

## System overview

### SINAMICS G130 / SINAMICS G150

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##### Overview



SINAMICS G130 converter built-in unit and SINAMICS G150 converter cabinet unit

SINAMICS G130 converter built-in units and SINAMICS G150 converter cabinet units are designed for variable-speed drives in mechanical engineering and plant construction.

They have been specially designed to meet the requirements of drives with square-wave and constant load characteristics, with medium performance requirements, and without regenerative feedback capability.

The control accuracy of the sensorless vector control is suitable for most applications, which means that an additional actual speed value encoder is not required.

However, SINAMICS G130/SINAMICS G150 converters are optionally available with an encoder evaluation function in order to handle applications that require an encoder for system-specific reasons.

SINAMICS G130 and SINAMICS G150 offer an economic drive solution that can be matched to customers' specific requirements using the wide range of available components and options.

##### Benefits

- Particularly quiet and compact converters due to the use of state-of-the-art IGBT power semiconductors and an innovative cooling concept.
- All device modules are easily accessible, making them extremely service-friendly.
- Can be easily integrated into automation solutions using a PROFIBUS or PROFINET interface and various analog and digital interfaces.
- Individual modules and power components can be replaced quickly and easily, which ensures a higher level of plant availability.
- Simple commissioning and parameterization using interactive menus on the AOP30 Advanced Operator Panel with graphic LCD and plain-text display.

##### Application

Variable-speed drives are ideal for all applications that involve moving, conveying, pumping or compressing solids, liquids or gases.

Key applications include:

- Pumps and fans
- Compressors
- Extruders and mixers
- Mills

##### Design

###### SINAMICS G130

The SINAMICS G130 provides machine builders and plant constructors with a modular drive system that can be tailored to specific applications.

SINAMICS G130 essentially consists of two modular, stand-alone components

- Power Module and
- Control Unit

They may be located separately from one another or combined in a single unit. The Power Module contains a slot for the Control Unit.

The AOP30 Advanced Operator Panel can be used for commissioning and local operation.

Predefined interfaces, via terminal block or the CU320-2 Control Unit with either PROFIBUS or PROFINET, make commissioning and control of the drive much easier. The Control Unit interfaces can be expanded with add-on modules.

###### SINAMICS G150

SINAMICS G150 is a ready-to-connect AC/AC converter in a standard control cabinet.

It can be adapted to individual requirements by selecting from an extensive range of options.

It is available in widths from 400 mm, which then increase in intervals of 200 mm, and can be ordered with various degrees of protection up to IP54 in two design versions.

###### Version A

offers sufficient space for all the options available.

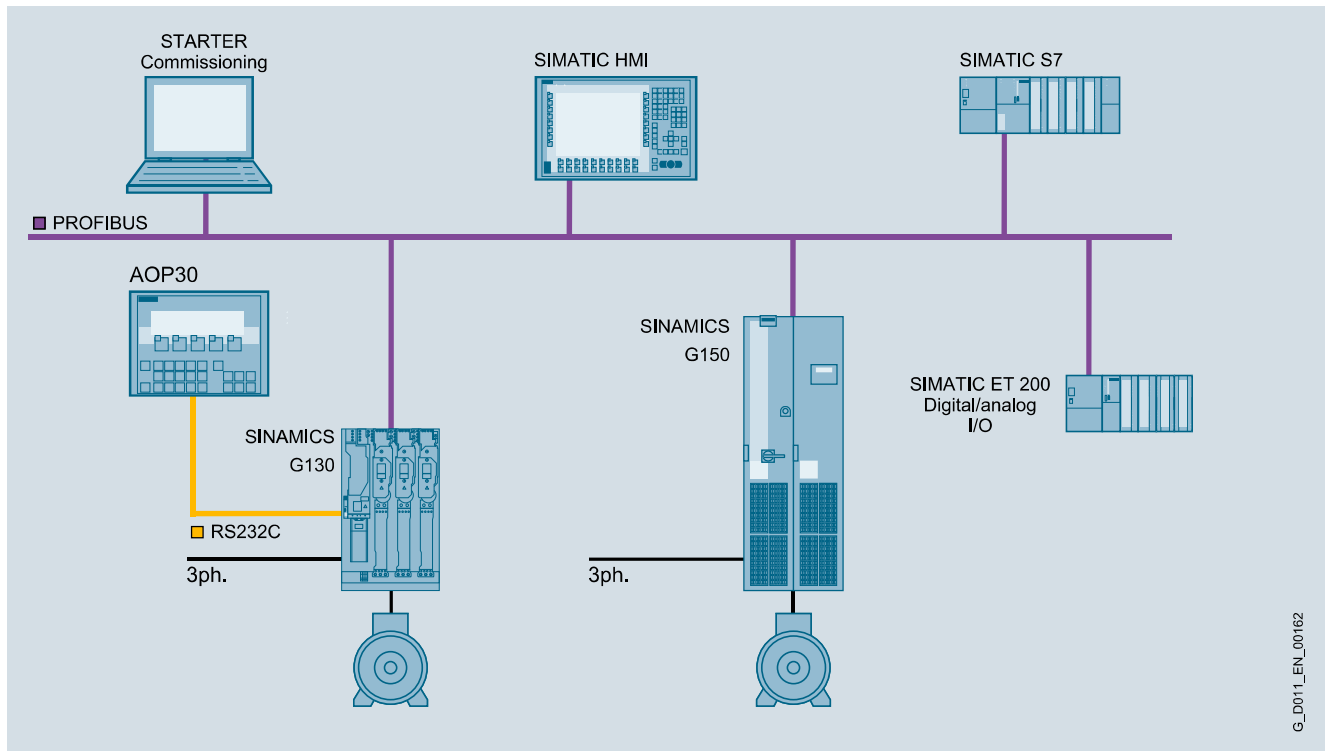
The different versions allow the line and motor connections to be arranged at the top or bottom, as required. This results in excellent flexibility in terms of location in the plant. This version is also available with power units connected in parallel.

###### Version C

is a particularly space-saving version designed for applications where the power supply components are accommodated in a central low-voltage distribution unit and need not be provided again in the control cabinet.

The AOP30 Advanced Operator Panel is fitted as standard in the cabinet door for both versions.

### Integration



SINAMICS G130 and SINAMICS G150 configuration example with SIMATIC S7