

2003.x: Frequency Converter

SIEMENS¹ Low Voltage Frequency Converter

SINAMICS G120 Chassis Units

- Control Unit with Fieldbus interface and safety functions
- Power Modules with regenerative feedback capability
- Power Modules with brake chopper, external braking resistor
- Basic Operator Panel, plugged to Control Unit

General Technical Data

- Rated output: 0.37 kW to 90 kW
- Voltage: 3 AC 380 ... 480 V $\pm 10\%$
- Input frequency: 47 ... 63 Hz
- Degree of protection: IP20
- Fieldbus Interface: PROFIBUS DP



Application

Type of Drive	Centrifuge / Device	Rated Output [kW]	Standard setup ²
Main Drives	HPZ 630	7.5	<ul style="list-style-type: none"> • Regenerative feedback • Safety functions
	HPZ 800	15	
	HPZ 1000	22	
	HPZ 1250	30	
	VBC 1000	15	
	VBC 1250	18.5	
Auxiliary Drives	VBC 1600	37	<ul style="list-style-type: none"> • No regenerative feedback • No safety functions
	Feed and wash disc	3	
	Feed and wash disc	5.5	
	Scraper unit	0.25	

Key Functions

Control Unit CU240S DP-F

- Integrated safety functions according to EN 954-1 - Cat. 3 and IEC 61508 - SIL2:
 - Safe Stop 1 (SS1)
 - Safely Limited Speed (SLS)
 - Safe Torque Off (STO)
- Integrated PROFIBUS DP interface for easy communication with control systems.
- Sophisticated software tools for engineering and commissioning which integrate to the STEP7 environment.
- Pluggable Basic Operator Panel used for commissioning purposes, monitoring devices in operation and input of individual parameter settings.

Power Module PM250 with regenerative feedback

- The regenerative feedback capability of the PM250 in generating mode (electronic braking) means that energy is returned to the supply system and not dissipated in a braking resistor. This saves space in the control cabinet, time-consuming dimensioning of the braking resistor as well as the wiring. Generated heat is also reduced in the control cabinet.
- Suitable for rated power range from 7.5 to 90 kW.

Power Module PM240 with brake chopper

- The PM240 comes with an integrated brake chopper to which an external braking resistor can be connected if required.
- Designed for low power drives (starting from 0.37 kW) and braking rotating masses with low moment of inertia.
- If, upon customer request or for other reasons, a regenerative feedback solution is not possible, the PM240 can be used with an external braking resistor to control the main drives. The braking resistor has to be installed at a suitable location outside the control cabinet.

¹ Other manufacturers available upon request

² Optional: Main drives without regenerative feedback. Additional external braking resistor required.