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## SINAMICS G120C

Versatile. User friendly. Compact.



SINAMICS G120C Framesize FSAA, FSA, FSB, FSC, FSD, FSE and FSF with IOP-2

SINAMICS G120C is especially compact with a high power density, and offers a well-balanced combination of functions to address a wide range of applications. With its seven frame sizes, it covers a performance range of 0.55 to 132 kW.

### Accessories

You can find suitable accessories such as mobile and local control panels as well as system components [> here](#).



Configure directly  
online

## SINAMICS G120C - Tutorials

**Tutorial 1 – Installation and commissioning**

**Tutorial 2– Commissioning in the TIA Portal**

**Tutorial 3 – Configuration in the TIA Portal and operation using digital / analog signals**

**Tutorial 4 – SINAMICS G120C and SIMATIC S7-1200 – a great team; Configuration in the TIA Portal**

**Tutorial 5 – SINAMICS G120C and SIMATIC S7-1200F – teaming up for safety; Safety Integrated in the TIA Portal**

### Benefits

#### Compact

Compact even in high performance ranges up to 132 kW

Integrated DC-line reactor and EMC filter

Side by side installation of all frame sizes without current or performance reduction

#### Simple commissioning and operation

Intuitive series commissioning, cloning function through SINAMICS G120 Smart Access Module, BOP-2, IOP-2 or SD Card

Simple and fast software parameterization

#### Perfect integration

Full integration of the drives in the TIA Portal system diagnostics

The use of the TIA Portal library concept ensures the easy reusability of the converters, including the parameter and hardware components

#### Leading-edge technology

The energy-efficient, sensorless vector control allows high torques with low frequency setpoints

Further external components are not required due to the certified safety function Safe Torque Off, which is integrated as standard.

#### Reliable communication

All commonly used bus systems such as PROFINET, EtherNet/IP, PROFIBUS and USS/ Modbus RTU are supported

With lots of innovative functions – all major facts at a single glance

Voltage	3AC 380 ... 480 V +10 % / –20 %
Power range	0.55 to 132 kW
Degree of protection	IP20
Environmental class	Class 3C2, (3C3 with SIPLUS)
Ambient temperature	–10° to 40° C without derating / up to 60° C with derating
EMC	According to IEC 61800-3 up to Category C2
Standards	CE, UL, cUL, c-Tick
Safety Technology	Safety Integrated: Safe Torque Off (STO); controlled via terminals or PROFIsafe
Communication	PROFINET, Ethernet/IP, PROFIBUS, USS/Modbus RTU
Control procedure	U/f (linear, square law, FCC, ECO), vector control without encoder (SLVC)
Functions	Fixed velocity setpoint, PID controller, motor holding brake control

Manuals



> Here you can download the manual

Technical data



> Overview of technical details

Catalogs and brochures




> All the important information provided in the catalog

We support you with the suitable tools to find the right converter

Integrated software supports user-friendly selection, commissioning and operation. The SINAMICS G120C can not only be set up easily, but provides superior usability already during the commissioning phase and later during operation. The integrated software makes it possible.


Convenient commissioning



Using SINAMICS Startdrive as part of the TIA portal makes commissioning a secondary issue

> More information about SINAMICS Startdrive


Configure systems for free



The SIZER engineering tool significantly facilitates the technical configuration of low-voltage drive Systems

> More information about the SIZER

Application examples



Practical applications on SINAMICS converters and SIMATIC Controllers

> More application examples

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SINAMICS G120C built-in units

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> Newsletter


Catalog and ordering system online

Technical info

Support

Training

SINAMICS G120C - Brochure



SINAMICS G120C - The compact and versatile converter with optimum functionality

> View/Download Brochure



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**Details about SINAMICS G120C**

- > Supplementary system components

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**All about SINAMICS G120C Built-in units**

- > Dimension drawings (Drive Technology Configurator)
- > Application examples
- > SINAMICS G120C - Multimedia Training
- > SINAMICS G120C - Safety Integrated
- > Videos
- > Tender Specifications

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**Tools**

- > Drive Technology Configurator
- > SINAMICS Startdrive Commissioning Software
- > Commissioning tool STARTER
- > Drive Design Tool SIZER

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**Related topics**

- > more SINAMICS
- > more Energy efficiency
- > more Conveyor technology
- > more Pumps, Fans, Compressors
- > more Safety Integrated

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