

System overview

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SINAMICS G120X infrastructure converters for HVAC/Water/Wastewater

Overview



SINAMICS G120X, frame sizes FSA to FSJ, degree of protection IP20, with IOP-2 Intelligent Operator Panel

Easy handling, utmost reliability, superior efficiency and advanced digitalization - Siemens offers an answer to these trends with the SINAMICS G120X converter series. SINAMICS G120X is an innovative and user-friendly converter series that has been specifically developed for applications performed in infrastructure environments such as water/wastewater, but also for tasks in building automation. In this context, the converter supports, for example, pump, fan and compressor applications through numerous integrated functionalities and combines these in one device for the target sectors.

The SINAMICS G120X converter series is intended for driving pumps and fans or comparable passive load with low dynamic requirements.

With this converter series, regenerative energy can neither be regenerated to the supply system nor dissipated via braking chopper and braking resistor.

The SINAMICS G120X converter is an integrated and efficient drive solution for a wide range of tasks. The system allows convenient handling through optimized user interfaces: IOP-2 Intelligent Operator Panel with graphic color display and the optional web server module SINAMICS G120 Smart Access - a Wi-Fi-based web server solution. Thus, the SINAMICS G120X fulfils the request for an easy and fast setup of the devices during the commissioning phase. Further, experienced users can use the full flexibility of a SINAMICS converter and adjust the relevant application to their requirements.

Totally integrated operation - this approach is also supported from ordering through to delivery. For example, all the major features of the converter are configured and displayed in the article number. The delivery includes the complete device - as configured - that means, the converter and the selected operator panel.

In addition, SINAMICS G120X has an extremely rugged and reliable construction. The integrated DC link reactor with a maximum output of 250 kW and optional resistance to harmful gases up to environmental class 3C3 ensure a reliable, stable and largely robust operation.

Further, the SINAMICS G120X converter series provides innovative hardware and software functions, e.g. for controlling synchronous reluctance drive systems. In this way, the SINAMICS G120X converter series makes a substantial contribution towards saving energy and makes more careful use of our natural resources.

Portfolio range

The SINAMICS G120X converter series with degree of protection IP20/UL Open Type offers a seamless system approach in three different voltage ranges with wide options of built-in communication interfaces including PROFINET, EtherNet/IP, USS, Modbus RTU, BACnet MS/TP and PROFIBUS DP:

- 200 V to 240 V 3 AC: 0.75 kW to 55 kW (1 hp to 75 hp)
- 380 V to 480 V 3 AC: 0.75 kW to 560 kW (1 hp to 700 hp)
- 500 V to 690 V 3 AC: 3 kW to 630 kW (4 hp to 700 hp)

User-friendliness

A high degree of user-friendliness is one of the main characteristics of the SINAMICS G120X:

- Operator panel with color display and extensive diagnostics functions (IOP-2 Intelligent Operator Panel)
- Two different setup options are available: Standard and quick start with graphical user guidance
- Optimized setups for pumps and fans in the web server module SINAMICS G120 Smart Access
- SINAMICS SD card for storing parameter settings, cloning and local commissioning

Integrated functionalities for the start/operational/stop phases of the application

SINAMICS G120X is always preset, depending on the selected converter performance. Further, the following functions can be easily selected and parameterized:

Start phase

During the start phase, the following functions are supported by default:

- Deragging mode for pumps for cleaning the pump system, improving efficiency and reducing wear
- Pipe filling mode for preventing pressure shocks in pipeline systems
- Two acceleration ramps for shorter start/stop times
- Flying restart of the running motor for fast hot restart
- Automatic restart function after power failure during short downtimes

Operating phase

During the operating phase, the following functions are supported by default:

- Continued run mode with autonomous reduction of output and pulse frequency
- PID controller for autonomous closed-loop control mode, operated according to analog input values
- Up to 16 variable-speed setpoints as fixed frequencies
- Speed monitoring via sensor (pulse input)
- Multi-pump control of up to four pumps
- Protection against blocking, leakage, dry running and cavitation
- Fire response mode for extended operation in case of emergency
- Skip frequencies for skipping critical frequencies and avoiding vibration
- Real time clock for switching over setpoints or controlling releases

Overview

Stop phase

During the stop phase, the following functions are supported by default:

- STO (Safe Torque Off) according to IEC 61508 SIL 3 and EN ISO 13489-1 PL e and Category 3.
External components (e.g. safety relays) are necessary for using the STO safety function.
- ON/OFF2 for an optimized braking
- Condensation protection for the motor
- Frost protection function for the pump

A detailed description of the functions and connection diagrams are included in the device documentation.

Commissioning of complex applications

Sample applications, which include the description and device setting, are provided for SINAMICS G120X.

The following application descriptions are available:

- Fan for exhaust air with closed-loop control of pressure and air quality
- Fan for cooling tower with closed-loop control of the cooling water temperature
- Fan for tunnel/parking garage with closed-loop control of air quality and essential service mode
- Fan for supply air with closed-loop control of pressure, temperature, air quality and flowrate
- Pumps with closed-loop control of the pressure
- Pumps with closed-loop control of the filling level
- Pumps for cooling circuits with closed-loop control of the temperature
- Compressor with closed-loop control of the pressure
- Vacuum pump with closed-loop control of the pressure

Practical application examples and descriptions are available on the internet at

www.siemens.com/sinamics-applications

Further information

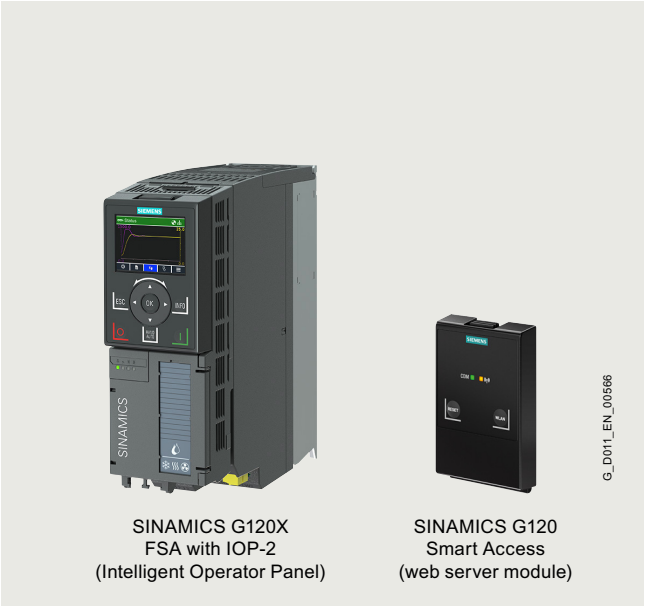
The converter is also available as SINAMICS G120X Cabinet version for more demanding projects. For more information, please contact your regional sales representative.

System overview

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SINAMICS G120X Starter Kits

Overview



Example: SINAMICS G120X Starter Kit, frame size FSA, 0.75 kW, with IOP-2 Intelligent Operator Panel and SINAMICS G120 Smart Access

A SINAMICS G120X Starter Kit comprises a SINAMICS G120X converter (380 ... 480 V 3 AC; PROFINET) with an IOP-2 Intelligent Operator Panel and a SINAMICS G120 Smart Access web server module.

The delivery quantity is limited to three units per customer.

Selection and ordering data

Description	Article No.
SINAMICS G120X Starter Kits Converter (380 ... 480 V 3 AC, PROFINET) with IOP-2 and SINAMICS G120 Smart Access	
• 0.75 kW, FSA, without integrated line filter	6SL3200-0AE70-0AA0
• 0.75 kW, FSA, with integrated line filter Category C2	6SL3200-0AE72-0AA0
• 3 kW, FSA, with integrated line filter Category C2	6SL3200-0AE73-0AA0
• 7.5 kW, FSB, with integrated line filter Category C2	6SL3200-0AE74-0AA0

SINAMICS G120X infrastructure converters for HVAC/Water/Wastewater

0.75 kW to 630 kW (1 hp to 700 hp)



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SINAMICS G120X infrastructure converters for HVAC/Water/Wastewater

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Further information about SINAMICS G120X can be found on the internet at www.siemens.com/sinamics-g120x

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Further information

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Benefits

Energy efficiency

SINAMICS G120X increases the efficiency and minimizes energy consumption in the complete process chain. The converter has integrated hardware as well as software functions as standard. The main features are:

- Power units with DC link reactor for extremely high active power component thanks to efficient converter topology - for the same drive power, the converter requires a lower line current than comparable converters
- Flux reduction through automatic adaptation of the motor current to the prevailing load conditions with closed-loop control modes V/f (ECO) and vector without sensor (SLVC) and savings of up to 5 % under partial load conditions
- Hibernation mode dependent on setpoints in the process
- High efficiency $\eta \geq 95 \%$

Application-specific commissioning and operation using operator panel

- Local commissioning without specialized knowledge of converters thanks to default settings and graphical user interface
- Unique: SINAMICS SD memory card for pre-parameterization and cloning of converter data sets
- Data backup for easy replacement
- Commissioning/diagnostics and controlling of converters

Flexible deployment of integrated functions

- PLC functions for local control tasks for frame sizes FSA to FSG
Flexible use of integrated function blocks
→ No need for additional, external components
- Four integrated PID controllers
Distributed closed-loop control for motor-independent process control without higher-level controller (PLC)
- Three freely programmable digital timer switches
Control for freely selectable daily and weekly programs

Flexible deployment across a wide range of applications

- Isolated digital inputs with separate potential group
- Isolated analog inputs
 - Potential transfer avoided
 - EMC-compliant design without the need for additional components in line with process industry requirements
- Direct connection of Pt1000/Ni1000 temperature sensors with optional SINAMICS G120X I/O Extension Module
- Connection and evaluation of a recommended, optional Pt100 temperature sensor by using a free analog input and output
- 2/3-wire control for static/pulsed signals for universal control via digital inputs
- 230 V AC relay
 - Direct control for auxiliary equipment, e.g. reactor or valve actuators
- Safety functions
 - Terminals for controlling the STO (Safe Torque Off) Safety function according to IEC 61508 SIL 3 and EN ISO 13489-1 PL e and Category 3. External components (e.g. safety relays) are necessary for using the STO safety function.
- X9 terminal strip for devices in frame sizes FSH and FSJ (315 kW to 630 kW)
 - Input for external 24 V DC supply
 - Input for external alarm/fault
 - Input for EMERGENCY OFF/EMERGENCY STOP
 - Output for 24 V DC
 - Control of the main contactor
 - Feedback message "DC link charged"
- Use of the communication versions at ambient temperatures of
 - -20 °C to +55 °C: PROFINET, EtherNet/IP
 - -20 °C to +60 °C: PROFIBUS DP, USS, Modbus RTU, BACnet MS/TP
- Removable operator panel
 - Protection against unauthorized access
 - Color-coded signaling of operating states
- Replacement of individual components without the need for reinstallation
 - Plug-in version of control terminals (for replacement without removing wiring)
- Version for harsh environmental conditions
 - Coated modules for increased resistance to humidity and dust (Class 3C2)
 - PCB coating for environmental class/harmful chemical substances Class 3C3 acc. to IEC 60721-3-3: 2002

Extended warranty

For SINAMICS G120X, Siemens offers an optional extension of warranty up to 5½ years via **Service Protect**:

- Free for the first 6 months after registering the product at: <https://myregistration.siemens.com>
- Subject to a charge for a further 3 or 5 years

For further information, go to:

<https://support.industry.siemens.com/cs/ww/en/sc/4842>

Concerning standard warranty please ask your partner at Siemens. Your partner can be found in our Personal Contacts Database at:

www.siemens.com/automation-contact

SINAMICS G120X infrastructure converters for HVAC/Water/Wastewater

0.75 kW to 630 kW (1 hp to 700 hp)

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Application

The specialist for pump, fan and compressor applications

SINAMICS G120X is ideally suited to pump applications (centrifugal pumps, oscillating and rotating pumps), fan applications (axial and radial fans) and compressor applications (cooling compressors, air and gas compressors). They are deployed in the water/waste water industries, in industrial environments, and in building automation.

SINAMICS G120X is ideally suited for the following applications:

- Circulating pumps for heating and cooling systems
- Pumps for pressure boosting stations
- Level control
- Fans in cooling towers
- Fans for air intake and discharge
- Fans for tunnels and multi-story car parks
- Fans for stairwells
- Compressors for cooling units

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With this converter series, regenerative energy can neither be regenerated to the supply system nor dissipated via braking chopper and braking resistor.

Reliable operation in harsh environments

SINAMICS G120X is suitable for use under harsh environmental conditions:

- Degree of protection IP20/UL Open Type for use in the control cabinet
- Degree of protection IP21 with optional IP21 top cover for use in lockable control rooms, including outside a control cabinet
- Degree of protection IP20 with optional push-through mounting frame for space-saving design when installed in the control cabinet; power losses are dissipated using an external heat sink, separate internal air circulation
- Use of the communication versions at ambient temperatures of
 - -20 °C to +55 °C: PROFINET, EtherNet/IP
 - -20 °C to +60 °C: PROFIBUS DP, USS, Modbus RTU, BACnet MS/TP
- Coated modules for increased resistance to humidity and dust (Class 3C2)
- Optional for environmental class/harmful chemical substances Class 3C3 acc. to IEC 60721-3-3: 2002

Design

SINAMICS G120X is a converter system that comprises a power output module and a control module with or without an operator panel.

The converter is configured on the basis of the power requirement and the application. State-of-the-art IGBT technology with pulse-width modulation is used for reliable and flexible motor operation. Comprehensive protection functions provide a high degree of protection for the converter and motor.

The SINAMICS G120X converters in degree of protection IP20 are intended for installation in a control cabinet.

- Selection of the line filter for line voltage 200 V to 240 V 3 AC
 - Without integrated line filter, 0.75 kW to 55 kW
- Selection of the line filter for line voltage 380 V to 480 V 3 AC
 - Without integrated line filter, 0.75 kW to 132 kW
 - With integrated line filter Category C2, 0.75 kW to 250 kW
 - With integrated line filter Category C3, 160 kW to 560 kW
 - With additional line filter Category C1 for unfiltered devices, 0.75 kW to 110 kW
 - With additional line filter Category C2 for filtered devices, 315 kW to 560 kW

- Selection of the line filter for line voltage 500 V to 690 V 3 AC
 - Without integrated line filter, 3 kW to 132 kW
 - With integrated line filter Category C2, 3 kW to 55 kW
 - With integrated line filter Category C3, 75 kW to 630 kW
 - With additional line filter Category C2 for filtered devices, 315 kW to 630 kW
- Environmental class/harmful chemical substances acc. to IEC 60721-3-3: 2002
 - Class 3C2
 - Class 3C3
- Selection of communication
 - PROFINET, EtherNet/IP
 - PROFIBUS
 - USS, Modbus RTU, BACnet MS/TP
- Selection of the operator panel

The operator panels support user-friendly local commissioning, control and diagnostics and enable complete converter data sets to be pre-parameterized and cloned.

 - Without operator panel
 - BOP-2 Basic Operator Panel

The menu prompting and the 2-line display allow for simple commissioning of the converter. Simultaneous display of the parameter and parameter value, as well as parameter filtering, means that basic commissioning of a drive can also be performed without a printed parameter list.
 - IOP-2 Intelligent Operator Panel

Supports entry-level personnel as well as drive experts. Thanks to the color display, a user-friendly menu structure and wizards, it is much easier to commission, diagnose and locally control standard drives.

Line-side power components

The following line-side power components are available for the SINAMICS G120X converters:

- Line filters for categories C1, C2 and C3, see above

With an additional line filter, the converter complies with a higher radio interference class.
- Line harmonics filters for frame sizes FSB from 5.5 kW to FSG up to 250 kW

The use of a line harmonics filter enables a significant reduction in unwanted harmonics. This means that a THD (I) value of less than 5 % can be achieved and compliance with the limit values according to IEC 61000-3-12, IEC 61000-2-2 and IEEE 519 is possible regardless of the network impedance.
- Line reactors for devices from 315 kW and for frame sizes FSH and FSJ

Line reactors smooth the current drawn by the converter and thus reduce harmonic components in the line current. Through the reduction of the current harmonics, the thermal load on the power components in the rectifier and in the DC link capacitors is reduced as well as the harmonic effects on the supply. The use of a line reactor increases the service life of the converter.

SINAMICS G120X frame sizes FSA to FSG feature an integrated DC link reactor as standard. The use of an additional line reactor is not necessary for this.

Recommended line-side overcurrent protection devices and power components

This section contains recommendations for additional line-side components, such as Siemens fuses and circuit breakers (line-side components must be dimensioned in accordance with IEC standards).

[Additional information about the listed fuses and circuit breakers is available in the Catalogs LV 10, IC 10 and IC 10 AO as well as in SiePortal.](#)

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Design

Load-side power components

Various load-side power components are available for the SINAMICS G120X converters. These allow the use of longer shielded motor cables and increase the motor service life:

- Output reactors for frame sizes FSD to FSJ
Output reactors reduce the rate of voltage rise (dv/dt) and the height of the current peaks, and can allow longer motor cables to be connected.
- Sine-wave filters for frame sizes FSA to FSF
Sine-wave filters limit the rate of voltage rise (dv/dt) and the peak voltages on the motor winding. Similar to an output reactor, they enable the connection of longer motor cables.
- dv/dt filters plus VPL for frame sizes FSD to FSJ
dv/dt filters plus VPL (Voltage Peak Limiter) limit the voltage rate-of-rise dv/dt to values of <500 V/μs and the typical voltage peaks to values according to the limit value curve according to IEC/TS 60034-17: 2006.
Standard motors with standard insulation and without insulated bearings can be used for converter operation if a dv/dt filter plus VPL is used.

Optional accessories

- SINAMICS memory card (SD card)
- SINAMICS G120 Smart Access for simple setup via Wi-Fi
- SINAMICS G120X I/O Extension Module for direct connection of Pt1000/Ni1000 temperature sensors ¹⁾
- Push-through mounting frame for frame sizes FSA to FSG
- Increase in degree of protection to IP21 with IP21 top covers for frame sizes FSA to FSG
- Wiring adapter for frame size FSG for optimal and space-saving wiring
- Installation kit for line-side cable connection, left, for frame size FSH

Note:

Shield connection kits are an integral component of the delivery.

Spare parts

- FPI (freely programmable interface) board for frame sizes FSH and FSJ
- PSB (power supply board) board for frame sizes FSH and FSJ
- Current transformers for frame sizes FSH and FSJ
- Spare parts kit for Control Unit for frame sizes FSA and FSJ
- Shield connection kit for Control Unit for frame sizes FSD to FSG
- Shield connection kits for Power Module for frame sizes FSA to FSG
- Small parts assembly set for frame sizes FSD to FSG
- Terminal cover kits for covering the connecting terminals for frame sizes FSD to FSG
- Fan units
 - External for frame sizes FSA to FSJ
 - Internal for frame sizes FSH and FSJ
- Control Units for frame sizes FSD to FSJ

Function

Technology function

Functions specific to pumps, fans and compressors are already integrated, e.g.:

- Specific firmware functions such as deragging or pipe fill mode
- Automatic restart
Application restart after a power failure or fault occurrence
- Flying restart
Connection of the converter when the motor is running
- Flux reduction
Automatic adaptation of the motor current to the prevailing load conditions in V/f control mode (ECO mode) as well as in sensorless vector control mode
- Cascade connection
Load-dependent connection and disconnection of a maximum of three additional motors by the converter in order to provide a largely constant output power (implemented by means of an additional external circuit)
- Hibernation mode
Startup or shutdown of the drive when the relevant value drops below an external setpoint or the internal PID controller setpoint
- Real-time clock
For time-dependent process controls, e.g. to reduce the temperature of a heating control at night and with automatic day-light saving/standard time switchover
- Freely programmable logical function blocks for frame sizes FSA to FSG
For simulating simple PLC functions

Functions especially for building technology as well as heating/air conditioning/ventilation applications

- Four integrated PID controllers
One PID controller for controlling the drive speed as a function of pressure, temperature, flowrate, fill level, air quality and other process variables; a further three PID controllers with freely configurable outputs, e.g. for controlling valves (heating, cooling) or flaps
- Emergency mode
Special converter operating mode that enhances the availability of the drive system in the event of a fire
- Bypass mode
When the setpoint is reached or a fault occurs, the system changes over to line operation (implemented by means of an additional external circuit)
- Programmable time switches

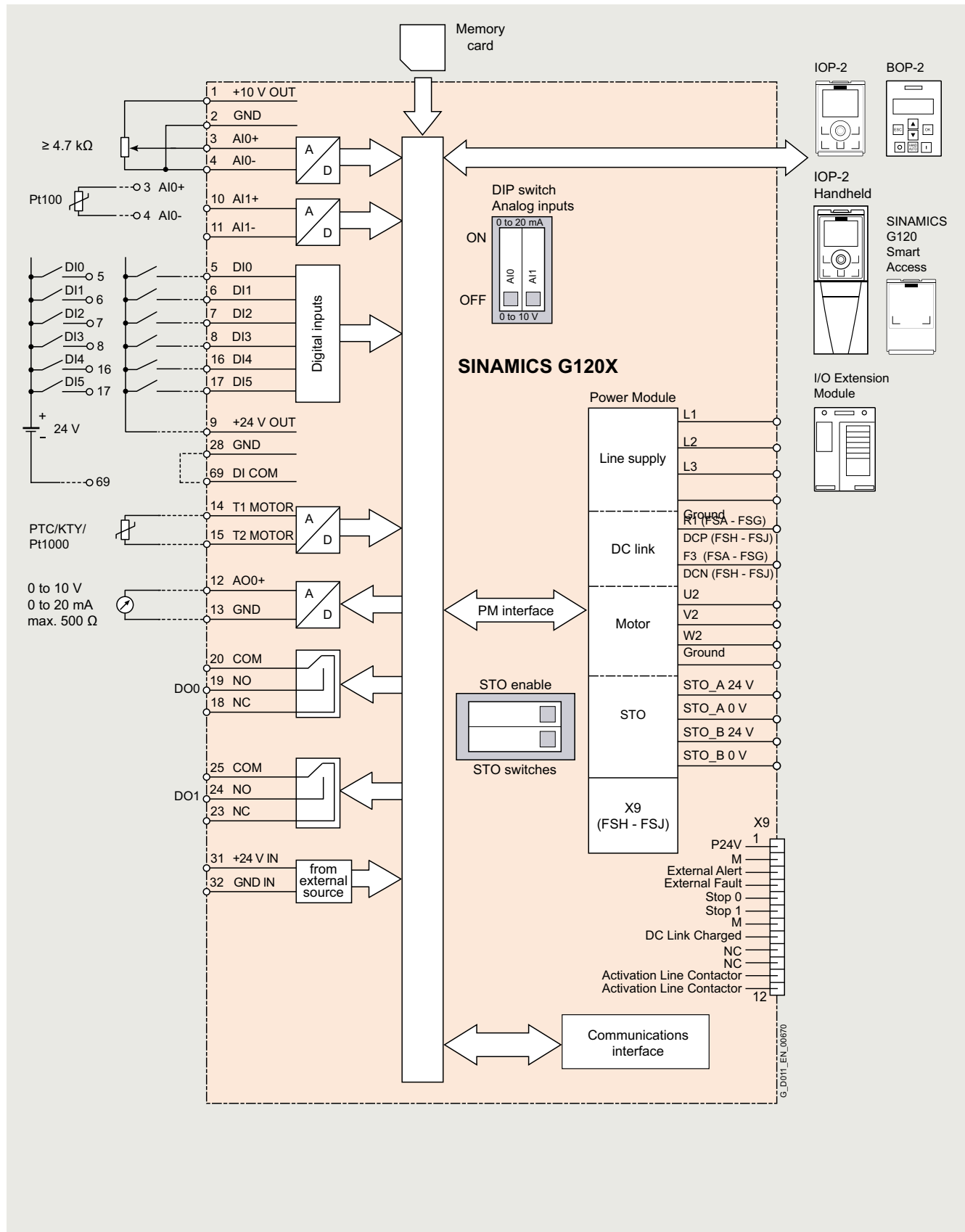
¹⁾ The SINAMICS G120X I/O Extension Module (article number: **6SL3255-0BE00-0AA0**) is only supported on the SINAMICS G120X converters with hardware version ≥ 02 02 (FSA to FSG) / 02 (FSH/FSJ) and firmware ≥ V1.01.
The hardware version of the converter is on the rating plate.
For more information please refer to the documentation on the internet at: www.siemens.com/sinamics-g120x/documentation

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Integration



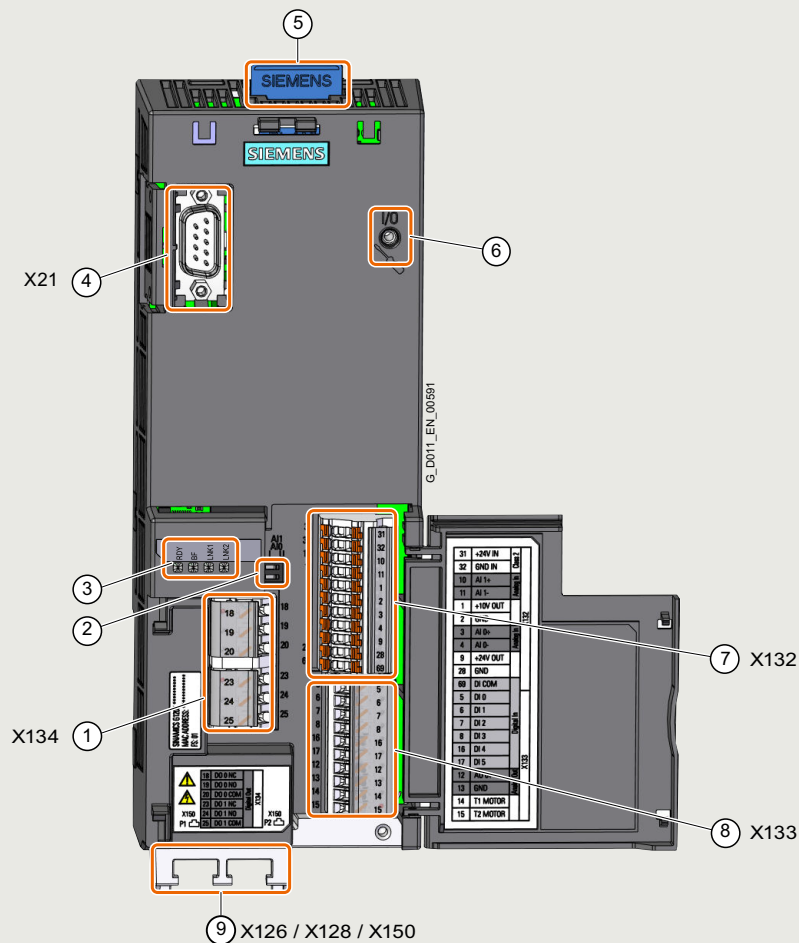
SINAMICS G120X connection diagram

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Integration



- ① Terminal strip
- ② Switch for AI 0 and AI 1 (I/V)
- ③ Status LED
- ④ Connection to Operator Panel, Smart Access or I/O Extension Module
- ⑤ Memory card slot
- ⑥ For mounting the I/O Extension Module
- ⑦ ⑧ Terminal strips
- ⑨ Fieldbus interfaces on the bottom

SINAMICS G120X infrastructure converters for HVAC/Water/Wastewater

0.75 kW to 630 kW (1 hp to 700 hp)

SINAMICS G120X infrastructure converters for HVAC/Water/Wastewater

Configuration

The following electronic configuring guides and engineering tools are available for SINAMICS G120X converters:

SINAMICS Selector app

Mobile selection guide for frequency converters

Siemens has developed the SINAMICS Selector app as a practical tool for finding article numbers for your SINAMICS converters in the power range from 0.1 kW to 630 kW quickly and easily. Whether for SINAMICS V20, SINAMICS V90, SINAMICS G120C, SINAMICS G120P, SINAMICS G120X, SINAMICS G120, SINAMICS G220, SINAMICS S200 or SINAMICS S210: The app will provide you with the correct article numbers conveniently.

How does it work? Simply select your application, the frequency converter you require, the rated power and device options as well as the necessary accessories.

Then you can save your selection and send it by email. Your pre-selection is the basis for an order specification with the dealer/Siemens.

You will find the free downloads for Android and for iOS at the following link:

www.siemens.com/sinamics-selector

SINAMICS ASSISTANT app

The error code function of the SINAMICS ASSISTANT app helps you to identify and rectify errors. Just enter the error code of your frequency converter and the app shows you what sort of error it is and how you can rectify it.

This app also recalculates for you the frequency (Hz) of a frequency converter into the speed to be set on the motor (r/min) or vice versa.

In addition, this app offers you a support page on which you can get in touch straight away with the right contact person in your region if you have any questions. Furthermore, video information is available to you free of charge, e.g. on installation and commissioning of the SINAMICS G120 frequency converter.

You will find the free downloads for Android and for iOS at the following link:

www.siemens.com/sinamics-assistant

SINAMICS DriveSim Designer (firmware V1.03.00 or higher)

SINAMICS DriveSim Designer provides easy-to-use models for PROFIdrive-enabled SINAMICS converters, so you can create a digital twin of your drive.

More information is provided on the internet at:

www.siemens.com/drive-virtualization

Siemens Product Configurator

The Siemens Product Configurator helps you to configure the optimum drive technology products for a number of applications – starting with gear units, motors, converters as well as the associated options and components and ending with controllers, software licenses and connection systems.

The Siemens Product Configurator can be used on the internet without requiring any installation. The Siemens Product Configurator can be found in SiePortal at the following address: www.siemens.com/spc

You can find further information on the Siemens Product Configurator in the Engineering tools section.

TIA Selection Tool

Selection tool and configurator for automation technology

Flawless configuration without expert knowledge through intelligent configurators and selection wizards. Desktop and cloud versions enable cross-team work with maximum flexibility.

There are two versions of the TIA Selection Tool:

- One for downloading and executing on Microsoft Windows PCs (from Microsoft Windows 10)
- One for running from the cloud, which is launched from mobile devices directly in the browser (we recommend Safari, Chrome and Firefox)

Projects stored in the cloud can be edited with both tools. This makes it possible to work on-the-go using a tablet, at home on a PC – and vice versa, or together with colleagues and customers.

In order to use the full functionality, we recommended setting up a SiePortal account for both cases. This gives you access to prices and enables you to save your projects to our cloud.

You can find more information on the TIA Selection Tool at www.siemens.com/tia-selection-tool

SIMARIS planning tools for plants with SINAMICS drives

Electrical planning: Even easier with software!

Electrical planning for power distribution in non-residential and industrial buildings has never been more complex. To ensure you, as a specialist planner, have the best hand when it comes to electrical planning with SINAMICS drives, we provide support with the following efficient software tools: SIMARIS design for dimensioning and SIMARIS project for calculating the space requirements of the distribution boards.

You can find more information on the SIMARIS planning tools for plants with SINAMICS drives in the Engineering tools section.

SinaSave energy efficiency tool

Use SinaSave to calculate potential energy savings

The web-based tool SinaSave can be used to estimate the potential savings which can be achieved over the entire lifecycle, e.g. for pump and fan applications, thanks to SINAMICS. The tool takes into consideration all important plant-specific quantities, such as the power and load data of the application, the relevant control mode and the operation profile for the application in question. The result delivered by the tool specifies the potential energy savings which can be achieved with the specific application in conjunction with all drive components. The tool also provides a monetary evaluation of the potential savings and estimates the payback period.

You can find more information about the amortization calculator for energy-efficient drive systems at

www.siemens.com/sinasave

You can find further information on the SinaSave energy efficiency tool in the Engineering tools section.

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SIZER for Siemens Drives engineering tool (integrated into TIA Selection Tool)

The SIZER for Siemens Drives engineering tool makes it easy to configure the SINAMICS converter family. It provides support when selecting the hardware and firmware components necessary to implement a drive task. SIZER for Siemens Drives is designed to support configuring of the entire drive system.

The SIZER for Siemens Drives engineering tool is available free on the internet at www.siemens.com/sizer

You can find further information on the SIZER for Siemens Drives engineering tool in the Engineering tools section.

Drive ES PCS 7 engineering system

Drive ES PCS 7 integrates drives into the SIMATIC PCS 7 process control system. Drive ES PCS 7 provides a block library with blocks for the drives and the corresponding faceplates for the operator station.

More information about the Drive ES engineering system is available on the internet at www.siemens.com/drive-es

SINAMICS web server for SINAMICS G120X via SINAMICS G120 Smart Access

Web server for efficient commissioning, diagnostics and maintenance

The optionally available SINAMICS G120 Smart Access provides the SINAMICS G120X drive system with a web server for efficient commissioning, diagnostics and maintenance. The web server provides access to a multi-faceted range of new options for parameter assignment and drive diagnostics for laptops, tablets and smartphones.

You can find further information on the SINAMICS web server for SINAMICS G120X via SINAMICS G120 Smart Access in the Engineering tools section.