



## Drives

# SINAMICS S120M

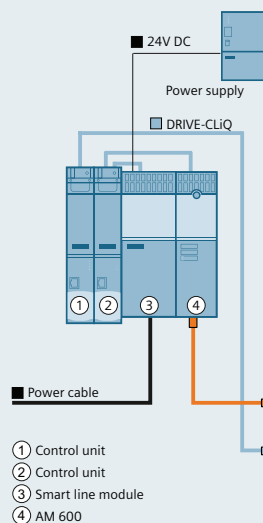
## Distributed servo drive for motion control applications

The modular SINAMICS S120 drive platform has been expanded to include SINAMICS S120M — a compact, ready-to-connect drive unit that includes the following:

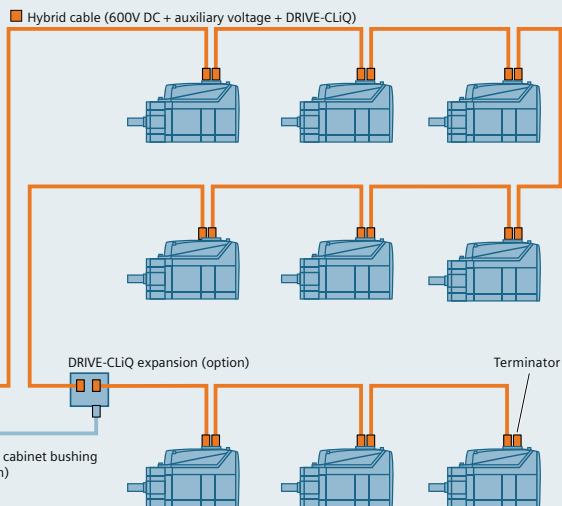
- Synchronous servomotor with multi-turn absolute encoder
- Integrated power unit (motor module)

The S120M provides the option of moving the motor inverter out of the control cabinet and onto the motor, and is directly integrated in the driven axis. This provides users with advantages, as well as a high degree of flexibility for existing and new machines. The S120M offers power ranges from 0.25–1.5 kW, 510V–720V DC and communication options including PROFINET, PROFIBUS, CAN and EtherNet / IP.

### Central components



### Distributed drive units



## SINAMICS S120M applications

Typical applications for the SINAMICS S120M can be found in the packaging, printing, glass and textile industries.

It is ideally suited for:

- Machines that extend over large areas (long cable lengths)
- Limited space requirements for control cabinets
- Modular machine concepts with flexible machine design

## SINAMICS S120M features

- Up to 12 distributed SINAMICS S120M servo drives can be operated from one adapter module (dependent upon the power rating)
- As many adapter modules as needed can be operated from an appropriately-dimensioned infeed unit
- DI / DOs are integrated into the drive for user-friendly adaptation to the machine environment
- When using the Terminal Module (TM54F), all of the safety functions available in the SINAMICS S120 system can be used
- Optimal integration into the SIMOTION motion controller and SINUMERIK CNC system environments

## Highlights at a glance

Description	Customer benefits
Motor module is integrated in the SINAMICS S120M	Reduced control cabinet envelope dimensions
Reduced power loss as a result of the distributed design	Reduced control cabinet requirements
Pre-fabricated hybrid cable includes all signal and power conductors	Reduced installation times and shorter cable lengths
For retrofits, limited if any impact on existing control cabinet	Increased flexibility when expanding / retrofitting systems
SINAMICS S120M is an integral part of the SINAMICS S120 drive platform	Common safety and communication protocols are available

## Selection and ordering information

Designation	Order Number
S120M shaft height 36	6SL3532-6DF71-OR
S120M shaft height 48 short	6SL3540-6DF71-OR
S120M shaft height 48 long	6SL3542-6DF71-OR
S120M shaft height 63 short	6SL3562-6DF71-OR
S120M shaft height 63 long	6SL3563-6DF71-OR
<b>Design</b>	
Key, without holding break	A
Key, with holding break	B
Plain shaft, without holding break	G
Plain shaft, with holding break	H
<b>Degree of protection</b>	
IP65	1
IP65 with IP67 shaft seal ring	2
Cabinet bushing (HCB)	6SL3555-2DA00-0AA0
DRIVE-CLiQ expansion (DQE)	6SL3555-0AA00-6AB0
Adapter module AM600	6SL3555-2BC10-0AA0
S120M hybrid cable outlet direction B end (rear) / B end (rear)	6FX8002-7HY00-xxx <sup>1)</sup>
S120M hybrid cable outlet direction B end (rear) / A end (front)	6FX8002-7HY11-xxx <sup>1)</sup>
S120M hybrid cable outlet direction A end (front) / A end (front)	6FX8002-7HY22-xxx <sup>1)</sup>

<sup>1)</sup> Cable length codes for MOTION-CONNECT cables