



SIEMENS

Ingenuity for life

SINAMICS G120

The modular drive:
space-saving, safe and rugged

usa.siemens.com/sinamics-g120

The second generation of the SINAMICS G120 drive series is here. Using the latest power component technology, the new PM240-2 power modules offer many benefits not seen before in general purpose, variable frequency drives (VFDs). With higher power densities, matching control units, new operator panels, enhanced vector control and basic positioning capabilities, the new SINAMICS G120 proves to be a best-in-class VFD.

Additional advantages include:

- Side-by-side mounting without derating
- Integrated, comprehensive safety concept up to PLe/SIL3
- Available in three voltage classes: 200V, 400V and 690V
- Increased ruggedness
- Innovative push-through design also available

SINAMICS G120 drives are an excellent match for complex applications such as industrial machinery, or in the automotive, textile, packaging and chemical industries



Highlights at a glance

- + **Space savings** in the control cabinet as a result of increased power density, as well as side-by-side mounting
- + **Increased ruggedness** through longer motor cable lengths and by meeting increased environmental requirements such as now having a SIL3 rating (frame size D, E, F only) and extended standard temperature ranges
- + **Improved safety** integrated into the drive
- + **Lower costs** for installation and maintenance through an optimized connection system
- + **Lower system costs** by eliminating the input line and output reactors—plus, shield plates are included with each drive
- + **Compatibility** with Siemens TIA (Totally Integrated Automation) and IDS (Integrated Drive Systems) integration



SINAMICS G120 technical information	
Voltage	1AC/3AC 200 ... 240V; 3AC 380 ... 480V; 3AC 500 ... 690V
Power range	0.55–250 kW (0.75–400 hp)
Degree of protection	IP20
Environmental class	3C2 (3C3 is possible with SIPLUS Control Unit—for frames D, E, F)
Ambient temperature	–10° C to +60° C (up to +40° C with derating)
EMC	According to EN 61800-3 up to Category C2
Standards	CE, UL, cUL, c-Tick
Safety technology	Safety Integrated: STO (up to SIL 3, PL e, Cat. 3), SS1, SBC, SLS, SDI, SSM, PROFIsafe
Communication	PROFINET, PROFIBUS, USS, Modbus, Ethernet/IP, BACnet
Closed-loop control modes	V/f, flux current control (FCC), vector control with and without encoder
Functions	Basic positioning function with EPos, energy recovery using efficient infeed technology, PROFInergy, PROFIdrive

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