



INNOVATIVE SYSTEM SOLUTIONS FOR HORIZONTAL MOTION APPLICATIONS.

SINAMICS G115D

Versatile. Rugged. Distributed.

SIEMENS

LESS EFFORT. MORE PERFORMANCE.

SINAMICS G115D

The SINAMICS G115D is more than just another converter – it is an optimally matched system solution consisting of a highly efficient geared motor and an innovative, low-profile converter. The system has been optimized exclusively for energy- and cost-efficient horizontal motion applications such as conveyor belts, sorting systems, baggage and freight conveyor systems, warehouse and distribution logistics, mail sorting and parcel distribution.

The most important advantages:

- Complete system, extremely easy to configure and install
- All components included and preconfigured from the factory
- Minimized space requirement, optimal performance
- Full TIA integration and MindSphere connectivity
- Prepared for operation under harsh conditions (down to -30°C)
- Extremely versatile (wall and motor mounted versions, identical electronic module)
- Simple on-site service of mechanical and electronic modules

THE NEW DISTRIBUTED DRIVE SYSTEM.

Versatile. Rugged. Distributed.



SINAMICS G115D is versatile

- SINAMICS G115D stands for simple configuration, easy ordering and easy commissioning. As a comprehensive distributed drive system, it is the simple solution to challenge all the horizontal conveyor applications.
- Fully implemented in the Totally Integrated Automation (TIA) environment which seamlessly connects hardware, software, and services. All of the individual components are harmonized and coordinated with one another.



SINAMICS G115D is rugged

- Robust design that includes high protection degree up to IP66 and harsh environment operation while maintaining space requirements with a reduced converter's size.
- Reliable operation with extended temperature range from -30 to 55 °C.



SINAMICS G115D is distributed

- The SINAMICS G115D drive system belongs to a family of distributed converters.
- The distributed system approach allows to individually control motors closer to the application process saving space, reducing motor cables and improving electromagnetic compatibility behavior and heat losses.



TODAY AND TOMORROW

Very economical

Life cycle costs in intralogistics depend largely on the efficient design, commissioning and operation of the drive systems for conveyor belts. With its unique combination of gearbox, motor and frequency converter, SINAMICS G115D enables easy project planning and commissioning with proven software tools and is supplied completely assembled ex works. Its Smart Access Module provides wireless system connectivity for added convenience.

Wherever a growing number of demands, parcel deliveries and more have to be handled while space is becoming increasingly scarce, the SINAMICS G115D comes into its own. It is a very compact and reliable solution with the ability to optimize performance. This is achieved e.g. by monitoring the number of deliveries in a given time with the Analyze MyDrives MindSphere app, by streamlining workflows – and by predicting future downtime. And in terms of energy efficiency, SINAMICS G115D is optimized for asynchronous IE3 and IE4 synchronous reluctance motors, which can also be monitored very easily with Analyze MyDrives.

CLEVER IDEAS FROM A RELIABLE PARTNER

Designed for success

The SINAMICS G115D is not only equipped with very reliable components, it also features a service-friendly design. The new electronic module is a good example of this. It is identical for the wall and motor mounted versions and can be easily disconnected and replaced for offline service. This drastically increases the availability of the entire system and optimizes operating costs.



ADVANCED CONNECTIVITY FOR IMPROVED OPERATION

Ready for the cloud

The SINAMICS G115D can be easily connected to MindSphere, the open IoT Operating system from Siemens to deliver operation and condition data for further analysis and optimization purposes.

To achieve this, the data is sent either directly from the SIMATIC S7-1500 controller, the MindConnect IoT 2050 or the SIMATIC MindConnect Nano interfaces. Once in the cloud, the data can be processed with Analyze MyDrives to obtain valuable insights and suggestions for improved operation.



Technical data

	SINAMICS G115D Motor Mounted	SINAMICS G115D Wall Mounted
Target group / applications	Horizontal motion – simple conveyor technology Intralogistics, Airports, Automotive and F&B market	
Supply voltage / power range	3AC 380 V – 480 V: 0.37 – 4 kW / 0.5 – 5 HP FSA up to 1.5 kW, FSB up to 4 kW	3AC 380 V – 480 V: 0.37 – 7.5 kW / 0.5 – 10 HP FSA up to 1.5 kW, FSB up to 4 kW, FSC up to 7.5 kW
EMC	EMC Category C2 / Removal of functional grounding (IT system) possible	
Degree of protection	IP55 (limited by motor) or optional IP65 / UL rating follows geared motor (compact system)	IP65 (connector version) or IP66 (gland version) / UL type 4X
Cooling	Convection	Convection ≥ 4 kW with fan (FSC size)
Ambient temperatures	–30 to 40 °C / to 55 °C (> 40 °C with derating)	
Motor cable length	–	15 m (EMC Category C2)
Motor control	U/f, FCC, ECO, SLVC sensorless vector control	
Overload capability	200 % 3 s, 150 % 57 s, every 300 s	
Inputs/outputs	4 DI, 2 DO (can also be used as DI), 1 F-DI (from 2DI), HTL-Encoder interface (from 2DI)	
Communication	PROFINET / Ethernet IP, AS-I or IO controlled	
I/O configuration	Selectable and predefined I/O macro configurations	
Fixed setpoints	Up to 16 fixed setpoints selected via digital inputs	
Ramp functions	Ramps (up/down) can be set separately Rounding-off ramp function to guarantee soft starting and stopping Available ramp switchover in operation	
Brake control	180V DC motor holding brake available as standard; 3 brake torques (reduced, standard, increased); Optional AC 400V brake for Wall Mounted; DC braking	
Application functions	Integrated firmware functions for conveyor technology (conveyors, corner turn table, corner table, travelling trolley)	
Logical functions	Yes, integrated free function blocks (FFB)	
Safety Integrated	STO (SIL 2, PLd)/ PROFIsafe, SLS as a licensed option (no additional hardware required)	
Memory card (SD card)	Yes	
TIA Portal integration	Yes, complete system (incl. G115D drive and 2KJ8 geared motor)	
Webserver	Yes, via SINAMICS Smart Access Module (SAM)	

EXTENDED COVERAGE FOR UP TO 4 YEARS

Our service package



Dedicated service packages

To further reduce life cycle costs, we offer special service packages for registered SINAMICS G115D solutions. These service packages extend the period for repair or replacement to up to 4 years for both wall mounted and motor mounted systems. In addition, the first half year after the usual twelve months warranty period is free of charge. After this period, further extended coverage is available as an option offering maximum investment protection and expert support over the entire lifecycle of the drive system.

Your advantages:

- Security of service for up to 4 years, with half a year free of charge service with product registration
- Maximum investment protection
- Expert support over the entire drive system lifecycle



Register your SINAMICS G115D online and obtain our service package free-of-charge for the first six months:

Standard warranty
18 months

+ 6 months with
product registration

+ 1 year extended coverage

+ 2 years extended coverage

AVAILABLE TOOL SET-UP FOR THE SINAMICS G115D

Easy configuration



DT Configurator

The Drive Technology Configurator (DT Configurator) supports you when selecting the optimum product version for your specific application. Preselected product groups, precise navigation with selection menus or direct product selection through entry of the article number makes configuration quick, efficient and convenient.



TIA Selection Tool (SIZER)

The TIA Selection Tool helps you to get the most out of your portfolio quickly and easily. Without detailed product knowledge needed, the TIA Selection Tool supports project planners, beginners and experts alike.



APPLICATION FIELDS

SINAMICS G115D



SINAMICS distributed drives are ideally suited for industrial conveyor systems and help you save wiring and installation costs as well as room in control cabinets. SINAMICS distributed drives rely on proven technology and are ideally suited for use in the automotive sector, distribution logistics, airports and every other environment where long distances and space have to be considered.

Intralogistics

Conveyor technology is essential for organization, control, implementation and optimization of the internal goods and material flow as well as for logistics in industry and trade. Choose from our flexible and efficient solutions for conveyor technology requirements including:

- Roller, belt and chain conveyors
- Corner Turntable
- Turntable
- Travelling trolley



Airports

Airport services depend on conveyor technology. Efficient baggage handling systems increase throughout qualities and help coping with steadily rising demands as well as fulfilling laws and regulations. Keep your airport running with solutions like:

- Baggage handling systems
- Tray based conveyor lines/systems for baggage
- Cargo handling systems
- Sortation systems



Automotive

Conveyor technology is needed at many stations within the automotive production processes for transporting car parts. Rely on the most modern solutions for all conveyor technology requirements like:

- Roll Conveyor
- Turntable
- Travelling Trolley



Food and Beverage

Choosing the right components for machines increases both flexibility and efficiency in food production. Optimize your service with complete conveyor solutions like:

- Conveyor belts
- Cross belt sortation systems
- Gapping belt conveyors



**Published by
Siemens AG**



Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit

[www.siemens.com/industrial-security](#)