



## EJ7211-0010 | EtherCAT plug-in module, servomotor module for OCT, 50 V DC, 4.5 A ( $I_{rms}$ )

The EJ7211-0010 servomotor EtherCAT plug-in module with integrated One Cable Technology (OCT) offers high servo performance in a very compact design for motors from the AM8100 up to 4.5 A ( $I_{rms}$ ). The One Cable Technology combines a motor cable and an absolute feedback system in a single cable. The integrated electronic type plate of the AM81xx motors can be read in automatically by the servo module to configure the motor parameters automatically. Thus, wiring and commissioning expenditure are minimised.

The fast control technology, based on field-orientated current and PI speed control, supports fast and highly dynamic positioning tasks. The monitoring of numerous parameters, such as overvoltage and undervoltage, overcurrent, module temperature or motor load via the calculation of a  $I^2T$  model, offers maximum operational reliability. EtherCAT, as a high-performance system communication, and CAN-over-EtherCAT (CoE), as the application layer, enable ideal interfacing with PC-based control technology. The latest power semiconductors guarantee minimum power loss and enable feedback into the DC link when braking. 16 signal LEDs indicate status, warning and error messages as well as possibly active limitations.

Technical data	EJ7211-0010
Technology	Compact Drive Technology
Load type	permanent magnet-excited three-phase synchronous motor
Number of channels	1
Number of outputs	1 x servo motor, 1 x motor brake
Number of inputs	2 x end position, 1 x feedback
Connection method	direct motor connection with OCT
Supply voltage electronics	24 V DC (via distribution board)
Supply voltage power	8...50 V DC (via distribution board)
Output current (rms)	4.5 A
Peak current (rms)	max. 9.0 A for 1 s
Frequency range	0...599 Hz
PWM clock frequency	16 kHz
Current controller frequency	32 kHz
Rated speed controller frequency	16 kHz
Output voltage motor brake	24 V DC
Output current motor brake	max. 0.5 A
Auxiliary power current	no data
Current consumption E-bus	typ. 130 mA
Distributed clocks	yes
Special features	compact and system-integrated, absolute feedback, One Cable Technology (OCT), plug-and-play
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	
<b>EJ9576</b>	EtherCAT plug-in module, brake chopper module
<b>AM811x</b>	Servomotor 0.20...0.52 Nm for servo I/Os (EL72xx, EP72xx)
<b>AM812x</b>	Servomotor 0.50...0.80 Nm for servo I/Os (EL72xx, EP72xx)
<b>AM813x</b>	Servomotor 1.35...2.37 Nm for servo I/Os (EL72xx, EP72xx)
<b>AM814x</b>	Servomotor 2.40 Nm for servo I/Os (EL72xx, EP72xx)
<b>AG2250</b>	Planetary gear units for Compact Drive Technology
<b>ZK4701-04x1-2xxx</b>	Supply cables for Compact Drive Technology