



# SINAMICS V90

## Simple. Precise. System-based.

### Highlights

- Optimized servo performance thanks to One-Button Auto Tuning and real time Auto-Tuning
- Simple to operate complete solution for motion control applications
- Together with a SIMATIC controller, a strong team in the TIA Portal

### Applications



Processing



Positioning

Format	Built-in unit (compact)
Drive concept	AC/AC
Degree of protection	Converters: IP20 Motor: IP65
Supply voltage/power kW (hp)	
1 AC / 3AC 200 ... 240 V	0.10 ... 0.75 kW (0.07 ... 1.02 hp)
3AC 200 ... 240 V	1.0 ... 2 kW (0.7 ... 2.7 hp)
3AC 380 ... 480 V	0.40 ... 7 kW (0.54 ... 10 hp)
Energy recovery	–
Control modes	Servo control with encoder
Ambient temperature	0 °C to 45 °C without derating/to 55 °C with derating
Line filter	With external line filter for environments according to IEC 61800-3 Category C2
Braking chopper	Integrated braking chopper for all frame sizes and max. motor power $\geq 0.2$ kW
Safety functions	STO via terminal
Communication	Pulse/direction interface, USS/Modbus RTU, PROFINET
TIA Portal connected	Yes, via the Hardware Support Package
Commissioning tools	SINAMICS V-ASSISTANT
Controller	SIMATIC S7-1200, SIMATIC S7-1500
Recommended motors	SIMOTICS S-1FL6 (servomotors)