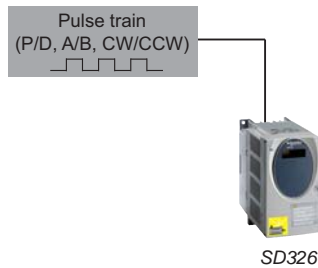
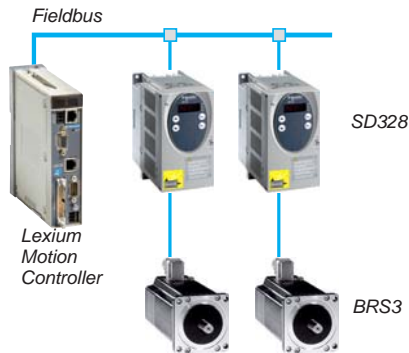


# Lexium SD3 motion control

## Lexium stepper motor drives



### Product offer

A Schneider Electric stepper motor drive system comprises of an SD3 stepper motor drive and a BRS3 3-phase stepper motor. Reference values are set and, if applicable, monitored by a master PLC or a Schneider Electric Motion Controller (e.g. Lexium Motion Controller). Together with Schneider Electric BRS3 stepper motors, SD3 is a very compact, high-performance drive system.

### Compactness

With its small dimensions (H x W x D: 145 mm x 72 mm x 140 mm), the SD3 stepper motor drive requires very little space in the control cabinet.

### Simplicity

Simple cabling and parameterisation of the SD326 allow for easy and quick commissioning. Commissioning software is not required. The SD328 drives are convenient to configure via the integrated control panel (HMI), via fieldbus or with the Lexium CT PC commissioning software.

### Flexibility

SD3 stepper motor drives are available in two power classes: 2.5 A and 6.8 A. The SD3 stepper motor drives are delivered with the following components depending on the device type:

- An opto-isolated signal interface for 5 V and 24 V input signals (SD326)
- An RS422 interface for pulse/direction signals or A/B encoder signals (SD328)
- A fieldbus interface for SD328: CANopen and Modbus (SD328A) or PROFIBUS DP (SD328B):
  - The CANopen interface of the SD328A can be used for connection to a CANopen AutomationBus or a CANopen MotionBus.
  - Movements of up to eight drive axes can be synchronously controlled by one Motion Controller (e.g. Lexium Motion Controller) via the CANopen MotionBus.
- Analogue reference value input  $\pm 10$  V (SD328)
- A power supply unit for single-phase mains voltages of 115 V $\sim$  and 230 V $\sim$
- Integrated mains filter

The SD326 can optionally be shipped with an electronic system for rotation monitoring and brake control.

### Application areas

A stepper motor drive system from Schneider Motion has excellent constant velocity characteristics, which are required for applications such as scanning or exposure. Due to the high torque at low speeds of rotation, the SD3 stepper drive system is particularly suited for short-distance positioning.

Another advantage is its high holding torque at standstill. This allows for the highly economic implementation of automation tasks such as "pick and place".

## Assignment of BRS3 3-phase stepper motors and SD3 stepper motor drives

BRS3 3-phase stepper motors		SD326●U25	SD328●U25	SD326●U68	SD328●U68
		115 V / 230 V; 2.5 A; including mains filter		115 V / 230 V; 6.8 A; including mains filter and fan	
					
BRS368		1.7 Nm / 1.5 Nm (1)			
BRS397		2.3 Nm / 2.0 Nm			
BRS39A		4.5 Nm / 4.0 Nm			
BRS39B		6.8 Nm / 6.0 Nm			
BRS3AC				13.5 Nm / 12.0 Nm	
BRS3AD				19.7 Nm / 16.5 Nm	

(1) The 1st value is the holding torque  $M_H$  when the stepper motor is at a standstill, the 2nd value is the nominal torque  $M_N$  when the motor is in operation.