. To activate a free function block, you must assign it to a runtime group with an exception of runtime group 9999.



7. Follow the instructions from Step 4 to Step 6 to complete editing of other target free function blocks and save the settings to the non-volatile memory of the drive.



Further information

For more information about the free function blocks, see the SINAMICS G120X/XA Operating Instructions (Page 107).

6.4.3 Setup (G115D converters only)



The setup Web page allows you to configure a comprehensive range of settings to meet the specific requirements of the G115D converters. You can perform the following three setups:

- Quick setup (Page 61)
- Application setup (for G115D PROFINET and AS-i variants only) (Page 69)
- Safety setup (Page 72)

6.4.3.1 Quick setup

The quick setup Web page allows you to set the following data for the connected G115D converter:

- Control mode
- Motor data
- I/O configuration
- Important parameters
- Motor identification

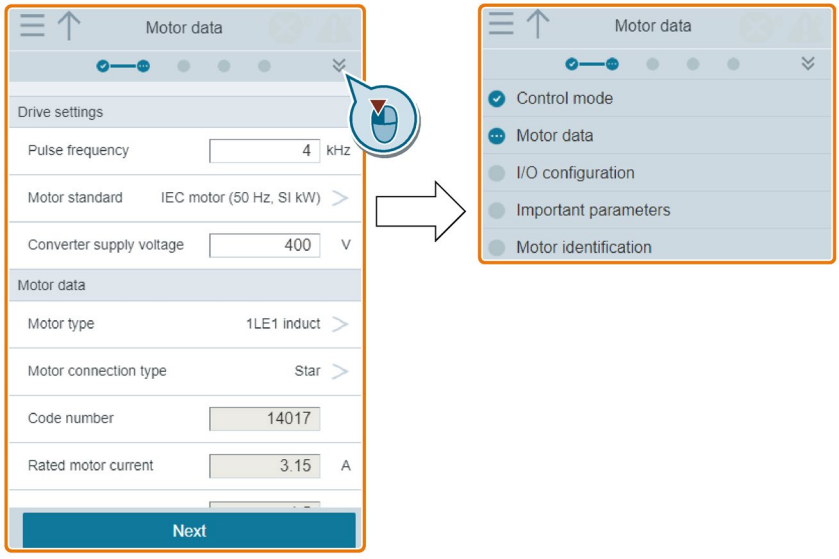
Expanded page for quick setup

When you see the Expand symbol on the top right of the quick setup page, click the symbol and an expanded quick setup page opens. You can do the following on this page:

- View the status of individual quick setup steps based on the symbols given below:

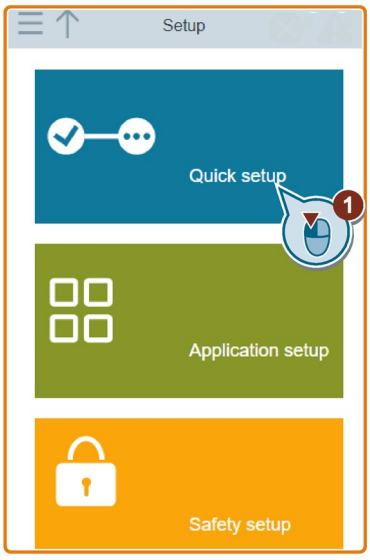
	Completed step
	Current step
	To-be-completed step

- Go back to a completed step. Once you open a completed step, all the changes done in subsequent steps become invalid and require new settings.

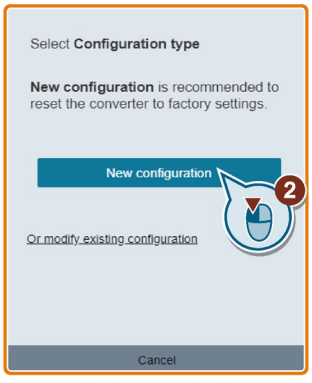


Operating sequence

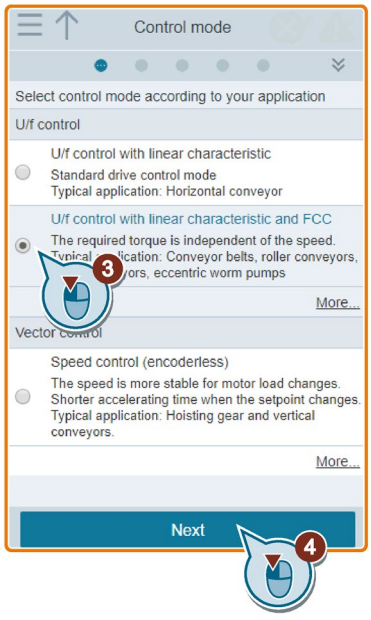
1. Open the setup Web page by selecting the setup icon from either the home page or the navigation sidebar.
2. Open the quick setup Web page by selecting the quick setup icon.



3. Start a new configuration (recommended) or modify the existing configuration.
   - If you select to start a new configuration, factory reset is performed automatically. After you confirm that the factory resetting is successfully completed, the Web page advances to the control mode subpage automatically.
   - If you select to modify the existing configuration, the Web page directly advances to the control mode subpage.

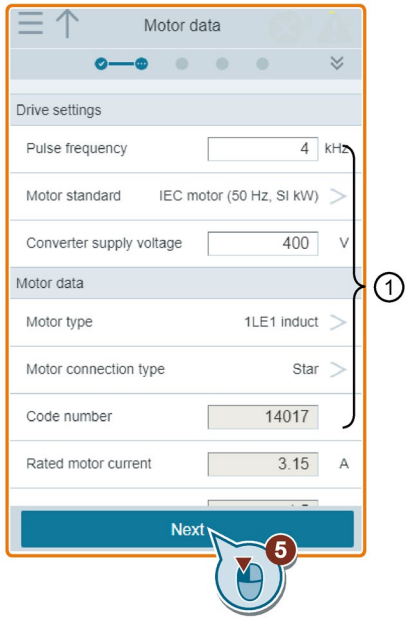


4. Select the control mode according to the specific applications.



5. Set the required drive and motor data.

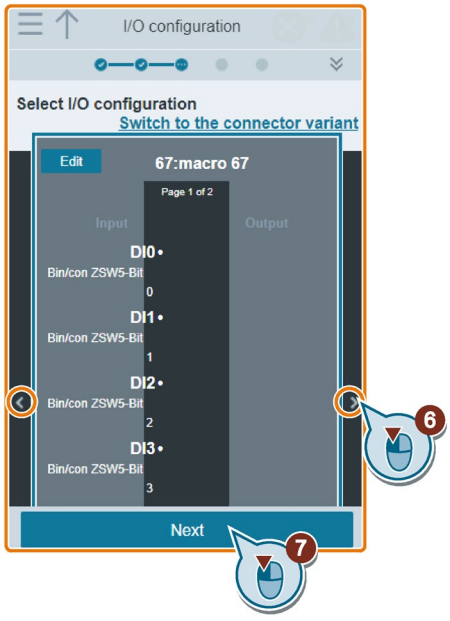
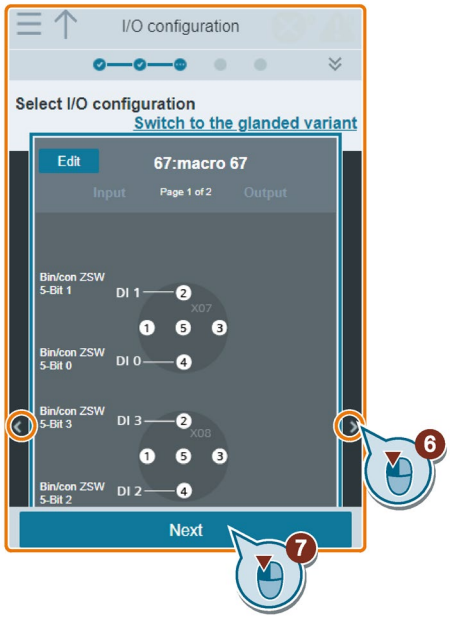
   For Siemens motors, enter only the data as shown in ① and the SINAMICS G120 Smart Access will automatically identify the rest of the data.



Note

- If you change the motor standard, the control mode changes to the default V/f control mode (P1300 = 1: V/f control with linear characteristics and FCC).
- If you select a reluctance motor or 2KJ8 asynchronous motor as the motor type, the control mode changes to the default vector control mode (P1300 = 20: encoderless speed control).
- For 2KJ8 motors, you must select IEC as the motor standard. When you select delta connection as the 2KJ8 motor connection type, do not select the frequency selection check box.

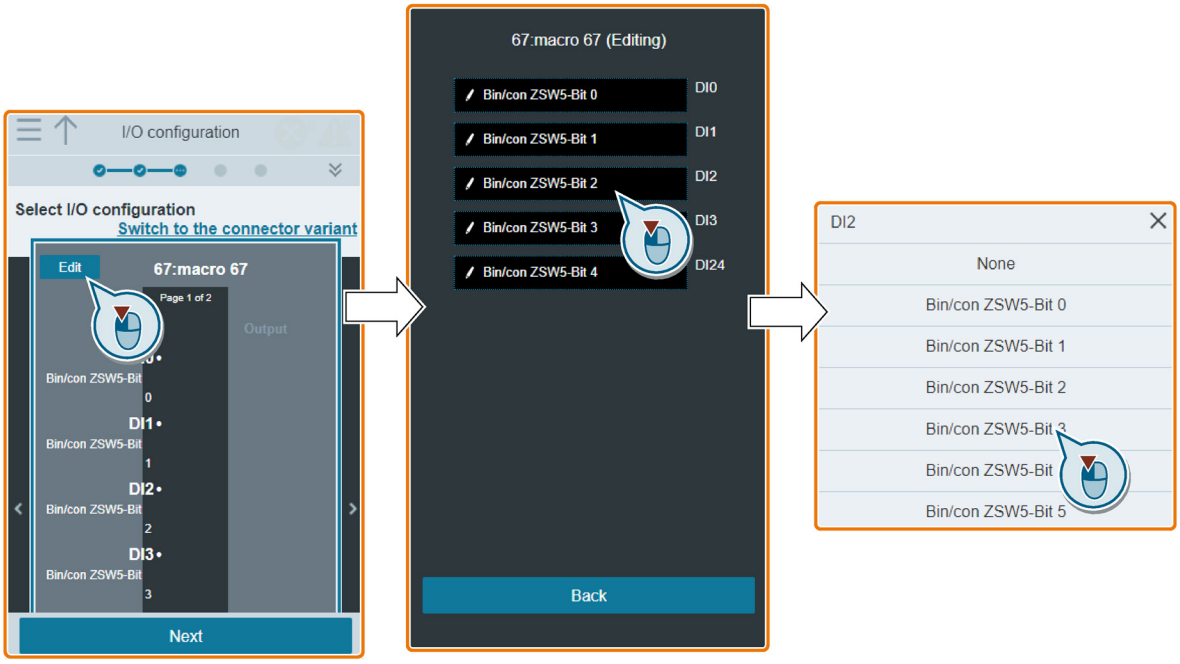
6. Select the factory interface settings for the converter based on your particular application. Note that the factory interface layouts vary depending on the variant of the connected converter. The illustration below takes a SINAMICS G115D PROFINET variant as an example:

Glanded variant	Connector variant
	

The G115D converter has two bidirectional digital inputs/outputs (DIO 24 and DIO 25). You can parameterize them as digital inputs or digital outputs with P0728. For more information about how to set the parameter, see Section "Parameters (Page 75)".

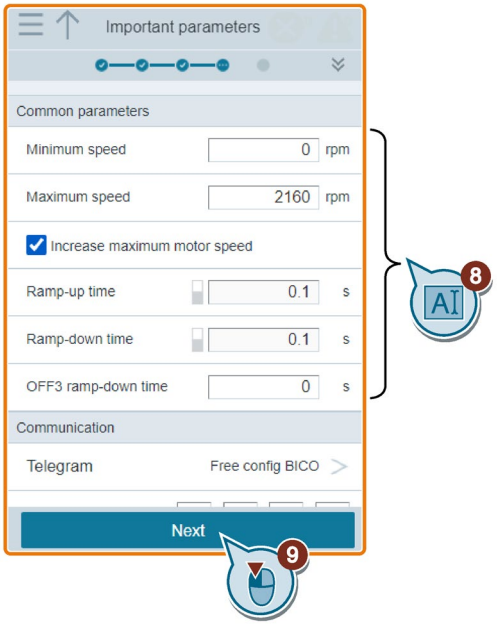
G115D P0728		
Bit	**Signal**	**Signal name**
24	0	DI24
	1	DO24
25	0	DI25
	1	DO25

Edit the selected factory interface settings, if desired. See the editing example below:



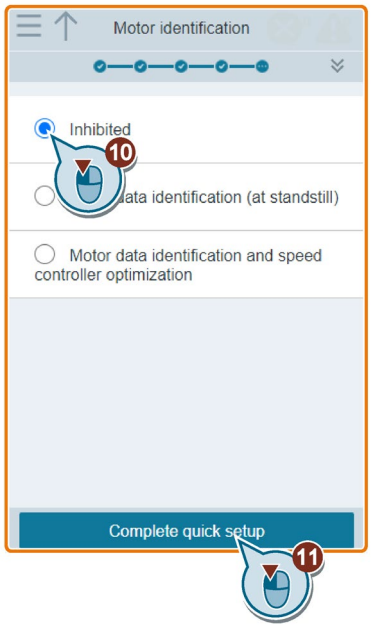
7. Set the following parameters based on your particular application.

   Note: ▯ reflects the settings done with the DIP switches on the G115D converter. For information on changing DIP switch settings, see the SINAMICS G115D Operating Instructions (Page 107).



Common parameters			
Minimum speed	P1080	Maximum speed	P1082
Ramp-up time	P1120	Ramp-down time	P1121
OFF3 ramp-down time	P1135		
Communication parameters			
Telegram	P0922	PN IP address	P8921
Speed setpoint selection	P1000	PN subnet mask	P8923

8. Select a desired motor data identification method.



Depending on the configuration type and selected application, the available methods for motor identification may vary:

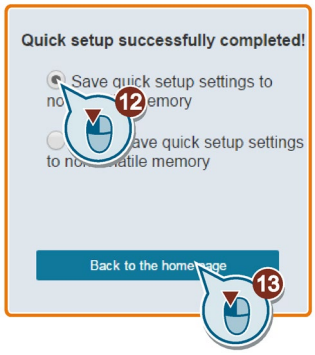
- Inhibited: P1900 = 0
- Motor data identification and speed controller optimization: P1900 = 1
- Motor identification at standstill: P1900 = 2

Note

For synchronous reluctance motors, the motor identification method automatically changes to "Motor identification (at standstill)" (P1900 = 2).

If you choose to identify the motor data, go to the JOG page after you have finished quick setup. For more information about motor identification, see Section "JOG (Page 82)".

9. Complete quick setup.



6.4.3.2 Application setup (for G115D PROFINET and AS-i variants only)

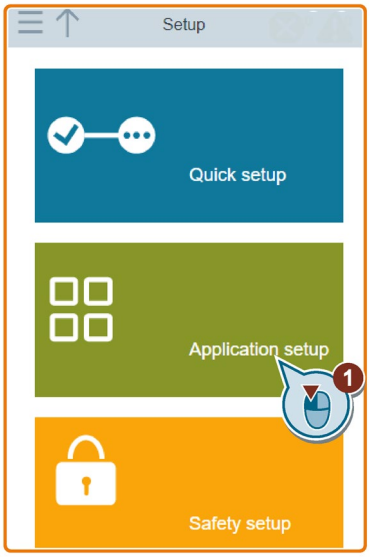
The application setup Web page allows you to set conveyor technology control functions for the SINAMICS G115D PROFINET and AS-i variants (I/O variants not supported).

Note

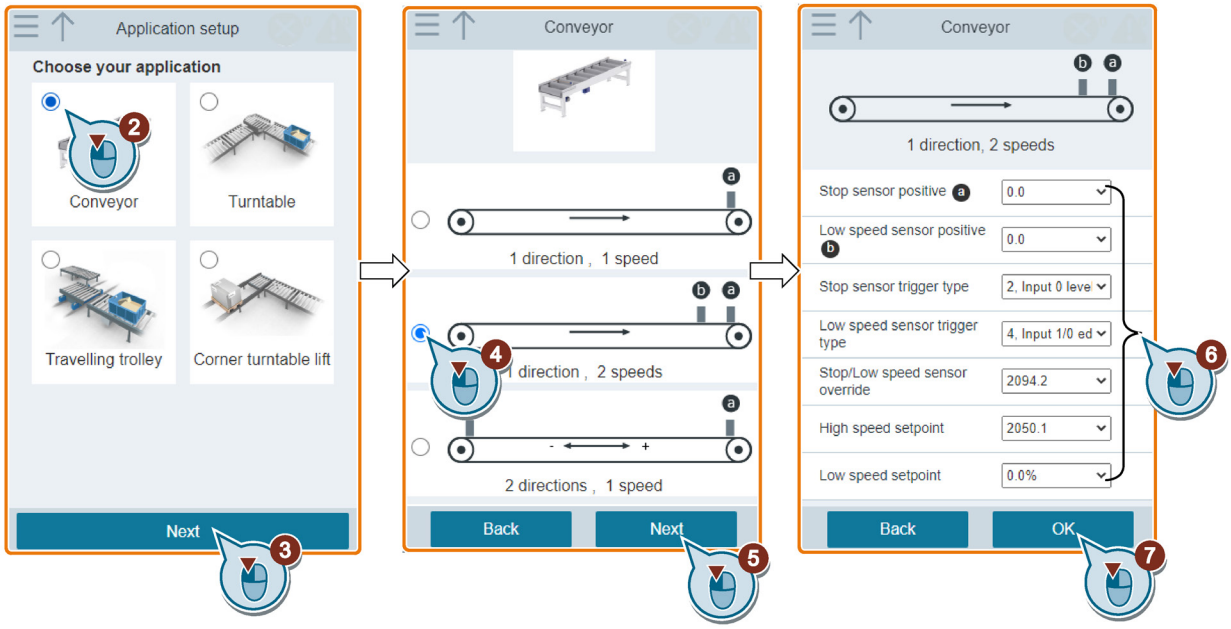
To make sure that the conveyor control function works properly on the SINAMICS G115D AS-i variant, you must select Macro 31 or 34.

Operating sequence

1. Open the setup Web page by selecting the setup icon from either the home page or the navigation sidebar.
2. Open the application setup Web page by selecting the application setup icon.



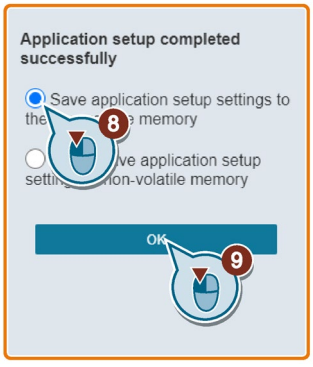
3. Set the desired application as the example shown below.



Parameter	Description	Function
P3384	BI: Stop sensor positive direction signal source	Sets the signal source of the stop sensor for the positive direction. Factory setting: 0
P3385	BI: Stop sensor negative direction signal source	Sets the signal source of the stop sensor for the negative direction. Factory setting: 0
P3386	BI: Stop sensor center signal source	Sets the signal source of the stop sensor for the middle position. Factory setting: 0
P3387	BI: Low speed sensor positive direction signal source	Sets the signal source of the low speed sensor for the positive direction. Factory setting: 0
P3388	BI: Low speed sensor negative direction signal source	Sets the signal source of the low speed sensor for the negative direction. Factory setting: 0
P3389	BI: Low speed sensor center signal source	Sets the signal source of the low speed sensor for the middle position. Factory setting: 0
P3390	BI: Stop/low speed sensor bypass signal source	Sets the signal source for bypassing the stop and low speed sensors. 1 signal: The stop and low speed sensors are not taken into account. The factory setting depends on the converter fieldbus interface.
P3391	BI: Stop/low speed sensor bypass manual operation signal source	Sets the signal source for bypassing the stop and low speed sensors in the "manual operation" mode. Factory setting: 8559.4

Parameter	Description	Function
P3392	End position shutdown activation	= 0: End position shutdown deactivated. Travel can be continued in both directions. = 1: End position shutdown activated (factory setting). Travel can only be continued in the opposite direction.
P3393	Conveyor technology application selection	Selects the conveyor technology application. Factory setting: 0
P3394	Stop sensor evaluation type	= 1: Input signal high level triggered = 2: Input signal low level triggered (factory setting) = 3: Input signal 0→1 edge triggered = 4: Input signal 1→0 edge triggered
P3395	Low speed sensor evaluation type	See P3394. Factory setting: 4
P3397	CI: Rapid traverse setpoint signal source	Sets the signal source of the high speed setpoint. The setpoint for the input is interconnected with the main setpoint P1070.
P3398	CI: Low speed setpoint signal source	Sets the signal source of the low speed setpoint. The connector input can be interconnected with a fixed setpoint (P1001 and following) or potentiometer (r0752). Factory setting: 0

4. Complete application setup.

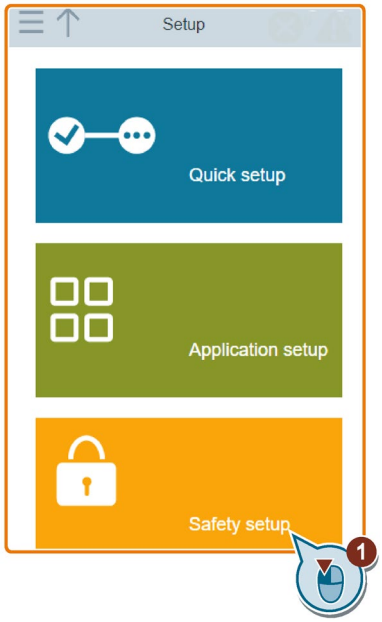


6.4.3.3 Safety setup

The safety setup Web page allows you to configure the safety function for the SINAMICS G115D converter. To ensure protection against unauthorized changes, it is recommended that you activate the safety function. The STO function prevents unexpected startup of an electrically-driven machine component.

Operating sequence

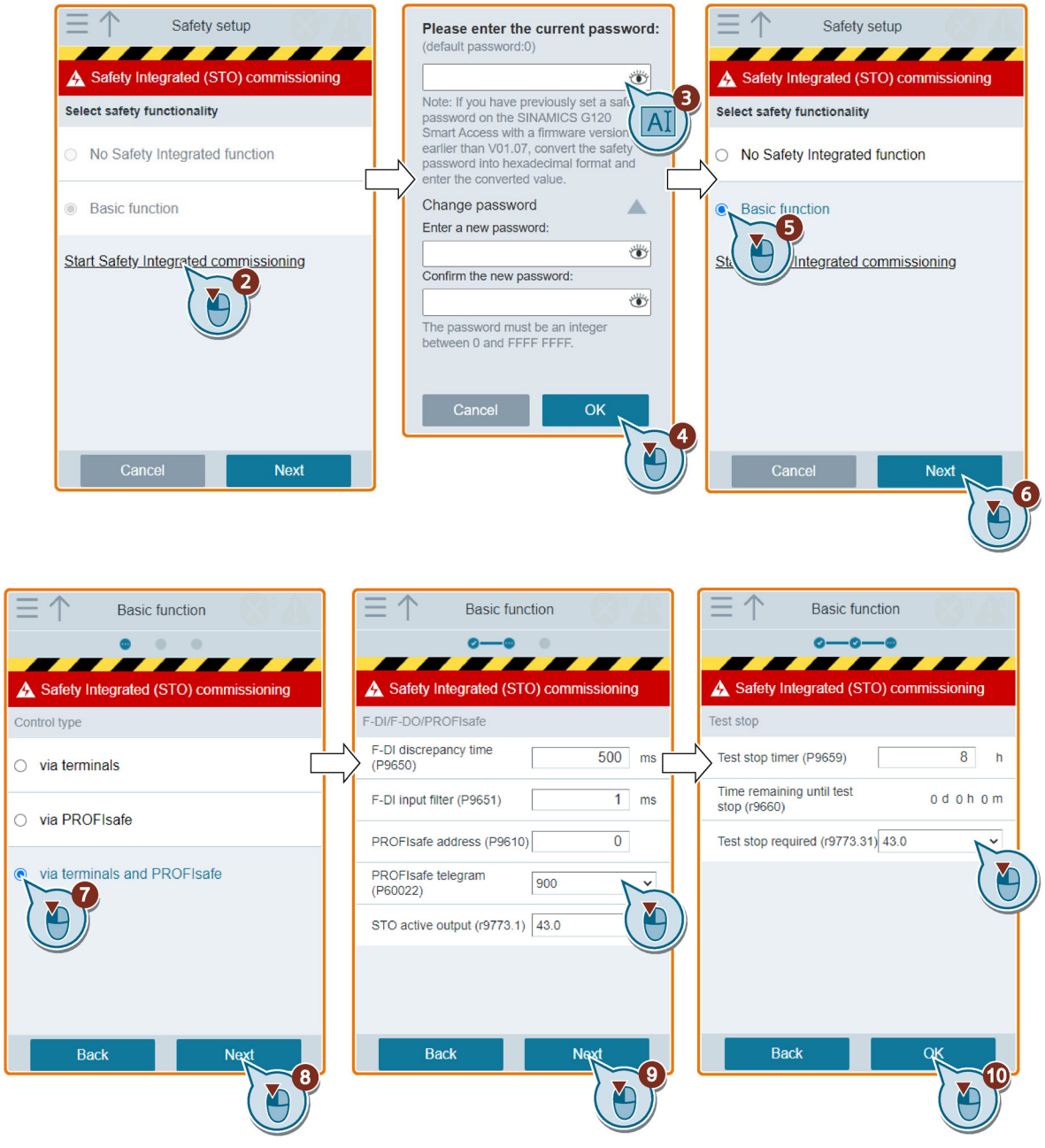
1. Open the setup Web page by selecting the setup icon from either the home page or the navigation sidebar.
2. Open the safety setup Web page by selecting the safety setup icon.



3. Proceed as follows to complete the commissioning of the safety function.

   Note the following when navigating through the procedure:

   - Follow the on-screen password instructions.
   - Activating the safety function is recommended.
   - Select the control type according to your converter variant.



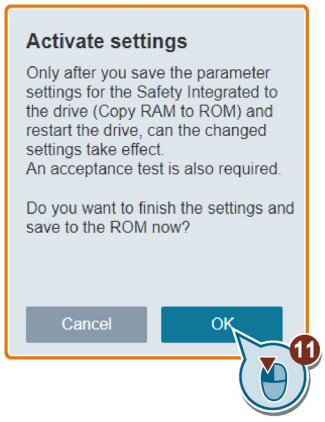
Note

The illustration above takes a SINAMICS G115D PROFINET variant as an example. On AS-i and I/O control variants, only the control type "via terminals" is available.

Parameter	Description	Function
P9650	SI F-DI changeover discrepancy time (processor 1) [ms]	Tolerance time to change over the fail-safe digital input for the basic functions. Factory setting: 500 ms
P9651	SI STO debounce time (processor 1) [ms]	Debounce time of the fail-safe digital input for the basic functions. Factory setting: 1 ms
P9610 *	SI PROFIsafe address (processor 1)	Sets the PROFIsafe address for processor 1.
P60022 *	PROFIsafe telegram selection	Sets the telegram number for PROFIsafe.
r9773.1	CO/BO: SI status (processor 1 + processor 2)	Signals for the higher-level control system. Bit 1: STO is active in the drive
P9659	SI forced checking procedure timer [h]	Monitoring time for the forced dormant error detection. Factory setting: 8 h
r9660	SI forced checking procedure re-maining time	Displays the remaining time until the forced dormant error detection and testing the safety switch-off signal paths.
r9773.31	CO/BO: SI status (processor 1 + processor 2)	Signals for the higher-level control system. Bit 31: Test stop is required for STO

* Not available when selecting the control type "via terminals"

4. Complete the safety setup by saving the parameter settings to the non-volatile memory of the drive (see the image below), then restart the drive and perform the safety acceptance test to verify the correct and intended safety function setup.



Further information

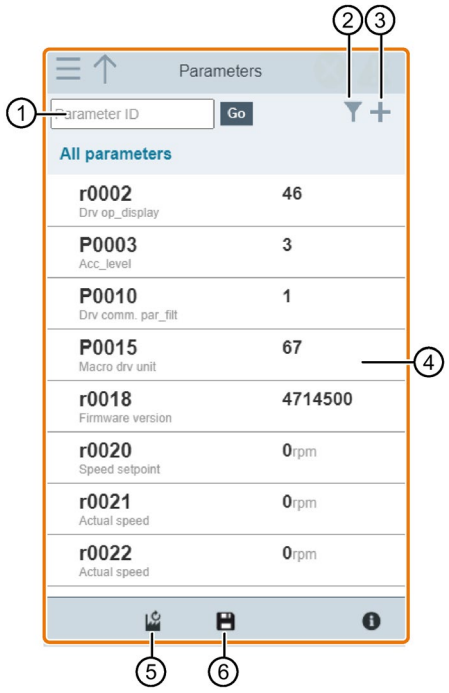
For more information about resetting the safety parameters, see Section "Resetting parameters (Page 81)".

For more information about the safety function, see the "Safety Integrated" Function Manual (Page 107).

For more information about the acceptance test of STO function, see the SINAMICS G115D Operating Instructions (Page 107).

6.5 Parameters

You can open the parameters Web page by selecting the parameters icon from either the home page or the navigation sidebar.

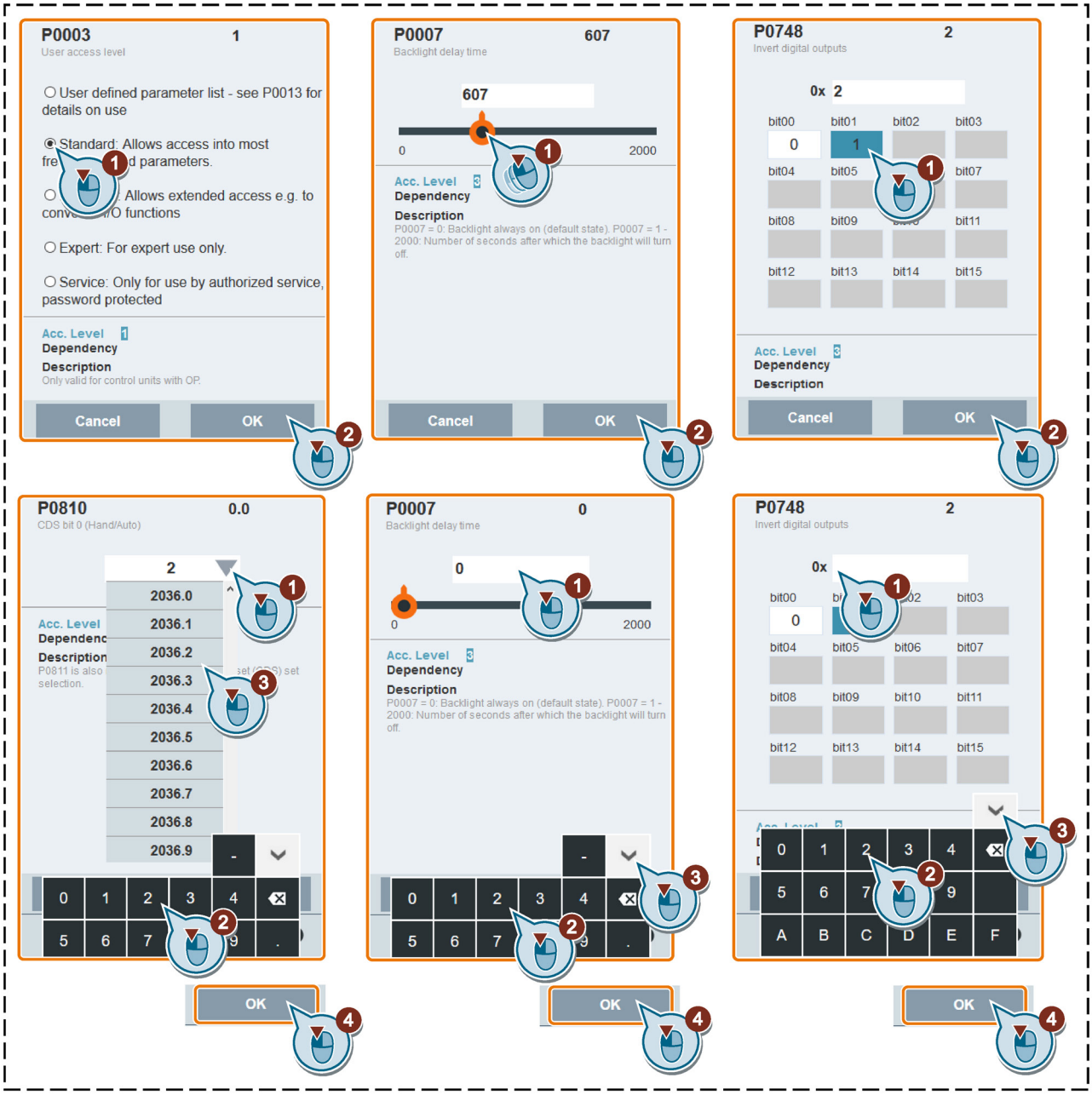


① Searching parameters
② Filtering parameters by group
③ Editing "My parameters"
④ Modifying parameters
⑤ Resetting parameters
⑥ Saving parameters

After successfully modifying parameters, a red point appears on ⑥ reminding you to save the changed parameters to non-volatile memory.

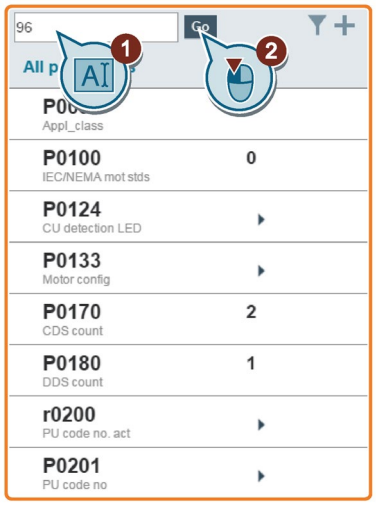
6.5.1 Modifying parameters

The figure below shows different methods for modifying parameters. Note that when modifying a BICO parameter (example: P0810), you can use the on-screen numeric keypad or your native keyboard to quickly navigate to the parameter values that start with the number(s) you enter.



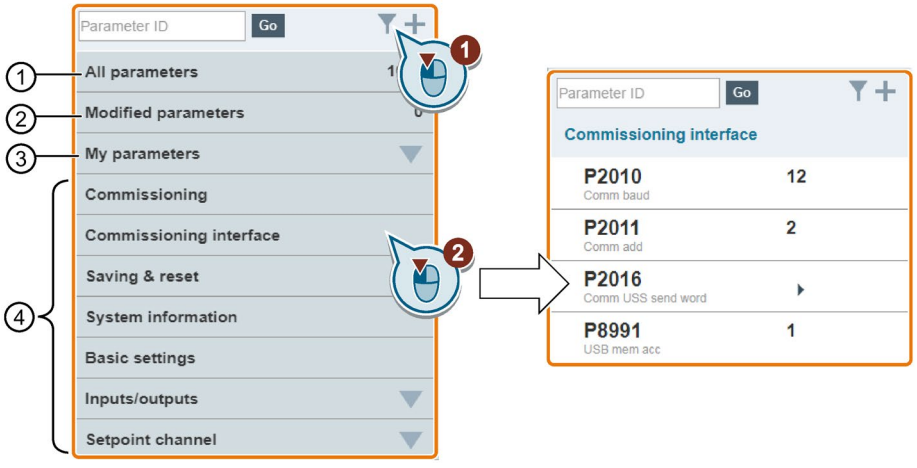
6.5.2 Searching parameters

You can search parameters by entering parameter ID. If you do not enter any parameter ID and then select the Go icon, the page shows the list of all parameters visible on the Web page.



6.5.3 Filtering parameters

You can view and set parameters in the target parameter group.



① Complete list of all visible parameters
② List of all modified parameters
③ User-defined parameters
④ Other parameter groups

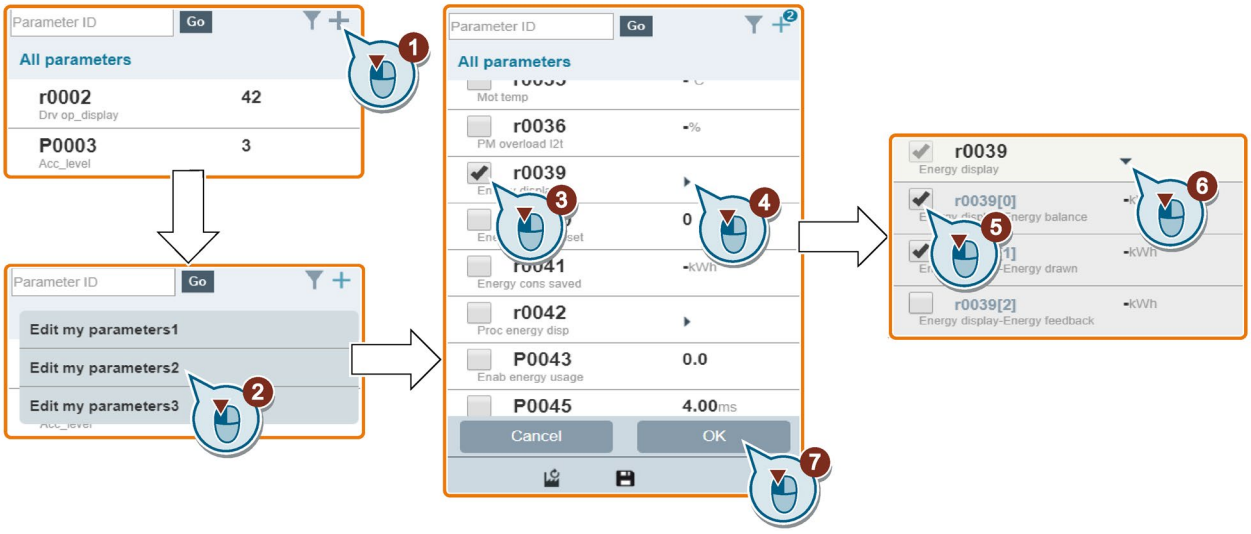
6.5.4 Editing "My parameters"

You can edit the parameters under "My parameters", such as adding, deleting, importing and exporting. Three groups are available under "My parameters" and the numbers on the right indicate the number of the parameters in each group. See example below:



- Adding "My parameters"

  Proceed as the example below to add certain parameters (including any specific indexed parameters) to "My parameters" (My parameters2 is selected in the example):



- Deleting "My parameters"

  If you desire to delete any parameters under "My parameters", deselect the checkbox before the parameter and confirm with "OK".

All successfully saved parameters will go to the corresponding parameter group. Proceed as follows to view these parameters:



If desired, you can also import or export "My parameters" (recommended on PC). Continue as follows:

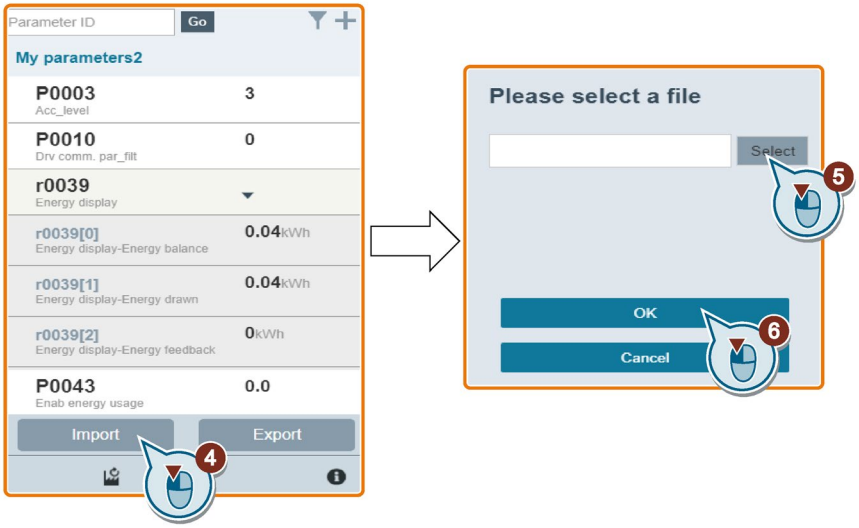
Note

Precondition

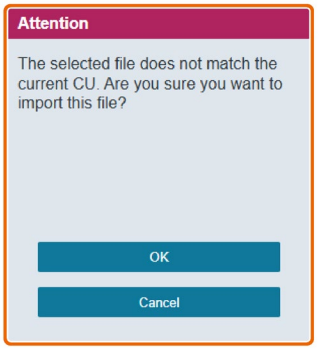
You have navigated to the desired parameter group under "My parameters" shown as the image above.

The softkeys "Import" and "Export" are not available if you are under the state of "Editing my parameters".

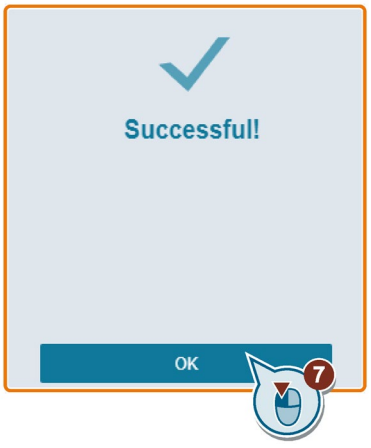
- Importing "My parameters"



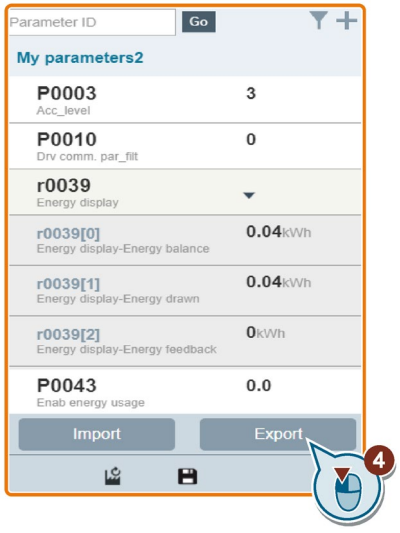
If the selected file does not match the current Control Unit, the following message prompts asking you whether you want to import the selected file or cancel the process.



The importing process completes when the following window appears. Note that the imported parameters will overwrite the old parameters in your specified parameter group.



- Exporting "My parameters"

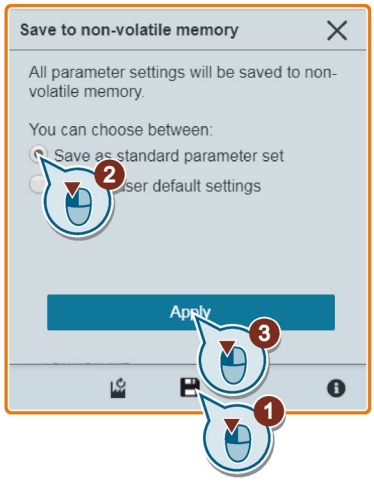


The exporting process completes with a .xml file saved under your specified path. You can open the file to view the exported parameters. Note that the exported .xml file only shows the parameter numbers. The corresponding parameter values are not shown.

6.5.5 Saving parameters to non-volatile memory

You can select to save all parameter settings to the non-volatile memory as standard parameter set as well as user default settings:

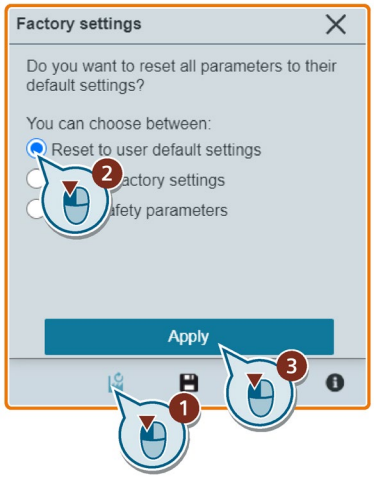
- Save as standard parameter set (P0971 = 1): save the current parameter settings to the non-volatile memory as the drive parameter set.
- Save as user default settings (P0971 = 10): save the current parameter settings to the non-volatile memory as setting group 10.



6.5.6 Resetting parameters

You can select to reset all parameters to either user default settings or factory settings:

- Reset to user default settings (P0970 = 10): reset the current parameters to the parameters in the setting group 10.
- Reset to factory settings (P0970 = 1): reset the current parameters to their default settings in the delivery state.
- Reset safety parameters (P0970 = 5): only reset the safety-related parameter in G115D to their default settings in the delivery state.



6.6 JOG

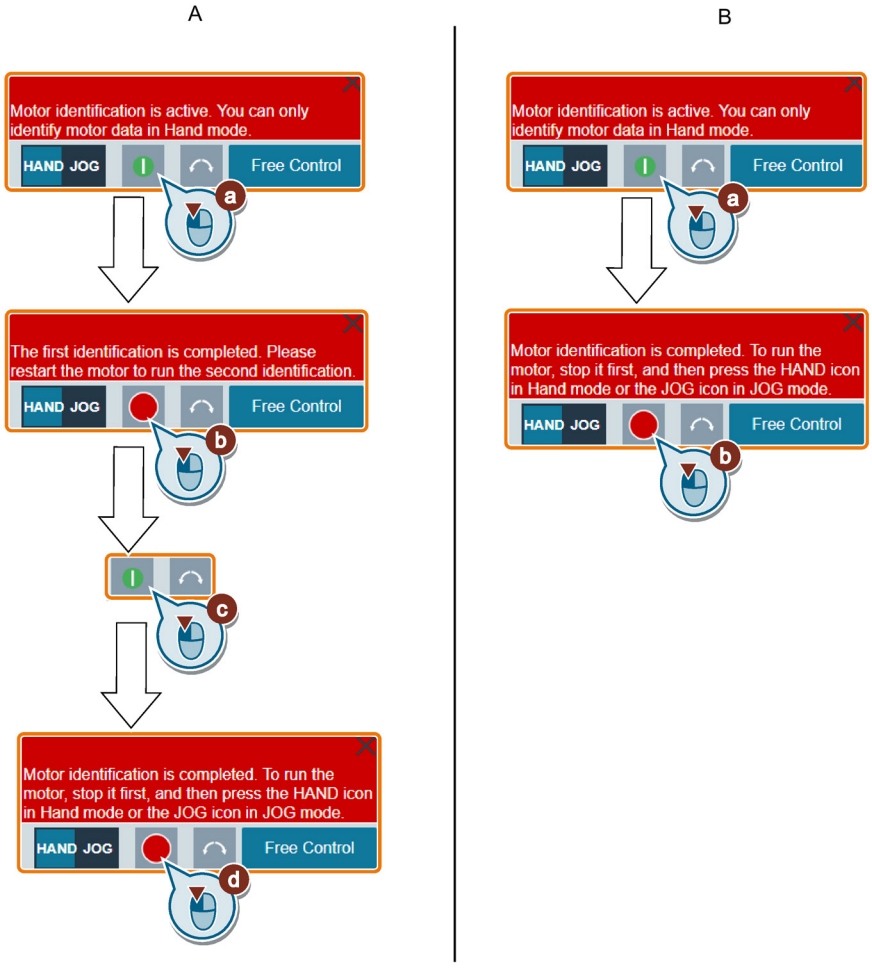
You use this Web page to start the motor test run in JOG or HAND mode.

Operating sequence

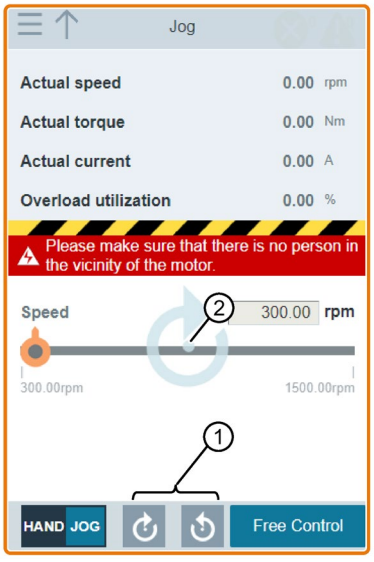
1. Open the JOG Web page by selecting the JOG icon from either the home page or the navigation sidebar.
2. Proceed as follows to get control of the motor.



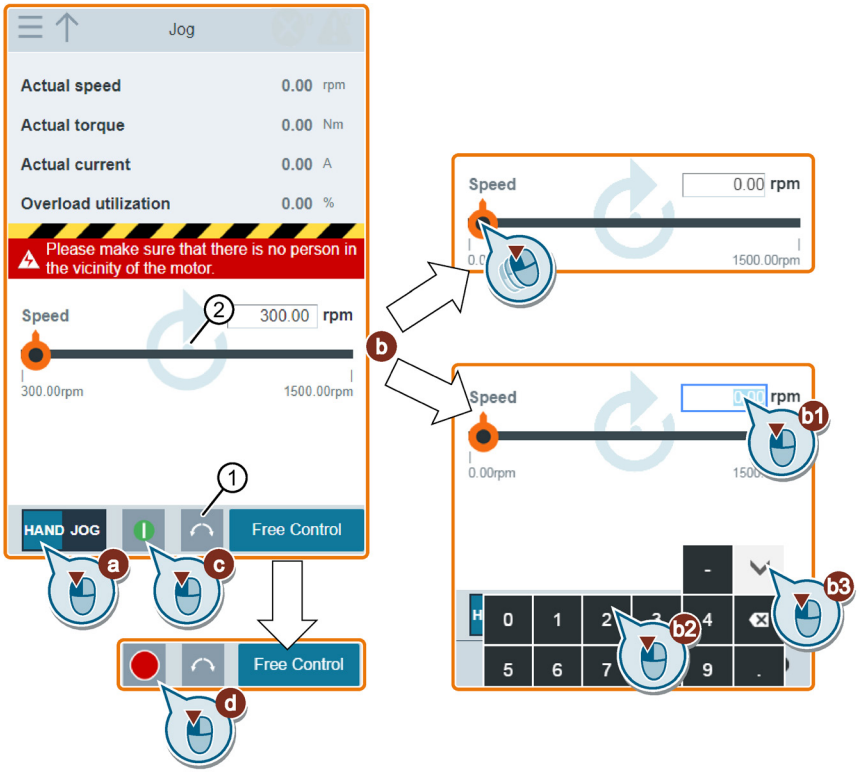
3. Identify the motor data. This step varies depending on the setting of the parameter P1900 in quick setup page or in parameter page.
   - P1900 = 0: Do not measure the motor data. Proceed to the next step to perform the motor test run.
   - P1900 = 1: Measure the motor data at standstill and with the motor rotating. You must do motor data identification twice (See A).
   - P1900 = 2: Measure the motor data at standstill. You must do motor data identification only once (See B).



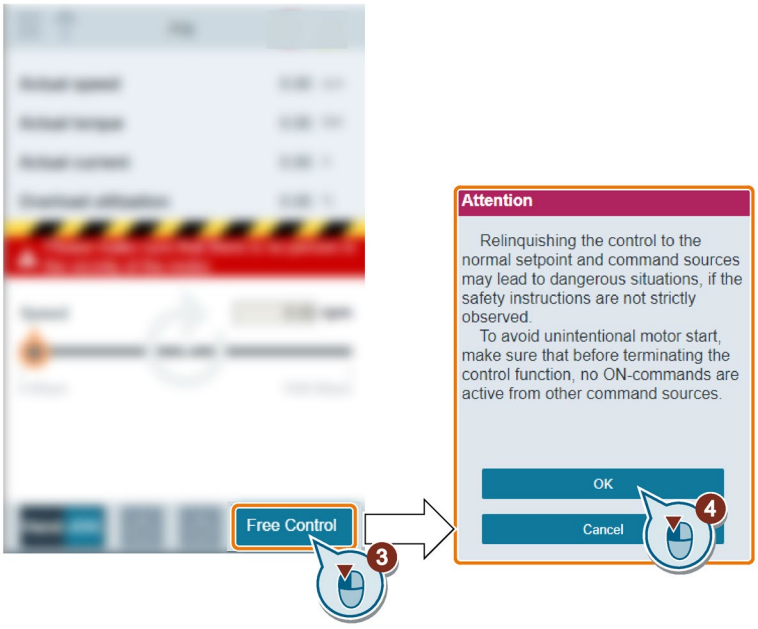
4. Run the motor in JOG or HAND mode (default mode: JOG).
   Note that if desired, you can also test the motor rotation direction with the corresponding button ("①"). The page shows the currently selected rotation direction ("②").
   - Press the desired button ("①") to run the motor in JOG mode:



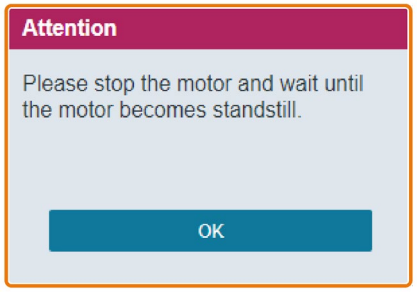
   - Proceed as follows to run the motor in HAND mode:



5. After you finish the motor test run, proceed as follows to relinquish the control of the motor:



Before relinquishing the control, make sure that there is no converter output and the motor has stopped. If the motor is still running, the following message appears:

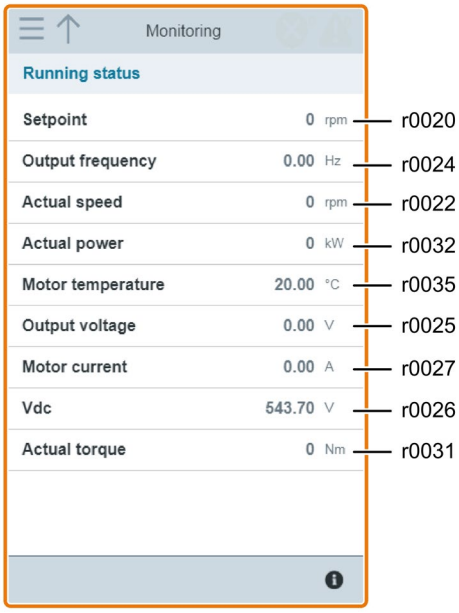


Note

If the Wi-Fi connection is lost during motor test run, you must re-establish the wireless network connection.

6.7 Monitoring

You can open the converter status monitoring Web page by selecting the monitoring icon from either the home page or the navigation sidebar.



6.8 Diagnostics

You can open the diagnostics Web page by selecting the diagnostics icon from either the home page or the navigation sidebar. This page includes the following subpages:

- Faults/alarms
- I/O status
- Status bits
- DIP switch status (G115D converters only)

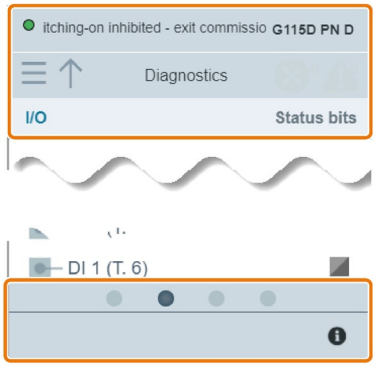
Switching among subpages

You have two methods to switch among the subpages:

- Click the circle icon at the bottom

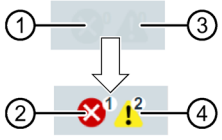


- Hold down the left mouse button and move the pointer left or right over the page header or footer until a different subpage appears



Meaning of fault/alarm icons

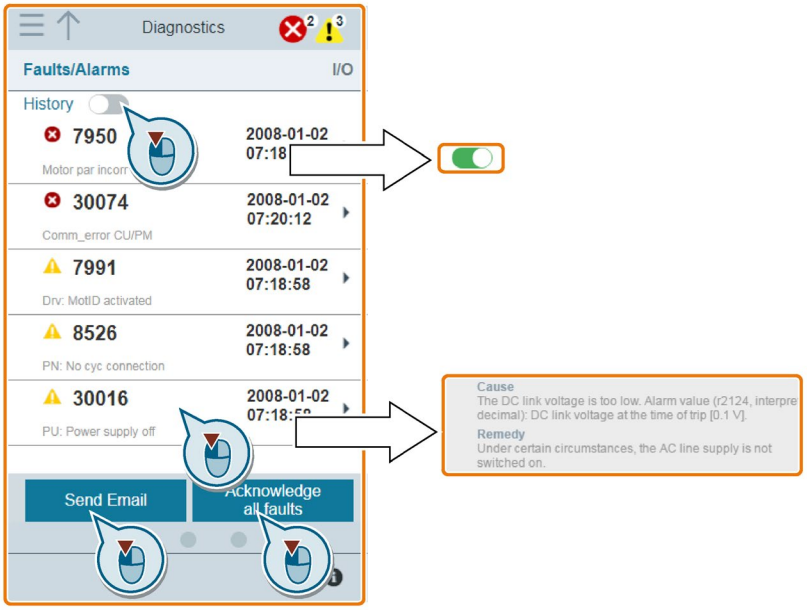
Fault and alarm icons are shown in the upper-right corner of the SINAMICS G120 Web page. See the following example for possible icon display:



Fault icons	
①	No active faults
②	Active faults (in this example: one active fault)
Alarm icons	
③	No active alarms
④	Active alarms (in this example: two active alarms)

Faults/Alarms

On this subpage, you can view the detailed fault/alarm information, acknowledge all faults, or send all faults by e-mail (recommended on PC). Note that when sending faults by email, make sure that your mobile device is connected to the internet.



You can use the filter button to display all faults and alarms or the active ones only.

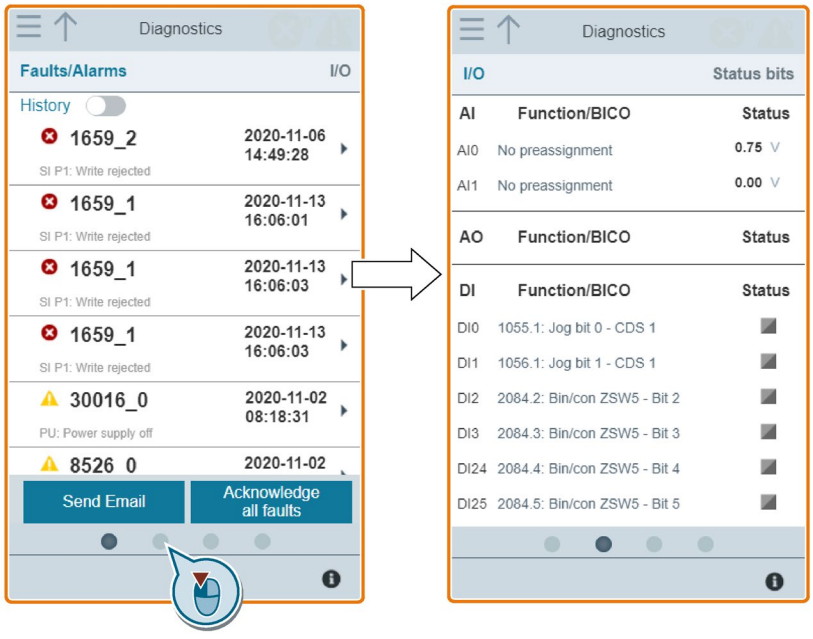
Button status	Description
	Displays the active faults and alarms only
	Displays all faults and alarms

Note: SINAMICS G120 Smart Access does not read the updates of active faults or alarms from the converter until you collapse the currently expanded fault/alarm.

For more information about the maximum number of faults/alarms that can be recorded, see r0947/r2110.

I/O status

This subpage displays the detailed I/O status information.

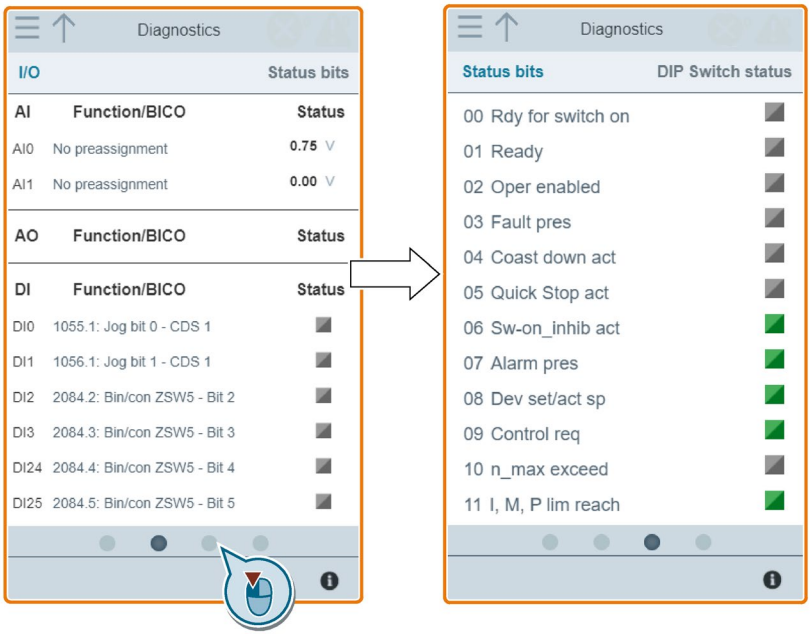


Parameters

Parameter	Function
r0722.0...n	CO/BO: CU digital input status
r0747.0...n	CO/BO: CU digital output status
r0752[0...n]	Actual analog input value [V] or [mA]
r0774[0...n]	Actual analog output value [V] or [mA]
P0756[0...n]	Type of analog input
P0776[0...n]	Type of analog output

Status bit

This subpage displays the detailed status bit information.

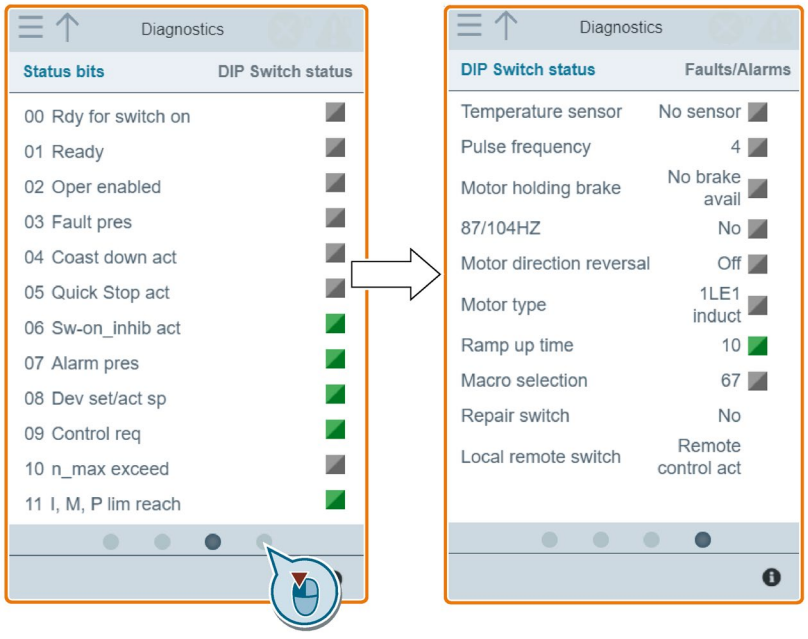


Parameters

Parameter	Function
r0052.0...15	CO / BO: Active status word 1
r0053.0...11	CO / BO: Active status word 2

DIP switch status (G115D converters only)

This subpage displays the detailed DIP switch status information.



Parameters

Parameter	Function
P0601	Temperature sensor
P0300	Motor type
P1215	Motor holding brake
P1820	Motor direction reversal
P1120	Ramp-up time
P1121	Ramp-down time
P1800	Pulse frequency

6.9 Backup and restore

You can open the backup&restore Web page by selecting the backup&restore icon from either the home page or the navigation sidebar. This page includes the following four subpages:

- Backup
- Restore
- Save as XML
- SD card file transfer

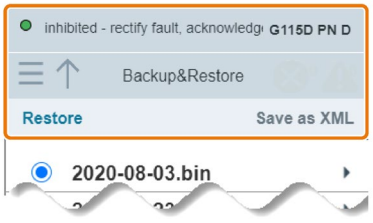
Switching among subpages

You have two methods to toggle among these subpages:

- Click the circle icon at the bottom



- Hold down the left mouse button and move the pointer left or right over the page header or footer until a different subpage appears





6.9.1 Backing up

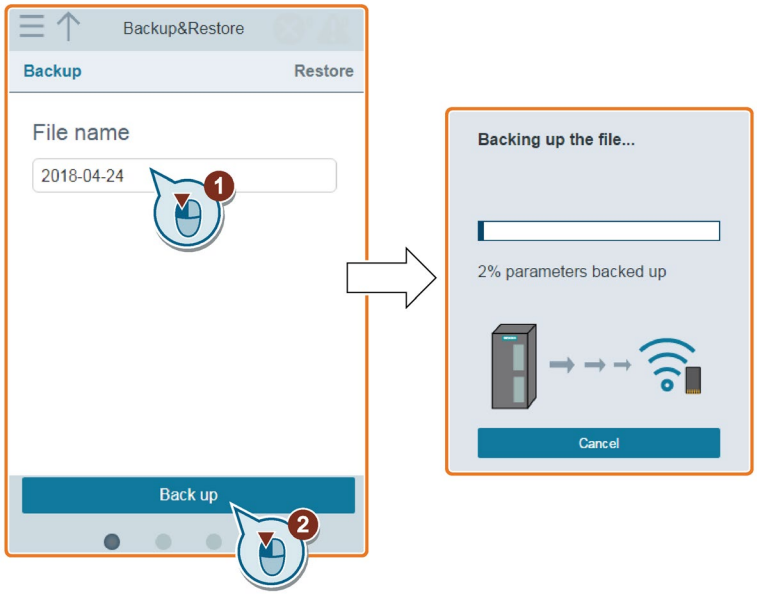
You can use the backup Web page to back up parameters to SINAMICS G120 Smart Access and download the backup file (*.bin file) to your local drive (recommended on PC).

Note

The backup process backs up all the changed parameters and allows you to back up a maximum of 20 files to SINAMICS G120 Smart Access. In case of any further backup attempt, a message appears prompting you to delete some of the existing backup files.

Operating sequence

1. Proceed as follows to back up the parameter file to SINAMICS G120 Smart Access.



   Character restrictions for the file name: maximum 30 characters which are limited to A-Z, a-z, 0-9, _, -, (,), dot, or space. If the name for the new backup file already exists, a message prompts asking you whether you want to overwrite the existing file or cancel the backup process.

2. The backup process completes when the following window appears. If the Web page indicates that the backup fails, you can select to back up again.

   Note that it is optional to download the backup file to your local drive (recommended on PC).



Note

When you perform the backup operation on a mobile device, if the menus and buttons on the Web page disappear after you finish editing the backup file name, then you can tap in the blank area of the Web page to restore them.

Note

Backup files must be protected against unauthorized operation, e.g. by implementing access control.

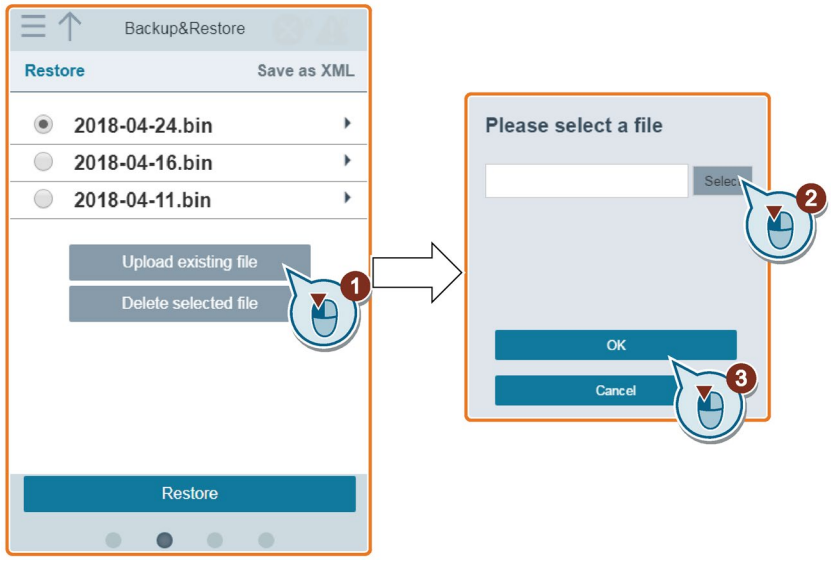
Note

When transferring important files (e.g. backup files and/or upgrade files) through email, email must be encrypted or signed.

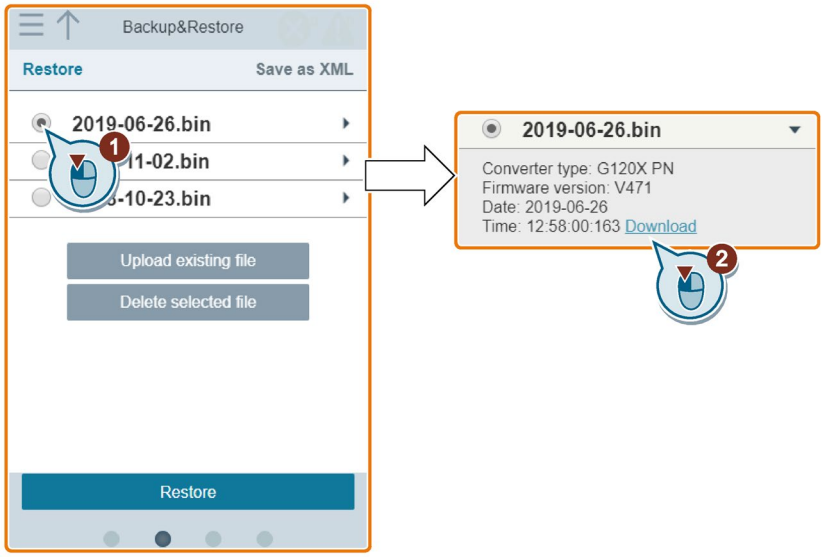
6.9.2 Restoring

You can use the restore Web page to upload, download, delete, and/or restore the selected file (*.bin file).

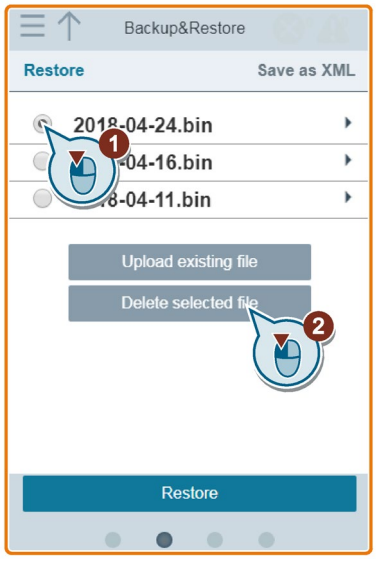
Uploading an existing file (recommended on PC)



Downloading an existing file (recommended on PC)



Deleting the selected file



Restoring the selected file

Note

The restoring process restores all parameters of access levels up to 3.

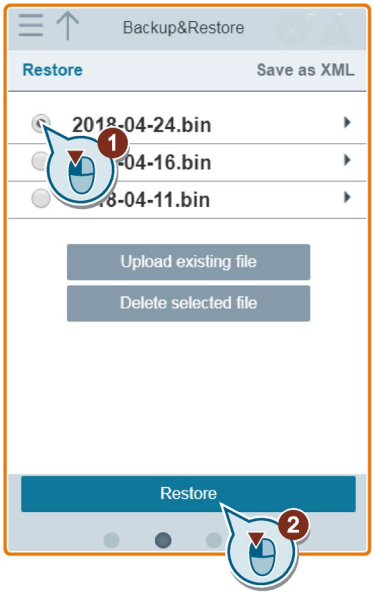
Note

Make sure that the selected file for restoring is specific to the connected converter.

Note

After restoring the parameters, an acceptance test is required to check whether the safety-relevant functions in the plant or machine function correctly.

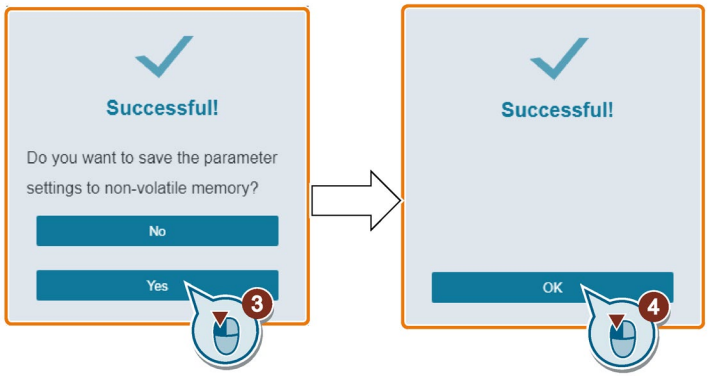
1. Proceed as follows to start restoring process.



If the safety function of the connected converter is activated, you must enter the safety password to continue.



2. The restoring process completes when the following window appears. If the Web page indicates that the restoring fails, you can select to restore again.
   If required, proceed as follows to save the parameter settings to the non-volatile memory:



6.9.3 Saving as XML

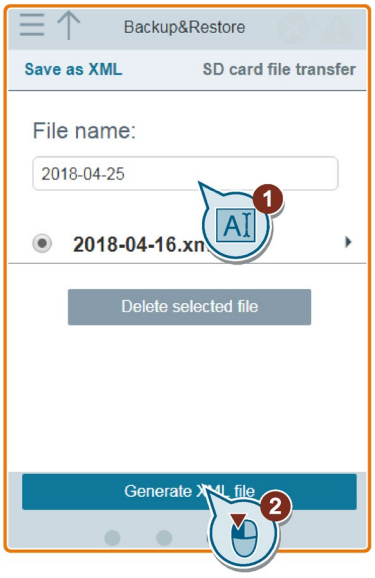
You can use the saving Web page to save the parameters as XML and download the XML file to your local drive so that you can open and see the parameters.

Note

The saving process saves all parameters of access levels up to 3 and allows you to save a maximum of 20 files to SINAMICS G120 Smart Access. In case of any further saving attempt, a message appears prompting you to delete some of the existing XML files.

Generating an XML file

1. Proceed as follows to save the parameters as XML.



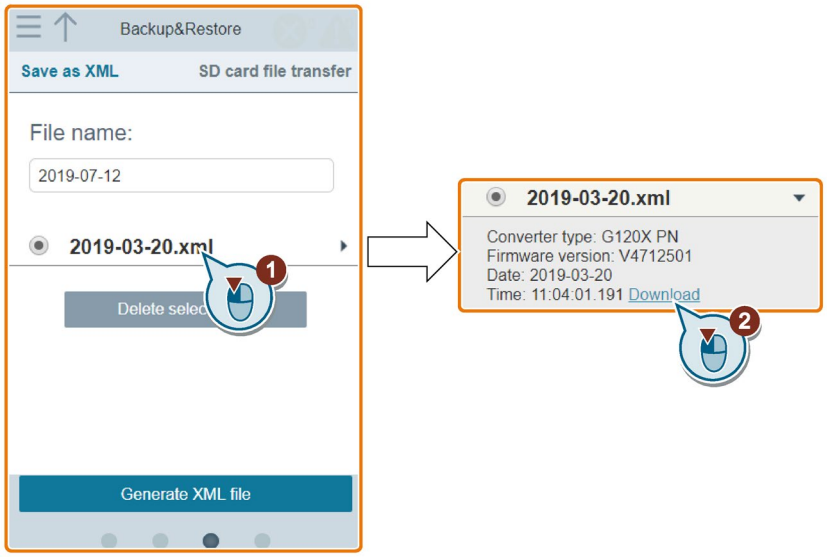
   Character restrictions for the file name: maximum 30 characters which are limited to A-Z, a-z, 0-9, _, -, (,), dot, or space. If the name for the file already exists, a message prompts asking you whether you want to overwrite the existing file or cancel the generating process.

2. The generating process completes when the following window appears. If the Web page indicates that the generation fails, you can select to generate again.

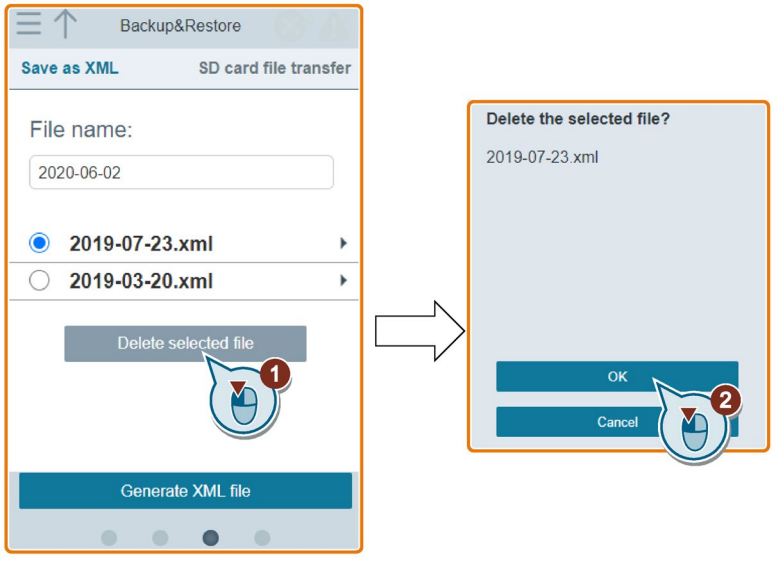
   Note that you can select to download the file to your local drive (recommended on PC).



Downloading an existing file (recommended on PC)



Deleting the selected file



6.9.4 Transferring

You can open the transfer Web page by selecting the backup&restore icon from either the home page or the navigation sidebar.

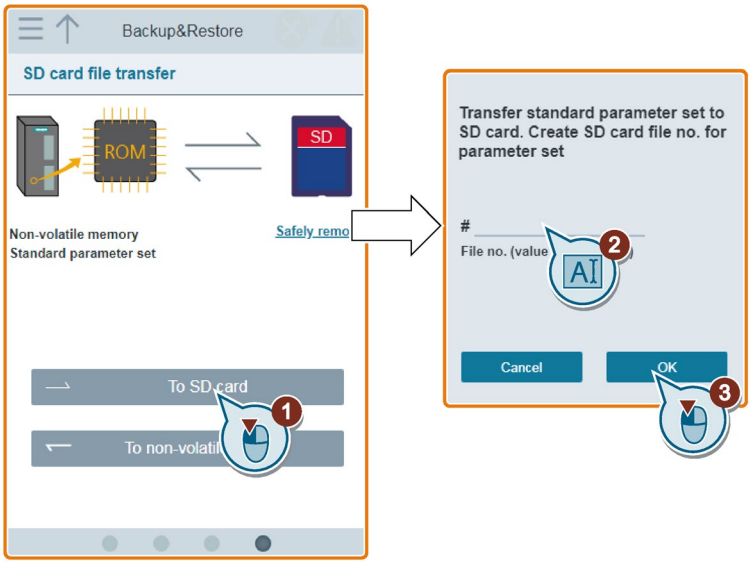
Precondition

The SD card file transfer function is available only when an applicable SD card is inserted into the converter.

Before data transfer, make sure that parameter settings are saved to the non-volatile memory as standard parameter set. For detailed information about saving parameters, see Section "Parameters (Page 75)".

Transferring standard parameters sets to SD card

1. Proceed as follows to transfer the standard parameter sets to the SD card.

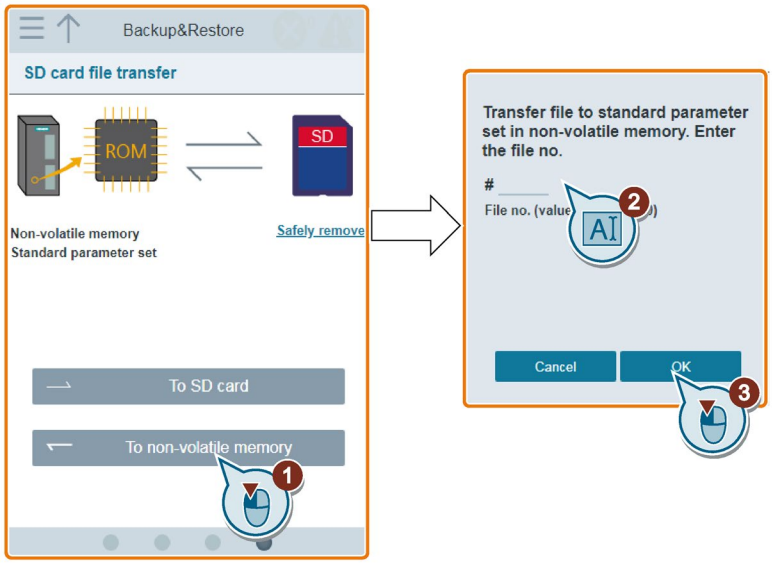


2. The transferring process completes when the following window appears. If the Web page indicates that the transfer fails, you can select to transfer again.



Transferring files to standard parameter sets in non-volatile memory

1. Proceed as follows to transfer files to standard parameter sets in the non-volatile memory.



2. The transferring process completes when the following window appears. If the Web page indicates that the transfer fails, you can select to transfer again.



Note

To safely remove the SD card, click "safely remove" on the transfer Web page after the transferring process has completed.

6.10 Support

The support information dialog box contains the following information:

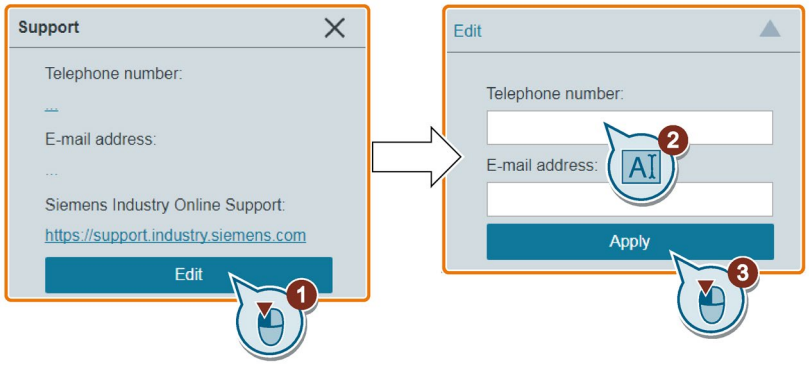
- Telephone number - left blank at the factory and can be edited by the OEM user
- E-mail address - left blank at the factory and can be edited by the OEM user
- Web site for Siemens Industry Online Support

Viewing the support information



Editing the support information (for OEM users only)

OEM users can enter their contact telephone and E-mail address in the following dialog box according to the specified rules:



- Telephone number: up to 22 characters starting with either "+" or numbers and limited to numbers, space, and "-"
- E-mail address: up to 48 characters starting with numbers or letters

Upgrading

7

Upgrading on the SINAMICS G120 Web page upgrades the firmware version of the SINAMICS G120 Smart Access.

Two upgrading methods are available:

- Conventional upgrading
- Basic upgrading (applicable when conventional upgrading fails)

Note

To ensure secure connection to the Web page, always update the firmware of the SINAMICS G120 Smart Access to the latest version.

Note

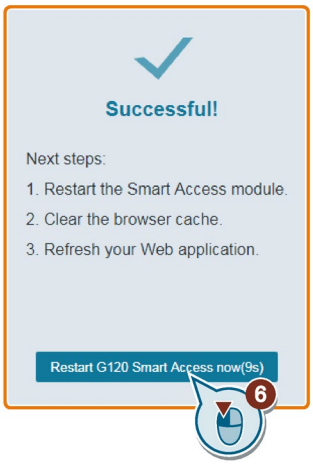
The SINAMICS G120 Smart Access firmware upgrading takes around 30 minutes. To ensure the stability of the upgrading process, we recommend you to perform the upgrading on PCs. When upgrading on smart phones or tablets, make sure that the screen is always bright.

Conventional upgrading

1. Download the target upgrade file (*.bin file) from the following Web site to your local drive (recommended on PC):
   https://support.industry.siemens.com/cs/ww/en/ps/13225/dl
2. Access the SINAMICS G120 Web page: http://192.168.1.1 or https://192.168.1.1. Proceed as follows to perform the upgrade:



3. The upgrading process completes when the following window appears. If the Web page indicates that the upgrading fails, you can select to upgrade again.



4. Restart the SINAMICS G120 Smart Access. Note that if you do not click "Restart G120 Smart Access now", the SINAMICS G120 Smart Access will restart automatically after the 10-second countdown time has elapsed.
5. Clear the browser cache.
6. Refresh your Web application.

Note

Uploading self-signed certificates

If you want to replace the default certificates with self-signed ones, you can upload the certificates in the conventional upgrading page. You can use any tool available to create self-signed certificates as long as they adhere to these settings:

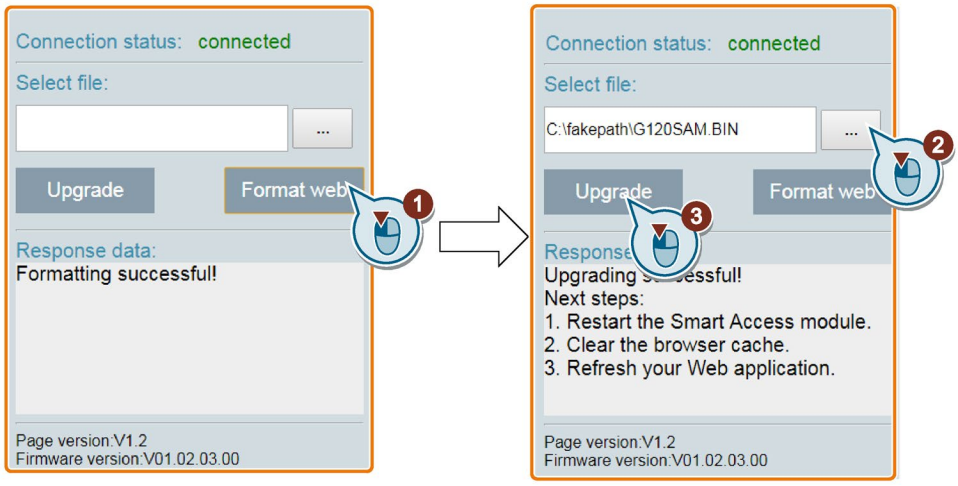
- The two certificate file names must be servercert.der and serverkey.der respectively.

After uploading the two certificate files, you must install the SSL certificates.

Basic upgrading

1. Download the target upgrade file (*.bin file) from the following Web site to your local drive (recommended on PC):
   https://support.industry.siemens.com/cs/ww/en/ps/13225/dl
2. Hold down the reset button when the module is in power-off state and then power on the module.
3. Open the following Web site specific for basic upgrading:
   http://192.168.1.1/factory/basicupgrade.html

4. Proceed as follows:



"Format web" is optional. If you click "Format web", the base version and all the bin files and xml files you have backed up will be deleted.

5. Restart the SINAMICS G120 Smart Access.
6. Clear the browser cache.
7. Refresh your Web application.

Note

Refresh the basic upgrading page if the connection status unexpectedly becomes "disconnected" during upgrading.

Further information

8

8.1 Reference materials

SINAMCS G120 Smart Access video tutorial

Video tutorial that helps you understand how to operate the SINAMCS G120 Smart Access is available via the following link:

SINAMICS G120 Smart Access video tutorial (www.siemens.com/sinamics-accessories)

SINAMCS G120 Smart Access system log

Visit the system log Web site (https://192.168.1.1/log.html or http://192.168.1.1/log.html) to view the recent history of the following events:

- Connecting SINAMICS G120 Smart Access
- Disconnecting SINAMICS G120 Smart Access
- Changing passwords
- Restoring the Wi-Fi configuration of SINAMICS G120 Smart Access to factory settings

The system log holds about five hundred most recent event records. When the log is full, all the event records are cleared automatically.

8.2 Technical specifications

Feature	Description
Article number	6SL3255-0AA00-5AA0
Firmware version	V01.06
Net weight	87.5 g
Gross weight	109.7 g
Operating ambient temperature	0 °C ... 50 °C under nominal conditions of the connected converter, according to UL requirement
Transportation and storage ambient temperature	-40 °C ... 70 °C
Extreme temperature range	-10 °C ... 60 °C
Relative humidity	< 95%, without condensation
Rated voltage	15 V DC
Wireless technology and working frequency	Wi-Fi 2400MHz ... 2483.5MHz
Wireless modulation type	802.11 b/g
Maximum wireless communication distance	100 m
Antenna gain	1.9 dBi
Maximum radio frequency output power	17.5 dBm (effective isotropic radiated power)
Protection	Depending upon the converter IP rating to a maximum of IP55/UL Type 12
Shock and vibration	Long-term storage in the product packaging according to Class 1M2 according to EN 60721-3-1: 1997 Transport in the transport packaging according to Class 2M3 according to EN 60721-3-2: 1997 Vibration in operation according to Class 3M1 according to EN 60721-3-3: 1995

8.3 Directives and standards

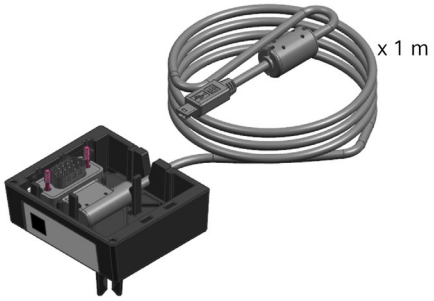
CE	**Radio Equipment Directive 2014/53/EU** SINAMICS G120 Smart Access is in compliance with Radio Equipment Directive 2014/53/EU. You can download the certificate from the following link: Declaration of conformity (https://support.industry.siemens.com/cs/ww/en/ps/13225/cert)
	The CE Declaration of Conformity is held on file available to the competent authorities at the following address: Siemens AG Digital Industries Motion Control Frauenauracher Straße 80 DE-91056 Erlangen Germany
WEEE	**European Directive on Waste Electrical and Electronic Equipment (WEEE)** SINAMICS G120 Smart Access complies with the 2012/19/EU directive on taking back and recycling waste electrical and electronic equipment.
UKCA	**UKCA Declaration of Conformity** SINAMICS G120 Smart Access complies with the requirements for the market in Great Britain (England, Wales and Scotland).
FC	**FCC Compliance statement** This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation. Changes or modifications made to this device not expressly approved by SIEMENS may void the FCC authorization to operate this device. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: • Reorient or relocate the receiving antenna. • Increase the separation between the equipment and receiver. • Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help. **RF exposure statement** This equipment complies with radio frequency exposure limits set forth by the FCC for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the device and the user or bystanders. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

ANATEL	ANATEL certificate number: 06121-18-00199 This device must not be protected against harmful interference and it may not cause interference in authorized systems (see below for corresponding text in Portuguese): Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.
NCC	根據低功率電波輻射性電機管理辦法規定: 第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。 第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信； 經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。 前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
IC	This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage. (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. This equipment complies with radio frequency exposure limits set forth by the Innovation, Science and Economic Development Canada for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the device and the user or bystanders. This device must not be co-located or operating in conjunction with any other antenna or transmitter. Cet équipement est conforme aux limites d'exposition aux radiofréquences définies par la Innovation, Sciences et Développement économique Canada pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre le dispositif et l'utilisateur ou des tiers. Ce dispositif ne doit pas être utilisé à proximité d'une autre antenne ou d'un autre émetteur.
NBTC	This telecommunication equipment conforms to the technical standards or requirements of NBTC (see below for corresponding text in Thai). เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.
	Notice to users in South Korea: 이 컴퓨터는 전자파 적합성평가(인증)를 받은 내장구성품을 사용하여 조립한것으로 완성품에 대한 전자파 적합성평가는 받지 않은 제품입니다.
И 005 19	SINAMICS G120 Smart Access fulfills the requirements for KVALITET.
	Australia and New Zealand (RCM formerly C-Tick) SINAMICS G120 Smart Access fulfills the requirements for RCM.
NTC Type Approved No.: ESD-1918475C	SINAMICS G120 Smart Access fulfills the requirements for NTC.

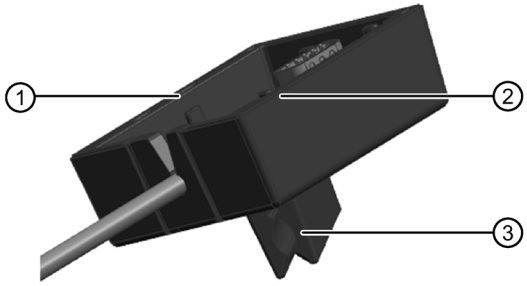
UkrCEPRO	SINAMICS G120 Smart Access fulfills the requirements for UkrCEPRO.
Approved by PTA (year) PTA Pakistan Telecom Authority	SINAMICS G120 Smart Access fulfills the requirements for PTA.
Complies with IMDA Standards [DA104037]	SINAMICS G120 Smart Access fulfills the requirements for IMDA.
TRA REGISTERED No.: ER69328/19 DEALER No.: 0016335/08	SINAMICS G120 Smart Access fulfills the requirements for TRA.
IFETEL	Certificate number: RCPSI6S19-0552
MOT	Certificate number: 4668 / E&M / 2019
TRC	Certificate number: TRC/SS/2019/53
MIC	SINAMICS G120 Smart Access fulfills the requirements for MIC.
ICASA	SINAMICS G120 Smart Access fulfills the requirements for ICASA.
ictQATAR	SINAMICS G120 Smart Access fulfills the requirements for ictQATAR.
SUBTEL	SINAMICS G120 Smart Access fulfills the requirements for SUBTEL.
SUPERTEL	SINAMICS G120 Smart Access fulfills the requirements for SUPERTEL.
FAC + CU	SINAMICS G120 Smart Access fulfills the requirements for FAC and CU.
SDPPI	SINAMICS G120 Smart Access fulfills the requirements for SDPPI.

8.4 SAM interface kit

The SAM interface kit (also known as SINAMICS G120 Smart Access interface kit) is used to connect the SINAMICS G120 Smart Access to the SINAMICS G115D converter, thus realizing Web-based access to the converter from a device connected to the G120 Smart Access.



The interface kit is designed with a rubber support and magnets, which allows you to easily mount the SINAMICS G120 Smart Access to the converter or remove it from the converter. The permissible operating temperature range for the interface kit is from -10 °C to +60 °C. Vibration in operation fulfills Class 3M1 according to EN60721-3-3: 1995.

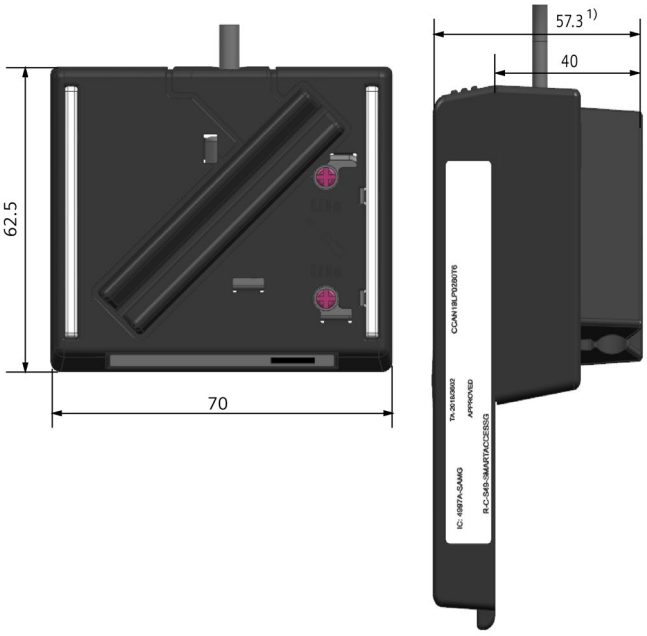


①, ② Magnet
③ Rubber support

Scope of delivery

- SAM interface kit (article number: 6SL3555-0XA00-0AA0) for the SINAMICS G115D converter
- Compact Installation Instructions in English, Chinese, and German

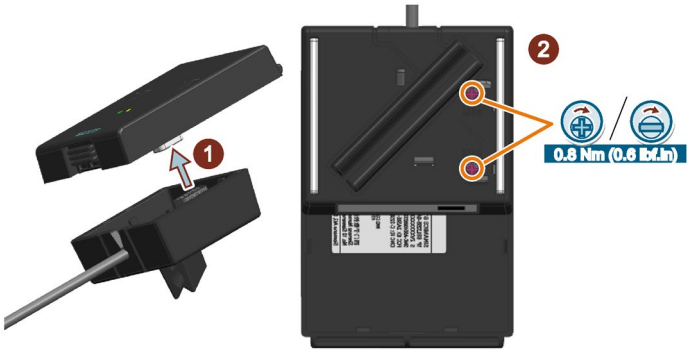
Dimensions (mm)



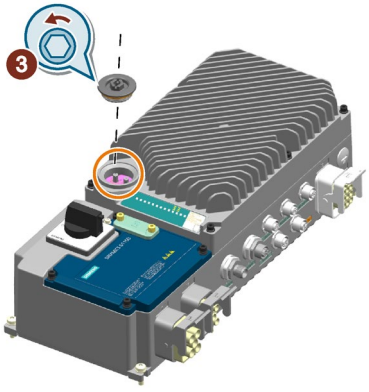
1) Dimensions with SINAMICS G120 Smart Access (article number: 6SL3255-0AA00-5AA0)

Installing

1. Mount the interface kit to the SINAMICS G120 Smart Access and fix the two tightening screws to the prescribed torque (0.8 Nm, 0.6 lbf.in) by using a slot screwdriver or a crosstip screwdriver.



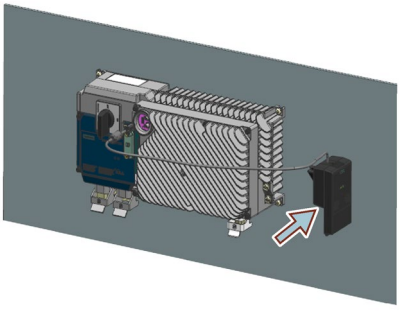
2. Remove the commissioning cover (③) from the G115D converter by using an S12 hex nut driver.



3. Choose one of the following three methods according to the applicable converter mounting position to connect the G120 Smart Access fitted with the interface kit to the converter:

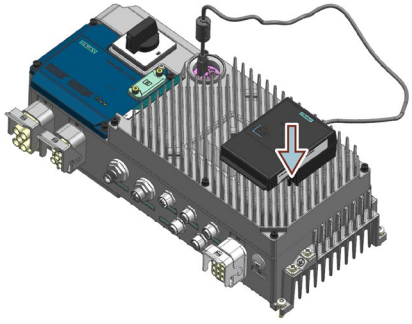
   – Method 1 (applicable to all permissible mounting positions)

     Attach the G120 Smart Access to an iron plate via one magnet of the interface kit and then connect the interface kit cable to the USB interface on the converter.



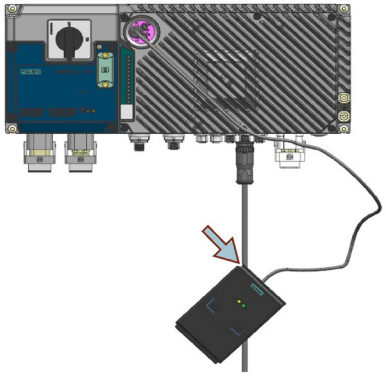
– Method 2 (applicable only to the mounting position with the heatsink facing upwards)

  Snap the rubber support of the interface kit onto the converter heatsink and then connect the interface kit cable to the USB interface on the converter.



– Method 3 (applicable only to the mounting position with the cable outlets facing downwards)

  Snap the rubber support of the interface kit onto the PROFINET cable or the I/O cable connected to the converter and then connect the interface kit cable to the USB interface on the converter.



For more information about converter commissioning with SINAMICS G120 Smart Access, see Section "Setup (G115D converters only) (Page 61)".

Get more information

SINAMICS:
www.siemens.com/sinamics

Industry Mall:
www.siemens.com/industrymall

Industry Online Support:
www.siemens.com/online-support