

SINAMICS G120C

Siemens EcoTech Profile

Compact converters for continuous motion



Minimum material use

The compact design compared to the predecessor, has led to reduced material usage.



Energy efficiency

Integration of DC reactor inside of converters* instead of external AC reactors for previous products, reduces the harmonic hazard and improves efficiency.



Maintenance possible / Updatability

Improved user experience for commissioning, monitoring & backup based on intelligent operator panel 2.



Repairability

Removable IO terminals provide good usability for fast exchanging of converters.



Compliant with substance regulations

Protect people and environment by avoiding substances of concern.



EPD Type II or Type III available

The Environmental Product Declaration (EPD) provides transparency on the environmental impact of the product throughout its life cycle. Type II according to ISO 14021 including Life Cycle Impact Assessment (LCIA). Type III verified and certified according to ISO 14025.



Scan for [Environmental Product Declarations \(EPD\)](#) and further technical information.

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Range of application

This Siemens EcoTech Profile is valid for product family SINAMICS G120C.

Further information on the product

Sustainable materials:



Minimum material use

- G120C with power range 0.55-2.2kW is up to **37%** smaller and **43%** lighter than predecessor, mainly saving aluminum.

Optimal use:



Energy efficiency

- The DC reactor reduces the harmonics in the line current better than an AC reactor with 2%. A three-phase AC reactor typically has a greater voltage drop (2%) than a DC reactor (1%).
- Lower input current reduces cable and fuse sizing. No additional line reactor required for stiff line supplies ($uk \leq 1\%$), minimizing required cable connections.



Maintenance possible / Updatability

- Color compared to previous black-and-white screen enhances operation and maintenance efficiency with better sharpness and back light.
- Can now store **255** parameter sets compared to **10**, providing more flexibility for maintenance.

Value recovery:



Repairability

- The user can change the convertors conveniently as the original terminals can be unplugged from old convertors and plug-in to new convertors.
- Low effort to connect IO cables after converter change.

*Applicable for frame sizes D to F.

Our production facilities

Our goal is clear: All Siemens production facilities and buildings worldwide are to achieve a net zero-carbon footprint by 2030. Today, all Siemens EcoTech products are manufactured in production facilities using **100% renewable electricity**.

And the ambitions go much further. The management systems implemented in our production facilities reduce the environmental impacts of our sites. Furthermore, we ensure fair treatment and respect for our people. More information about the 360° view on Siemens' sustainable transformation: [Learn more about our DEGREE framework](#)



Scan for more information on the [Siemens EcoTech framework](#)



TÜV Rheinland has independently validated the assessing methodology behind this product sheet's data evaluation according to ISO 14020 and 14021 standards.

Our Robust Eco Design process

The Siemens Robust Eco Design (RED) approach provides the foundation for integrating Ecodesign systematically into our product development and allows us to derive Ecodesign specifications that are advantageous from an environment point of view while meeting our own sustainability goals as well as those of our customers and suppliers. The RED approach involves three phases:

Application perspective

Definition of relevant product families, identification, and prioritization of Ecodesign requirements from stakeholder expectations.

Solid foundation

LCA-based assessment of environmental impacts for representative products along the entire life cycle, communicated via EPD.

Dematerialization

Evaluation of quantitative environmental impacts of Ecodesign and of further requirements, derivation of improved design specifications wherever reasonable.

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