

Introduction

SINAMICS G130 / SINAMICS G150

The universal drive solution
for single-motor drives with a high power rating

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Overview



SINAMICS G130 drive converter chassis units and SINAMICS G150 drive converter cabinet units are designed for variable-speed drives in machine building and plant construction.

They have been specially tuned to the requirements of drives with quadratic and constant load characteristics, with medium performance requirements and without regenerative feedback.

The control accuracy of the sensorless vector control is suitable for most applications, and additional actual speed value encoders are therefore superfluous.

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 unit modules are easily accessible, making them extremely service-friendly.
- Can be easily integrated into automation solutions using the PROFIBUS interface supplied as standard and various analog and digital interfaces
- Increase in plant availability since individual modules and power components can be replaced quickly and easily.
- Easy commissioning and parameterization using interactive menus on the AOP30 Advanced Operator Panel with graphical 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.

This means the following applications in particular:

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

Design

SINAMICS G130

SINAMICS G130 provides machine builders and plant construction companies 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 user-friendly AOP30 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 supplemented with add-on modules.

SINAMICS G150

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

They can be matched to individual requirements by selecting from an extensive range of options.

They are available in widths from 400 mm, which then increase in intervals of 200 mm; they can be ordered with various degrees of protection up to IP54 in two design versions.

Version A

offers sufficient space for installing all of the available options. With the different versions, the line and motor connections can be located on the top or the bottom, which in turn offers excellent flexibility in terms of location in the plant. This version is also available with power sections connected in parallel.

Version C

is a particularly space-saving version envisaged 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.

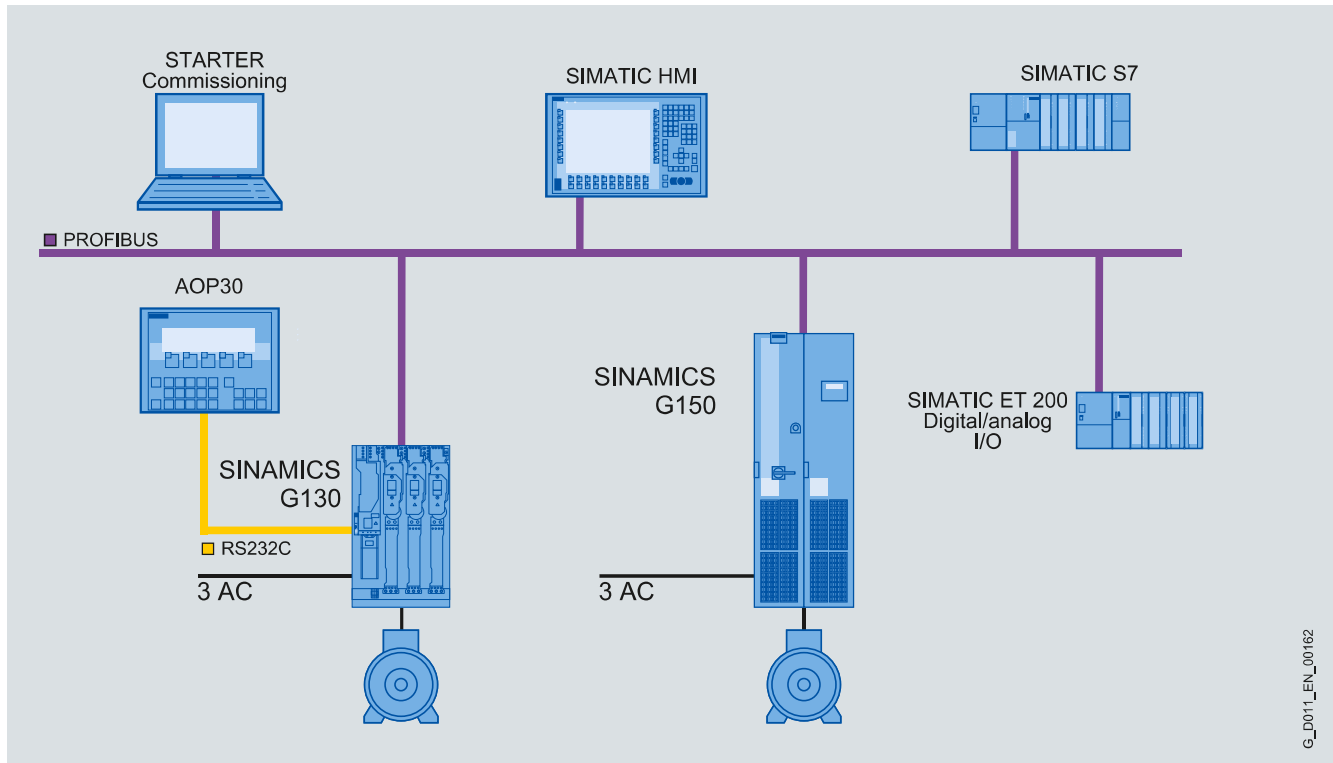
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Integration



SINAMICS G130 and SINAMICS G150 configuration example with SIMATIC S7