



Lexium SD3 drive controlling a printing machine



Lexium SD3 drive controlling textile machines

### Presentation

The Lexium SD3 offer consists of an SD3 stepper motor drive and a BRS3 3-phase stepper motor.

This combination provides an extremely compact and high performance drive system, designed more specifically for complex machines.

Reference values are defined by a master PLC or a motion controller such as the Lexium LMC. If necessary, the encoder data is fed back from the drive to the PLC or to the master motion controller.

### Compact offer

With its compact size, the SD3 stepper motor drive takes up very little space in the control cabinet and is easily integrated into the installation.

### Easy to install and commission

The simple wiring of SD315 and SD326 drives means they can be installed quickly. Commissioning is instantaneous, no software is required.

The SD328 drive is easy to configure from the integrated graphic display terminal, via the communication bus, or using Lexium CT PC commissioning software, with its customizable menus.

### Flexibility

SD3 stepper motor drives are available in three power classes - 2.5 A, 6.8 A and 10 A.

They are designed to offer open communication to various control system architectures by means of their communication interfaces or integrated communication protocols.

Depending on the model, they incorporate an EMC filter to enhance installation protection, reduce costs and provide an economical means of ensuring that machines meet CE marking requirements. They comply with standard IEC/EN 61800-3, second edition, categories C2 and C3.

### Compliance with international standards and certifications

Lexium stepper motor drives have been designed in accordance with the stringent international standards and recommendations governing electrical industrial control equipment (IEC, EN), including low voltage control devices, IEC/EN 61800-5-1, IEC/EN 50178 and IEC/EN 61800-3 (immunity to conducted disturbance induced by high frequency signals).

They bear the CE mark in accordance with the European machinery directive (98/37/EEC) and the European EMC directive (2004/108/EEC).

The entire range is cULus certified (United States and Canada). SD328 drives are also TÜV certified in accordance with the safety standards for medical devices and equipment.

### Applications

The Lexium SD3 stepper motor drive range is designed to meet the requirements of applications needing excellent synchronisation characteristics, such as scanning or isolation.

With its high torque at low rotation speeds, the BRS3 stepper motor is particularly suitable for short range positioning applications.

Its high holding torque at standstill also significantly reduces implementation costs in pick and place applications.

### BRS3 3-phase stepper motor/SD3 drive combinations

Motor type	Lexium SD3 drives		
	24...48 V $\square$ supply voltage	115...230 V $\sim$ supply voltage	
	10 A rms output current	2.5 A rms output current With EMC filter	6.8 A rms output current With EMC filter and fan



	SD315	SD326●U25	SD328●U25	SD326●U68	SD328●U68
	Nm (1)	Nm (1)	Nm (1)	Nm (1)	Nm (1)
BRS364H	0.51 / 0.45				
BRS366H	1.02 / 0.90				
BRS368H	1.70 / 1.50				
BRS397H	2.26 / 2.0				
BRS39AH	4.8 / 4.0				
BRS39BH	5.5 / 5.75				
BRS368		1.7 / 1.5			
BRS397		2.3 / 2.0			
BRS39A		4.5 / 4.0			
BRS39B		6.8 / 6.0			
BRS3AC				13.5 / 12.0	
BRS3AD				19.7 / 16.5	

(1) The first value corresponds to the holding torque at standstill  $M_H$ . The second value corresponds to the nominal torque  $M_N$ .