

**SIEMENS**

*Ingenuity for life*



Innovation in flexibility  
and efficiency

**SINAMICS S120**  
Chassis-2 & Cabinet Modules-2

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# SINAMICS S120 innovation

## Next-gen in flexibility and efficiency

The keys to cost-effectiveness in high-performance drives are a high degree of flexibility and maximum reliability together with simplified engineering. The new SINAMICS S120 Chassis-2 and Cabinet Modules-2 device series was optimized exactly for these requirements, starting with the use of state-of-the-art components for maximum performance and ultimate reliability and also including an improved cooling system and space-saving design as well as compatibility with existing systems.

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### Maximum reliability

The new frequency converters are designed to meet the most extreme requirements. High-performance IGBTs and reliable capacitors, rugged electronic modules, an innovative cooling concept with speed controlled fans, as well as type and system tests, ensure maximum reliability and availability. Additional to this, the new drive comes with a minimal derating at low output frequencies and alternating load cycles.

### Increased cost-effectiveness

Whether SINAMICS S120 Chassis-2 or Cabinet Modules-2: Both products are easy to dimension even for sophisticated applications. The standard pulse frequency increased to 2.5 kHz results in significantly higher levels of system efficiency. The device footprints were also reduced, which helps save space – for example, in the control room.

### Flexibility for easier integration in existing systems

The new SINAMICS S120 Chassis-2 and Cabinet Modules-2 devices can easily be integrated in existing systems thanks primarily to the improved electrical specifications as well as the rugged mechanical design. The devices are lighter, quieter, and offer simplified derating. Overall, the SINAMICS S120 Chassis-2 and Cabinet Modules-2 devices qualify for a wide range of drive solutions with simplified engineering and no compromises in performance.



Metals



Paper



Crane



Conveyor technology



Presses



Test stands



Centrifuges

## Your benefits at a glance

### Flexibility

For new applications and retrofits through a space-saving chassis design and improved electrical specifications

### Cost-effectiveness

With precise dimensioning for sophisticated applications and increased system efficiency

### Reliability

Due to perfect adaptability and optimized derating behavior

### Ready for digitalization

For simplified engineering and condition monitoring

# SINAMICS S120 Chassis-2

## Perfect for cabinet solutions

The new chassis design is mechanically and electrically optimized with the specific goal of maximizing availability and operational reliability and also helps to minimize total lifecycle costs, from engineering to system maintenance. Thanks to its simple installation and easy ordering installation kits, designing your own cabinets is perfectly supported.



Easy to integrate in the control cabinet with four screws

Standardized connections

Innovative cooling concept

Simple fan replacement

Small, standardized footprint

### Product data overview

Supply voltage	3 AC 380 V – 480 V (+/-10%)
Power range	315 kW – 800 kW/4800 kW (thanks to sixfold parallel connection)
Protection class	IP00
Ambient temperature	Operation -10° C... +45° C (with derating: +60° C)
Rated pulse frequency	2.5 kHz
Maximum pulse frequency	8.0 kHz
<b>Dimensions</b>	
Width x height x depth	280 mm x 1491 mm x 542 mm (type 4) 280 mm x 1461 mm x 542 mm (type 2)
Weight	162 kg
<b>Compliances/Proof of suitability according to</b>	CE (EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU, and Machinery Directive 2006/42/EC for functional safety); RoHS II, REACH, WEEE

# SINAMICS S120

## Chassis-2 & Cabinet Modules-2

### The drive for your success

#### Flexibility



- Standard pulse frequency of 2.5 kHz
- Simple, optimized derating even for demanding applications
- Rugged mechanical design
- Simple integration into existing SINAMICS/MASTERDRIVES systems
- Simple engineering
- Cabinet Modules-2 with innovative cabinet module concept

#### Cost-effectiveness



- Simplified, precisely tailored overall design
- Increased system efficiency
- Reduced engine noise
- Chassis with smaller, standardized footprint reduced up to 60%
- Ready-to-use cabinet systems that can be perfectly adapted to customer requirements thanks to standard options
- Cabinet system width of 600 mm





## Reliability

- Increased operational reliability even under the most severe operating conditions
- State-of-the-art components
- Innovative cooling concept with variable-speed fans
- Minimized derating, even for alternating loads (e.g. at frequencies < 10 Hz)
- Type-tested cabinet systems with maximum quality control and ruggedness before/during commissioning and installation



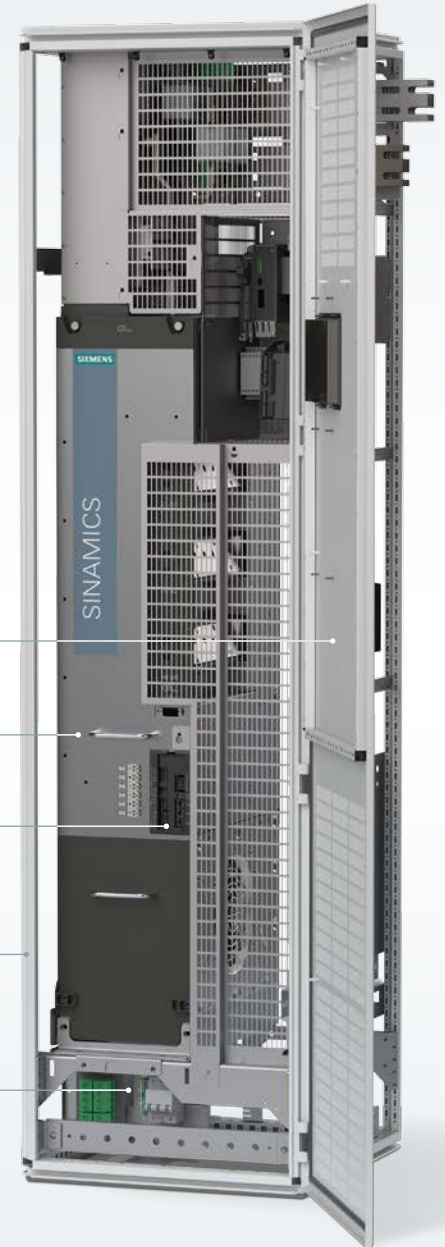
## Ready for digitalization

- Integrated condition monitoring
- Easy access to technical data via data matrix code
- Simplified engineering process thanks to availability of standard data (3D, EPLAN)
- Ready for SIDRIVE IQ

# SINAMICS S120 Cabinet Modules-2

## Type-tested and ready-to-use for every customer solution

The cabinet system combines all the innovative benefits of the Chassis-2 in terms of flexibility, reliability, and cost-effectiveness, proven by type and system tests and the lowest possible engineering effort.



Flexible cabinet module concept

Modules can be installed and removed quickly

Standardized interfaces

Standard cabinet width 600 mm

Simple system engineering

### Product data overview

Supply voltage	3 AC 380 V – 480 V (+/-10%)
Power range	315 kW – 800 kW/4800 kW (thanks to sixfold parallel connection)
Protection class	IP20 – IP54
Ambient temperature	Operation –10° C... +40° C (with derating: +50° C)
Rated pulse frequency	2.5 kHz
Maximum pulse frequency	8.0 kHz
Dimensions	
Width x height x depth	600 mm x 2200 mm x 600 mm
Weight	option-dependent
Compliances/Proof of suitability according to	CE (EMC Directive 2014/30/EU, Low Voltage Directive 2014/35/EU, and Machinery Directive 2006/42/EC for functional safety); RoHS II, REACH, WEEE

**Published by  
Siemens AG 2018**

Process Industries and Drives  
Large Drives  
P.O. Box 4743  
90025 Nuremberg, Germany  
[siemens.com/sinamics-s120-innovation](http://siemens.com/sinamics-s120-innovation)

Article No. PDL-D-B10112-00-7600  
Printed in Germany  
Dispo 21503  
TH 455-180055 BR 04180.5

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