

B&R - X67 System

X67SM4320

4-axis Stepper Motor Module

Technical specifications

Motor channels	4 full bridges
Motor type	2-phase bipolar stepper motor
Motor supply	24 VDC $\pm 25\%$
Nominal current	1 A per motor
Peak current	1.5 A per motor for 2 s after at least 10 s recovery at maximum 1 A
Maximum module current	6 A
Current-value resolution	1%
Microstep resolution	256 microsteps per full step
PWM frequency	38.5 kHz
DC bus capacitance	440 μ F
Current profiles	Boost, nominal and holding currents independently configurable
Stall detection	Integrated with configurable threshold
Motion model	Function model 3 ramp based on CANopen DS402
Outputs	4 $\times$ M12, A-coded
Internal I/O / X2X power	2 W / 0.75 W
Operating temperature	0 to 50 °C
Degree of protection	IP67
Mounting orientation	Any
Storage / transport temperature	-40 to 85 °C
Dimensions	5.3 $\times$ 8.5 $\times$ 4.2 cm (W $\times$ H $\times$ D)
Weight	0.195 kg

Documented role

B&R X67SM4320 is an IP67 motor module with four full bridges for controlling four two-phase bipolar stepper motors for the X67 System.

Documented applications

- Four-axis stepper positioning on packaging and assembly equipment
- Distributed stepper control for feeders, guides and indexing mechanisms
- Automation Studio or CNC machine axes requiring microstepping and stall detection

Selection and installation checks

X67SM4320 controls four bipolar stepper motors. Match winding current and connector pinout, respect the 6 A module total and peak recovery time, then validate current profiles, stall detection, motion parameters and IP67 sealing.