



EJ7047 | Stepper motor module 50 V DC, 5 A, with incremental encoder, vector control

The EJ7047 EtherCAT plug-in module is intended for stepper motors with medium performance range. The PWM output stages cover a wide range of voltages and currents. Together with two inputs for limit switches, they are located in the EtherCAT plug-in module. The second input can also be configured as an output, thus enabling the use of a holding brake.

The EJ7047 can be adjusted to the motor and the application by changing just a few parameters. With its torsion-proof, integrated encoder (1,024 inc/rev), the AS2000 stepper motor is ideal for the closed-loop control of the EJ7047.

Technical data	EJ7047
Technology	Compact Drive Technology
Load type	2-phase stepper motor (uni-/bipolar)
Number of channels	1
Number of outputs	1 x stepper motor, 1 x brake (configurable, 0.5 A)
Number of inputs	2 x end position, 1 x encoder
Connection method	direct motor connection + feedback
Supply voltage electronics	24 V DC (via distribution board)
Supply voltage power	8...50 V DC (via distribution board)
Output current	max. 5.0 A
Step frequency	configurable up to 16,000 full steps/s
Step pattern	64-fold micro stepping
Current controller frequency	approx. 30 kHz
Resolution	approx. 5000 positions in typ. applications (per revolution)
Encoder input signal	5...24 V DC, typ. 5 mA, single-ended
Input frequency	max. 400,000 increments/s (with 4-fold evaluation)
Auxiliary power current	typ. 70 mA (via distribution board)
Current consumption E-bus	typ. 140 mA
Distributed clocks	yes
Special features	travel distance control, encoder input, vector control
Electrical isolation	500 V (E-bus/field potential)
Weight	approx. 50 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/see documentation
Approvals	CE, UL

Accessories	
AS2022-0Hy0	stepper motor, 50 V DC, 1.5 Nm standstill torque, 5.6 A standstill current
AS2023-0Jy0	stepper motor, 50 V DC, 2.3 Nm standstill torque, 6.4 A standstill current
AS2042-1Hy0	stepper motor, 50 V DC, 6.4 Nm standstill torque, 5.6 A standstill current
Cables, gears and couplings	accessories for AS2000 stepper motors